

SOUTH ATLANTIC FISHERY MANAGEMENT COUNCIL

SNAPPER GROUPER COMMITTEE

**Westin Jekyll Island
Jekyll Island, Georgia**

March 6-8, 2023

Transcript

Snapper Grouper Committee

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Attendees and Invited Participants

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Dr. Jack McGovern
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Jamal Ingram
Nikhil Mehta
LT Patrick O'Shaughnessy
Dr. John Walter

Additional attendees and invited participants attached.

The Snapper Grouper Committee of the South Atlantic Fishery Management Council convened at the Westin Jekyll Island, Jekyll Island, Georgia, on Monday, March 6, 2023, and was called to order by Chairman Jessica McCawley.

MS. MCCAWLEY: All right. We're going to run through some beginning business, before we turn it over to our guest for today, and so the first order of business is approval of the Snapper Grouper Committee agenda. Are there any changes or modifications to the agenda? Any objections to approval of the agenda? All right. Seeing none, the agenda is approved. The next order of business is approval of the December 2022 transcript. Any modifications to that transcript? Any objection to approval of that transcript? All right. Next up is the Status of Amendments Under Formal Review, and I'm going to turn it over to Rick.

MR. DEVICTOR: Good afternoon, everyone. Okay, and so we have five amendments that are in rulemaking, or are about to go into rulemaking, for snapper grouper, and I will just quickly update you on where they're at in the process. These are Amendments 49, 50, 51, 52, and then the ABC Control Rule.

For 49, if you recall, this is greater amberjack, and this increases ACLs in response to the latest stock assessment and changes allocations, and so the council approved this at the September meeting, and this amendment is going through final review. We do a review with council staff and SERO and GC, and we'll go through the document and make sure that everything looks good, and so, after the council submits Amendment 49, then we'll work on the proposed rule and the notice of availability, and then, of course, you'll see a Fishery Bulletin.

That's 49 in greater amberjack, and then there's Amendment 50, and so the final rule published on December 20, and regulations were effective on January 19, and so that one is all done and in place, and, of course, that's the rebuilding plan for red porgy. Amendment 51 is snowy grouper. The council took final action in December, and actually submitted the document last week, and so March 2, and we currently have that at SERO, that document, and we are working on -- Again, that's going to have a notice of availability, because it's a plan amendment, and a proposed rule, and so look out for a Fishery Bulletin on 51.

Amendment 52 is golden and blueline tilefish, and this is one of the amendments that you approved at the December council meeting, and it's the same with 49. We're waiting on the council to submit that amendment, and so, again, once that's submitted, we'll begin the proposed rule and NOA, and so that's 49, 50, 51, and 52, and the last one is the ABC Control Rule. As you know, that amends several FMPs, including Snapper Grouper, and so that was approved at the December meeting, and we're waiting on the council to submit that one, and so you all are keeping us busy. Thank you.

MS. MCCAWLEY: Thank you, Rick. Any questions for Rick? All right. Next up, we're going to get into the management strategy evaluation, and Chip is going to come up here and introduce our guest.

DR. COLLIER: Before I hand the mic off to Adrian and Tom, just following-up from December's meeting, in December of 2023, you guys had mentioned that you would like a presentation on management strategy evaluations that we've been working on here, in contract with Blue Matter

Science. They are experts in the world of developing MSEs, and so we're lucky to have them. They're working on a multispecies MSE for us, focused on the snapper grouper fishery.

In addition to some of the -- Having Blue Matter present to you guys, you also requested some updates to the website, in regard to MSE, and Nick did a great job updating the website. We do have the website built-out, or the webpage built-out, and it's under the science page, or, actually, since we are on the internet, we can go right to it. If you just go to the South Atlantic page, and under Science & SEDAR, you will notice here a nice little button for Management Strategy Evaluation, and so this describes management strategy evaluation, and it gives a link to Blue Matter Science, who is working on it for us, and it explains what a management strategy evaluation is.

There was a request to have kind of a literature page, and so do have that, but we also have some videos. This one, the first one, is Tom's presentation to the Snapper Grouper AP, and the second is Adrian's presentation to the Snapper Grouper AP, and then the third one is John Walter's presentation during our seminar series, talking about the bluefin MSE, and then we also have some of the goals, and that is it for the updates, as far as what we've been working on, in trying to make sure that everything is up and ready to go for you, and so now we have Adrian Hordyk and Tom Carruthers, with Blue Matter Science, that's going to be going through management strategy evaluation. I am going to be sending a newer presentation to you guys, through email, and I'm going to request that Nick also update the document, to make sure that we can get the most recent ones, and I just need to change screens, and so Adrian and Tom.

DR. HORDYK: Thanks, Chip. Good afternoon, everybody. I'm Adrian Hordyk, and this is my colleague, Tom Carruthers, and we're from Blue Matter Science in Vancouver, Canada. First of all, thank you very much for inviting us here. It's really nice to be here with you all, especially in-person, and we've had enough online meetings, and so it's really nice to be in a room full of people.

Today, we've got a presentation that outlines -- There's four components to it, and first we start with an outline, a brief outline, of what management strategy evaluation, or MSE, is, and then we'll briefly just contrast the sort of typical stock assessment process with management strategy evaluation, which may be a new concept for some people, and then the third section of the talk is an overview of the proposed process for the snapper grouper fishery, the MSE process that we're busy working on right now, and then, lastly, we'll just briefly go over the actual framework, the MSE software that we're using, and give some more information about the framework that's used to do this analysis.

We'll start with MSE, a brief overview, and most fisheries management decision-making can benefit from at least three things. One is a more coherent strategy of why decisions are being made, what decisions are being made and why they're being made, and, secondly, increased transparency and accountability, how these decisions have been made, and this is common in fisheries situations, but, when you can see the options, there is good reasons for understanding why achieving these more coherent strategies, and more increased transparency, is difficult.

This is a schematic of a fisheries system. On the top, we have a fishery, a fishery activity that occurs on the water, and then the right-hand side is data collection, and so sampling protocols, and data is collected from the fishery, and then the square on the bottom is that data analyzed and processed, and then management advice is generated, one way or another, and then that's

implemented and enforced back into the fishery, which impacts the fishery in the future, and the cycle continues.

One way to test changes to our fishery management system is to do experiments, and so we could, for example, change the way that the data is being collected or change the analysis, how that data is being analyzed, or we could implement new regulations, modify the existing regulations, or we can implement new types of management regulations, and then implement back into the fishery, but there's at least two problems with this sort of approach.

First of all, it's risky, because, any time you make a change in a fishery, there is risk associated with understanding whether the impacts that you see in the fishery are a result of your actual management change or just due to luck, good or bad luck, and the problem here is a lack of replication. When you do experiments, scientific experiments, you need to have replication, to be able to isolate the change that you take in the system that is being affected by, in this case, the management regulation that you have implemented, and that can be really difficult in a fisheries system, because of that higher risk, where there's a reluctance to try new things, because it can result in undesirable outcomes, and so there's no guarantee that a new regulation, or a new data analysis approach that you might try, will result in the outcomes that are your desired outcomes.

This is really common in all sorts of areas in the world, and the way that people deal with these, in high-risk situations, is to do simulation modeling, and the simulation modeling is where the system -- It gets reproduced in a model, and the model can be a physical model, like a wind tunnel, and it can be developed to test, for example, aircraft, how an aircraft is going to respond in different sorts of conditions, and simulation modeling can be done like the military does simulation modeling with wargames, where nations get together and do mock battles, to test out new strategies, and it's the same sort of approach, because they're trying to test these new ideas, or different ideas, in a controllable environment, to be able to determine what ideas have good outcomes and which are likely to be unsuccessful.

This image here on the left-hand side is a trainee helicopter pilot inside a simulator, a flight simulator, and, in this case, this is a simulation model, but the simulation model is being built in a computer, and so the flight -- The environment of a helicopter pilot is being reproduced in the computer, and a training pilot can get tested, and evaluated, under a whole range of controllable conditions, like crosswinds, different sorts of visibility, and so on.

On the right-hand side, we have an F1 driver in a similar situation, and it's a computer simulation for a racetrack. It's expensive, and potentially dangerous and risky, to put a new driver on a real track, but, in a simulation environment, you can test the driver's ability to be able to handle the vehicle under a whole range of different conditions that you can control, and so, in both of these scenarios, the emphasis is on the pilot and the driver, and the idea isn't to try and predict the weather, to try and predict what the racetrack conditions are going to be like, but the idea of this simulation testing is to try and identify pilots, or drivers, who are robust to uncertainty, who are going to, under a wide range of expected conditions, are going to have the ability to achieve the outcome, to land the helicopter successfully complete and hopefully win the race.

Both of these cases are about testing robustness and testing the ability of a pilot, of a driver, to be able to achieve something under a whole range of conditions which are, in reality, likely to be

unpredictable. We can't predict what the weather is going to be like, but we can have confidence that our pilot is able to handle whatever conditions get thrown at them.

Management strategy evaluation is the same approach for fisheries, and so this schematic here is what we saw earlier as a fisheries system, and, with an MSE, we reproduce the fisheries system in a computer model. The fishery dynamics, things that go on in the water, in the gray box, get reproduced in an operating model, and the operating model is really the core component of a management strategy evaluation, of an MSE, and we're going to talk a lot more about them in a minute.

The data collection gets reproduced in an observation model, and this is where data gets generated from the operating model and gets passed through an observation model that tries to reproduce what real fishery data looks like, subject to all sorts of sampling error and so on, and then the population, assessment, and management rules are what we call a management procedure, and a management procedure is a set of rules that take fishery data, process them in a standardized, reproducible way and produce management advice, and there can be a whole range of different things going on inside a management procedure, and we'll talk about that in more detail later, but the main thing is that fishery data goes in and management advice comes out, and it's reproducible, which means that it's a set of rules, rather than -- You know, it's not subject to discussion, but it's a set of rules. The data goes in, it's processed in this way, and this is the rule that comes out for management advice.

Then that management advice gets implemented back into the fishery, and, in the rule world, it gets enforced in the MSE, and that's called an implementation model, and this is where you can characterize any potential implementation error, and so, for example, a management procedure might set a catch limit, a total catch limit, and an implementation model might say, well, in reality, the catches are sometimes higher or lower, and so it can add some extra uncertainty. Uncertainty is really a key part of management strategy evaluation, and, in each of these components, it's where different aspects of the uncertainty in the system get built into the model, and we're going to talk about that in more detail as well.

Sometimes a management procedure is called a harvest strategy, or a management strategy, and they're used interchangeably. We like to use the words "management procedure", to make it clear that, when we're talking about an MSE, an MSE approach, a management procedure is a coded set of rules, and so, when you want to test it, you can test all sorts of ideas, but, once your management procedure is adopted, it's a set of rules that can be coded into a computer, with a spreadsheet, and the data goes in, and it gets processed in the same way every time, rather than something perhaps more like a harvest strategy, which may sound like something that gets, each time, subject to review or whatnot. A management procedure is a set of rules that is going to give you the same management advice, with the same data, no matter who applies it.

Of course, there is acronyms and abbreviations, and an operating model is an OM, and management procedure is MP. These are the two main components of an MSE, and I will try and use the full words, but, if you hear me say "OM", it's an operating model, and an "MP" is a management procedure.

Here's a little example of how an MSE works, and we have, in the gray box, an operating model, and, in this case, it's an assessment that was conducted in 2020, and that has characterized the

fishery system, an understanding of the fisheries system, and it captures the description of the stock biology, the characteristics of the animal, the species, and also the fishing fleets that are exploiting that animal, and that's all captured and estimated in the assessment, and so this is the operating model, and then we're going to go through an MSE loop.

On the right-hand side, those two figures are projections, and so now, in this case, it's 2020 when the assessment was done and the operating model was built, and we're projecting the population forward into the future with, in this case MP Number 1, which is an index-based management procedure. It's just an example here, but this is where you could set a catch limit that responds to some sort of index of abundance, and so the rule could be very simple. If the index goes up, the catch limit goes up. If the index goes down, the catch limit goes down, by some set amount.

The model runs and goes for a year loop, and then the catch gets set, or the catch advice gets set, by that management procedure, and that gets implemented into the fishery, through that implementation model, and it updates the fishery population, and so then the biomass -- The red line in the bottom plot is the biomass, the projected biomass, in the updated operating model, and so now the operating model has been updated with the catch advice that came out of the management procedure, and now it's in 2021, in this case.

Then the cycle goes around another loop, and, in this case, the management advice is being updated every year, but that can, of course, be specific to the situation. In some places, the management advice is fixed for a set period of years, and so here it's going for another loop, and now you see the management procedure has recommended a decrease in the catch, in this example, and so the catch has gone down, and the biomass has responded and gone up a little bit, and then we can continue just looping around into the projections into the future, and, each time, the management procedure gets provided with updated fishery data from the observation model, and so the model has generated new fishery data and applied the rule, and the rule has been implemented back into the fishery, and we just keep going around, in this case for five years.

This whole process gets repeated now for Management Procedure Number 2. In this case, it's another management procedure that uses an index, but, here, the index is based on a mean length in the population, and so it's another set of rules that says take the mean length in the population and generate management advice according to these set of rules, and that gets applied every year, again for these five years into the future, and again for another management procedure, and this one uses a different type of index, or maybe a different rule, the same data in a slight variant in the rule, and you can see, in this -- It's just a made-up example, but, in this case, this management procedure has a lot more variable catches, and so, in the blue line, the catches are going up and down by a larger amount than the other management procedures.

I mentioned earlier that a central part of MSE is about uncertainty, dealing with uncertainty, and one way to deal with that is multiple operating models, and so an operating model, here OM Number 1, is one plausible hypothesis of a fisheries system, one understanding of the fisheries system, but there may be competing ideas about what's really going in the fisheries system, and so there can be another operating model, that perhaps is another set of ideas, or another set of beliefs, about what is really going on in the fishery.

Management strategy evaluation isn't about trying to determine which one of those hypotheses is correct, and it says, if it's a plausible description, supported by data, then the goal of MSE is to try

to find a rule, a management rule, a management procedure, that will work under that range of uncertainty, and so, here, the whole process gets repeated, but now I've got OM Number 2 in the yellow box, and it's very similar, but, in this case, it's got an assumption that discard mortality is lower than the first operating model, and so this process gets repeated, and you can have as many operating models as -- The idea is to have as many operating models as you can to span the uncertainties, and so, anytime there's a disagreement, a key disagreement, about a fundamental belief in the fisheries system, and maybe it's growth, or maybe it's natural mortality, or maybe it's spatial distribution in the fishing fleets, and, anytime there's a disagreement, this can be captured in a different operating model and evaluated, and, if we find a management procedure that works well, and achieves the outcomes we're after, under this management uncertainty, then, from a management point of view, that uncertainty is not significant, and it doesn't really matter. We can still provide management advice that's going to get us what we want without having to be concerned about that particular uncertainty.

Just to follow-up on that, I mean, one of the key contexts for MSE, globally, has been an inability to have consensus and certainty over the state of scientific knowledge, that this is what's happening, and, in a traditional stock assessment framework, that can create stall, can create a roadblock, and we can't agree on what the model is, and so we can't set advice, and we can't have confidence in our advice, but what if it doesn't matter?

What if, regardless of your scientific understanding, the same management procedure performs suitably, and notice the crucial difference between scientific uncertainty and management uncertainty, and so MSE was devised specifically to address that issue, to say that, fundamentally, scientifically, there are lots of things we don't know about, and it doesn't matter how we reliably make a management strategy to navigate it, and that's one of the key problems that MSE has been able to solve.

Just a central part of MSE is what we call closed-loop simulation, and that's what we just went through now. It's called closed-loop simulation because we had an operating model, and we did a loop that the management advice got implemented back into the operating model and updated the fishery dynamics, and so it's what called closed-loop simulation, and you might hear that term, that can be different than what is called open-loop simulation, where it's more typical in a stock assessment framework, where a population gets projected forward into the future, with say a fixed catch limit, or some fixed management regulation, but there's no feedback, and so an MSE incorporates the feedback.

You can often have situations where, when you change management rules, and, for example, like this blue line here could be quite variable management advice, and you see the catches are going up and down quite a lot, and that can implement and create a lot more variability in the fisheries system, and so it often, just by defining a set of rules in a management procedure, you don't know its emergent properties, and you don't know how it's likely to work in reality until you test it in a closed loop, because that rule is going to update the fishery population, which is going to change the data, potentially change the data, change the system, maybe introducing more variability into the system than you had under a different rule, for example. The key here is it's closed-loop simulation, and the management advice impacts the population in the model.

Just briefly, how does this contrast with stock assessment, which may be more familiar with some people, with the stock assessment, the key questions really are what is the current and what is the

historical state of the fish stock, how many fish are in the water and what is the biomass of the fish in the water, and is the stock overexploited, relative to some reference points, and should the management regulations right now be changed, and so the output of a stock assessment process is an estimate of the key population parameters, the scale and productivity of the population, the current state of the stock, relative to some reference points, and is the stock overexploited or not, and advice to managers of what should be done, and this is, like I mentioned, usually done with short-term projections of the population, subject to different harvest policies, and the managers can choose which harvest policies they wish to implement, based on those results, and so it's more about what decision to make right now, what's the state of the fishery right now.

The focus with MSE is different. The key question in MSE is what management policy, or what management procedure, management strategy, is most appropriate for this fishery, and so it's really a question about what's the overall strategy for this fishery to achieve the long-term objectives, and it's not about what decision necessarily to make right now, but it's about what sort of management approach, and what management method, is most suited to this fishery, and, because fisheries are -- Every fishery is different, both in terms of the biology of the animal and the characteristics of the fishery that exploits it, and also the objectives of the stakeholders involved in that fishery, there's no one-size-fits-all rule, and every fishery typically has a different set of management approaches that would be most suited to achieve its particular objectives.

An MSE asks questions like what process should be used to convert fishery data into management advice, and that's a management procedure. Is this process robust to uncertainty? Is it likely to work under the unpredictable future, and under what conditions is it likely to fail? If you can find something that is likely to work under a wide range conditions, but, also, with MSE, you can identify situations and indicators that a management approach is failing to -- Is likely to fail, and so you mind, for example, a management procedure that's very robust, and works well, except for you have recruitment failure.

For example, if you can identify -- If you have recruitment failure for a couple of consecutive years, it's going to derail the entire system, and so, if that's a management approach that you've adopted for your fishery, then that's an indicator that you need to watch, because you know your particular management approach is fragile to that scenario, for example, and so it gives you some indication of what we call exceptional circumstances, something to monitor and say this thing is not working the way we expected, and so a MSE is all about these overall strategies and trying to find an approach that is most likely to work under the wide range of conditions that we expect, and rather than trying to predict exactly what those conditions will be, find something that is likely to work and have some level of confidence about when it's likely to fail, fail to meet our particular objectives.

The output of an MSE is a reproducible and transparent process for selecting a management plan, and so the whole thing is an operating model, or operating models, and you've captured and documented your uncertainties and described your current belief of the fisheries system, and you've analyzed that in an MSE software that's been peer reviewed and described in the literature, and so it's transparent. Anybody can take that same approach, that same data, and run the same analysis and get the same result that anybody else could do.

The output is an agreed process, a management plan, or a management procedure, from going from data to management advice, and so the idea is, once an MSE process is finished, you have a

management procedure that could be selected, and adopted, as the management procedure that is most suitable for your fishery, and, once that's adopted, then, at least in principle, the management of that fishery, the rules, have been agreed upon by everybody involved in the fishery.

They've been through the whole MSE process, and they've been tested under all ranges of uncertainties, tested against their own particular objectives that may be different and competing objectives from different stakeholder groups, evaluated tradeoffs amongst those objectives, and identified a management procedure that, as a group, the consensus is that it's most suitable for our fishery, and so that's all the hard work, and then the adoption is just the implementation of that management procedure.

Every year, data gets collected in the way that you said you would collect the data, and it gets analyzed in the way that the management procedure -- Is dictated by the management procedure, and the advice that comes out of the management procedure, the catch advice, or the bag limit or the size limit or whatever, gets implemented as the rule, and it gets implemented back into the fishery on a set interval, every year or every five years or whatever.

Also, a part of MSE is, like I just mentioned, exceptional circumstances, and you identify conditions that you need to monitor, and so the thing can run on autopilot, essentially, and the rules keep getting updated based on the new data that comes in, and you can identify the conditions where the management plan requires revision, or you can say we've got the indicators that something is starting to go wrong, and we need to reevaluate it, and, if those exceptional circumstances aren't triggered, the idea is that the fishery management no longer has those hurdles, those obstacles, to updating management advice every time new data comes into the fishery.

Okay, and so I'll go now into the process, the MSE process, the proposed process, and what we're working on now for the snapper grouper fishery. Like an assessment, of course, the MSE starts with the fishery data, and it comes from the various sectors involved in the fishery, and, unlike an assessment, where the focus is trying to analyze that data and produce a model with the best understanding of the fishery, in MSE, we try and capture all the uncertainties in that data.

All the various plausible ways of interpreting that data and describing the fisheries system get captured in operating models, and this is usually done by a stakeholder group, who can propose different ways of analyzing the data, or generating operating models, and perhaps there's different data streams that can be used, and so it can result in a large range of operating models that can span a lot of uncertainty, that can be quite different descriptions of a fisheries system, and so, rather than one model, like an assessment, we have as many models as we need to get the stakeholders, the various stakeholders, understandings and beliefs of a fisheries system.

The first step is management policy, or management procedures, and, again, this is driven by stakeholders, and they propose different rules, different potential ways of managing the fishery, different ways of conveying fishery data into management advice. In this stage, any ideas are acceptable, and any sort of rules can be proposed and included in the MSE and tested. There is no real way, upfront, of knowing whether a proposed approach of managing a fishery, an MP, what they call a candidate management procedure, a potential management procedure, is a good idea or a bad idea. We need to do the evaluation and see.

Again, stakeholder groups can propose different ways of managing fisheries, or components of the fishery, different size limits, different bag limits, effort limits, spatial closures and so on, and they can all get proposed, and every one that gets proposed, as long as it can be coded into a set of rules, like a clear set of rules, like take this data and do this to it, and then set this advice in this way, it can become a management procedure, a candidate management procedure.

Once we have the operating models and the management procedures, we do the closed-loop simulation testing, and that gets run in an MSE framework, which I will talk about in a second, but that's really just a computer, a giant calculator, and operating models go in, and they're the ones that capture all of your uncertainties in the system, and management procedures are a bunch of different proposed potential rules that go into the computer, and the computer just does the calculation. It just has the model of a fisheries system, and it just does the calculation, and the results that come out of that are the performance of those management procedures under those different conditions. The idea is to use those results to quantify and compare the performance of those management procedures against established objectives.

DR. CARRUTHERS: I think that's probably the most important point to take home, really, is that what we're proposing, and what is being proposed in this project, is to move towards a system where you have a shared understanding of what's happening with your fishery, fisheries, and that is represented by models, which is essentially just a big calculator, and that's all it is, and you can use that calculator now for experimenting with ideas on how to manage that fishery, and so, instead of a situation where people have disparate views on what is happening on the water, and there isn't a coherent and reproducible way of confronting ideas of management against those views of what could be happening, now you have a calculator to do that.

It marks the possibility of moving towards a system where you have a central basis for decision-making. In theory, these set of regulations should be successful, regardless of what you think is happening, and we know they're vulnerable to this, and we know they're particularly susceptible to this, but our calculator tells us that this is a reasonable approach. You are proposing this management option, and it has an effect relative to this one, and so it becomes -- If a management proposal was vulnerable, now you know what to research. Now you know, in theory, what to pursue, what you need to know more clearly to have confidence in what's being proposed.

It's a step towards a more transparent, more coherent way of making decisions about a range of things, from data collection to management procedures, and I think this schematic, and what you described, is the fundamental difference between this and something like a stock assessment.

DR. HORDYK: Then the final step, as I mentioned before, is the action, and it's just the implementation of a management procedure that's gone through this rigorous testing, under a range of conditions that have been proposed by the stakeholders, and this whole process is stakeholder driven. Every view that gets put forward is incorporated into the process, in the operating models, or in different management procedures, and then the results of this is a management procedure that gets adopted by the group and implemented in the fishery.

Let's talk about operating models in a little bit more detail. Operating models are a plausible description of the properties of our fisheries system, and so I've got the word "plausible" there in italics, just to highlight that, unlike an assessment -- Assessments try and get at the best -- The scientific understanding of a fishery, or the state of a fishery system, and, in an MSE, operating

models can be -- It's not so much about whether it's correct or not, and this is the true state of the fishery, but it's plausible, and there's enough of this data to support that, and there's people who believe that this is the description of the fishery, that this is the fisheries system.

If that's the case, if there is certain beliefs that this is how a fisheries system operates, then that needs to be evaluated in the MSE, because, if there is data to suggest that that may be the case, we want to make sure that that management approach works with those conditions, and so it's a plausible description that is supported by data in a fisheries system, and it incorporates, in the operating model, a description of the stock biology, so the growth, maturity, natural mortality, all that sort of stuff, and, also, the exploitation of the fishing fleet, or the fishing fleets, that target that, and so often a stock assessment, like we'll talk about in a second, a stock assessment can be used.

The results of a stock assessment can be used to develop an operating model, because that is plausible, and, in this case, it's the best understanding of a fisheries system, but there may be others that are perhaps not as well supported by the data, but are still potentially a description of the fishery system, and so that can be separate operating models.

With multispecies fisheries, like we're working on here, and, in this MSE, we're focusing, at first, on two species, the red snapper and the gag grouper, and so, with multispecies fisheries, it gets a little more complicated. An operating model has the description of the stock biology and the fishing fleets for the individual stocks, but it also has to incorporate the interactions between those species, and between those fishing fleets, and so any spatial overlap in the stock biology, or if there's any preferential targeting, whether the fishing fleets prefer one species over another, and really what we're trying to get at here is how management regulations for one stock are likely to impact the other one, and so that's where it gets a little more complicated in a multispecies fishery, but, of course, that's the real problem with multispecies fisheries, that a set of rules changes the fishing behavior and potentially impacts other fish stocks. A multispecies MSE, like we're working on here, tries to capture those interactions.

Like I just mentioned, multiple operating models can be built to capture the uncertainties, and so, for example, you may have an uncertainty in the stock abundance, and there may be a slight variant of the assessment process that results in a different abundance estimate, or current abundance, that could be a separate operating model. There may be different views on the spatial distribution of the fish stocks that gets equally supported by data, and we can have another operating model, or another set of operating models, and they can go on. There could be many operating models, as many operating models as you need, really, to span the uncertainties. There can be uncertainties in the fishing fleet, the selectivity patterns of the fishing fleets, how the effort is likely to get allocated amongst different species at different times, and so on.

Building operating models, the way we started with this fishery is we started building operating models based on the recent stock assessments, SEDAR 73 and SEDAR 71, and those are the two assessments that are most recent for these species, and these stock assessments estimate all those things that we care about in an operating model. They have estimates of the stock biology, and also the exploitation history of a fishery, the selectivity patterns of the fishing fleets and the historical fishing effort, and some of those things are already estimated in an operating model, and we can import them into the MSE framework and combine them together, and we have an operating model that we just need to describe the interactions between those two species.

This is a plot here, and it's really from the MSE, the historical -- Where we simulate the historical fishery, and, in this case, it's just reproducing what the assessment has predicted for the stock biomass, but now in a single model for the two species, but these estimates come straight out of the stock assessments, and so, in the top, we have biomass, and, on the bottom, we have the landings and the discards for these two species, and that's all captured in this operating model, and it gets put into the MSE framework, and it redoes the calculations and gets the same results as the assessment, but it's ready to project these populations forward under different management rules.

You can have a separating Operating Model Number 2 that may have been produced in a different way, and it could be the same assessment models, with slightly different assumptions, or different data streams, or it could be a different model that's used to generate a description of the fishery system, and, of course, a different model will have different predictions of what the historical biomass and catches look like, or at least the biomass, or at least a different description of what the biomass was really like in the historical period.

Once we have a set of operating models, and that's usually through an iterative process. Usually, with a MSE process, the figures should show like quite a linear process, but, in reality, we usually develop operating models and do some testing, and they people introduce new uncertainties, what about this or what about that, and new operating models get built, and so it's quite an iterative process, but, once you have a set of management procedures, the next thing to develop is -- Sorry. Operating models, and the next thing you need to do is develop management procedures, a process of going from data to a management decision.

In terms of data, a management procedure specifies what data are collected and how those data are processed, or how they're analyzed, and then there is rules of how those data converge our management advice, and is it a static rule, and does it just set a size limit at a certain size limit, in which case it's not based on data, and it's just a management procedure that just has a rule, or is it adaptive, where the management regulations, size limit, bag limit, catch limit, gets changed based on some indication in some data stream, or data streams, and that's all coded into a management procedure.

What comes out of that is the advice, the management decision, that may or may not be updated every time data gets updated, and so this is different from a traditional approach of setting management advice. First of all, it's reproducible, which means the management procedure always gives you the same result, no matter if it's different people applying it, and it's agreed upon, and so, once the rules have been adopted, there is no haggling anymore. The data goes in the top, and the management advice comes out the bottom, and there is no wiggle room, and it's simulation tested.

This is a really core part of an MSE, is that you simulation test these intervals, and you have some confidence to say this set of rules is likely to meet an objective, because we tested it under all these different conditions, and these conditions are supported by these data, and this is our beliefs of a fisheries system, and so the whole thing is try and upfront characterize your uncertainties in the system, upfront declare what objectives, what you're trying to achieve in the system, put those things into a calculator, and, when you get a result that comes out of it, you've got some confidence that the result that you are proposing is going to achieve the things that you're after.

DR. CARRUTHERS: You can imagine an advantage. There's a couple of advantages there, and one advantage would be that, if you were to establish something for a period of time, the degree of burden on the scientific process is reduced, and so now you're using a very simple rule that can be written on a projector, that everybody understands, and there's no more worrying about whether a stock assessment is exactly right or wrong, and you have a simple rule that's already been tested against these scenarios, and so it's relatively easy for people to understand, a wide group of people, and management procedures are typically very simple, and you also, potentially, save quite a bit of money, by not having regular complicated assessment processes, and so, in situations where you have secondary species, or other scientific challenges, you can pursue those, and so, in some settings, this is seen as a way of taking the focus away from some of the most data-rich and sort of well-studied stocks and being able to put money into areas which are of concern, but have traditionally taken a backseat, and so it's potentially less of a long-term scientific burden,

DR. HORDYK: With multispecies fisheries, the management procedures can be a little more complicated as well, because you have a multispecies management plan. Often, in multispecies fisheries, you have one set of rules that applies to a suite of fisheries, a suite of fish species, and so management procedures can be as simple, or as complicated, as you like, really, and it doesn't really matter what goes on inside of there, and so you could, for example, have different data streams that are going into a management procedure that set different rules for commercial and recreational sectors of a fishery, and perhaps for different species, or can group species together into a species complex, and set the rules for a species complex, and then the MSE -- In the framework, those rules get applied in the way that is proposed in the management procedure, and so you can test different ways of the advantages of managing species on a species-by-species, versus grouping them together into complexes, and it can be used to try and evaluate, if you group species into complexes, what is the appropriate groupings, and so on.

Management controls can be any combination of the usual methods, spatial closures, seasonal closures, size limits, bag limits, effort limits, some sort of seasonal effort limit or a maximum amount of trips, something like that, and, of course, catch limits, total catch limits, total removals out of the fishery, or any combination of those things. They can be grouped together, or you can have different sets of rules for different sectors in the fishery.

For example, a management procedure can -- You can test slight variance as well, and so can have a management procedure with a range of different size limits, and Management Procedure Number 1 has a size limit of so many inches, and Management Procedure Number 2 can have the same set of rules inside of it, but just a slightly different size limit, and so you can evaluate tradeoffs amongst sets of management approaches that are quite similar, because we evaluate where kind of the sweet spot, in terms of tradeoffs between, you know, discards, or trying to keep different sectors in the fishery sort of equally happy.

Once you have a suite of management procedures, the next part is to test those management procedures against those operating models in closed-loop simulation evaluation, in closed-loop simulation testing, and so I've got a little diagram of how that works. Here, we have an operating model, Operating Number Model Number 1, and it came from those two assessments that we just showed earlier, and so we've built an operating model, and we have just reproduced what those assessments predicted as the state of the fishery.

The first step in an MSE is to simulate the fishery, and that simulates the historical fishery based on the operating model, and, in this case, it's the biomass as predicted by those assessments, and then we have a management procedure, Proposed Management Procedure Number 1, and so, here, we've got a management procedure for these two species, the red snapper and the gag grouper, at a five-year management cycle, and so, every five years, the management advice gets updated, in this case, and the specifics of these rules doesn't matter in this case, and it could be rules for each stock independently, or it could be one set of rules for both species.

Then the model is moving forward into the closed-loop simulation part, and so we spool up the model, and we've built the simulated historical fishery, and now it starts to generate data, generate what the data expects to see in the future, next year, and that management procedure, this rule, MP Number 1, sets the management regulations, implements them back into the model, and updates that model. Now we have a projection, just like I showed you earlier, going forward that is the biomass of these two species, under this set of rules, Number 1, and this is, of course, just entirely made up for this presentation, and so don't worry too much about these trajectories. I made them contrasting on purpose.

Then it's updated the population, and now the model is five years into the future, 2025, in this case, and it simulates data again. It simulates data from the last five years of the model and applies the management procedure again. This whole process repeats and projects the model forward for another five years under that fixed catch limit, in this case, and that process gets repeated for some period of time into the future, typically twenty or thirty or forty years.

Because there is lots of uncertainty about the conditions in the future, in environmental conditions, and, usually, in a fisheries modeling context, that uncertainty in environmental uncertainty is captured in recruitment variability, but there can be other things as well, and so we have to have multiple simulations when we project forward, because we don't have just one state for the fish population going forward, and it could be -- Recruitment for the animal could be highly variable, and so we don't really know what it's going to be like next year, and so the whole process gets repeated with a second simulation, where everything is identical.

It's the same rule, and everything is identical, but, in this case, the population is subject to a different random recruitment event, or events, and so you get different population -- It's the same rules, but a different trend in the population, and that gets repeated for many simulations, lots and lots and lots of them, until we have enough simulations to be able to characterize the population in a statistical distribution, so that we can get statistical properties, the means and medians and probabilities and so on, of the population under that set of rules.

Then this process gets repeated for another management procedure, Management Procedure Number 2, and so now everything in the model -- Everything is identical, and, when you do those simulations going forward, they have all the same variability, and so everything, on a simulation-by-simulation basis, is identical, and the only thing that's different is the rule, the management procedure, and so now, anytime we see a difference in the population between Management Procedure Number 1 and Management Procedure Number 2, the difference is just due to those sets of rules, what those rules prescribed, and that gets repeated for all the management procedures, 3 and 4 and so on.

At the end, we have something like this, and, in this case, I'm just showing a biomass, but we can have catches and all sorts of things that will measure the population, and this shows the projections of the populations under these different rules and enough simulations that we can characterize that uncertainty.

Then the question is how do we rank these management procedures, and which have good performance, and which have bad performance, and how did we decide what's a good approach and what's a bad approach? To do that, we need to define what we care about, and how do we define good management outcomes? What's a -- How do we define successful management of this fishery, and, equally important, how do we define bad management outcomes, which ones we'll avoid, and how do we know whether a management procedure is going to result in something that do not want?

These get captured in what we call performance metrics, and performance metrics are where we take management objectives, the desired outcomes for a fishery, and they get defined in a quantitative way, a quantitative measure, and so they say, quantitatively, we want to achieve this, and we want to have a biomass at this level, or above this reference point, with this probability, for example, and these can be determined by stakeholders. In some cases, there is some performance measures that are required by law, for example the sustainability of the resource, and there may be laws that say you have to have at least some probability of maintaining the stock at some level, and so that's -- When you have that, according to the law, that's a performance metric that you can use to eliminate management procedures that are going to be unacceptable, because they have a high probability of resulting in -- In breaking the law.

They may differ among stakeholders, and some stakeholders may prefer some things versus other things, and they may -- Recreational fisheries may have different objectives than commercial fisheries, for example, and so an important part of MSE is to evaluate the tradeoffs amongst those objectives. If you can meet both objectives, the objectives of both groups at the same time, great, but, in some cases, if you increase the probability of a mean objective for Group A, that decreases the probability of meeting the objective of Group B, and so part of MSE is try and quantify, describe what the tradeoff space looks like, so that managers, and stakeholders, can navigate that tradeoff space and just determine themselves where they think is an acceptable place to be.

Here is a really simple example of how performance metrics can be used to select, or identify, an acceptable management procedure, and so, in this case, obviously, I've got two performance metrics, and, typically -- You can have more, although the usual advice is try to keep them as to as few number as you can, because it can get -- The more criteria you have, the more difficult the decision can be, but, in this case, we've got two.

There's a requirement that the stock needs to have at least 50 percent probability that it's above B target, and that's defined in some way, and, secondly, you want to maximize overall catch, in this example, and so now I've got these two management procedures that -- Management Procedure Number 1 and Management Procedure Number 2, or, I'm sorry, Management Procedure Number 3, and we can look at the tradeoffs between -- On the figure on the right-hand side, I just plotted the catches, the total catches, in the projection period for these two MPs.

In this example, Management Procedure Number 1 has a low probability of reaching the target level, and you can see, in the projections forward, the distribution is underneath those B target

levels, and so this set of rules is unlikely to have at least a 50 percent probability of being above B target, and so it would be rejected. We would say we wouldn't consider this management approach, because it's unlikely to achieve our management objective of being above B target.

Management Procedure Number 3 is a better option, and you can see, on the figure on the bottom, on the left-hand side, at the bottom, the median line is above the target levels for those two stocks, and so it meets our Performance Metric Number 1, and it achieves at least a 50 percent probability of being above B target, and it results in higher long-term and short-term catches, compared to Management Procedure 1, and so, in this very simple example, really, if you had a choice between these two management procedures, we project Management Procedure Number 1, and you say it's not going to achieve what we want, and Management Procedure Number 3 would be a better candidate.

Okay, and so just an overview of the process, and this is a schematic that we usually use for describing what the MSE process looks like, and we start with Phase 1, and where we're at now is we describe, try and describe, those key components of the operating model structure, the performance metrics that we're going to use to evaluate the fishery, the fishery rules, and we try and capture all those different uncertainties in those components, and then the Phase 2, 3, and 4 is really where we start to implement the evaluation side of things.

I am going to not talk too much about exceptional circumstances right now, and we can maybe get back to that later on, and I will just wrap-up with the last section, a brief overview of the framework. What we're using for our MSE framework is called openMSE, some software that we developed called openMSE, and it's opensource software, which means the code is all available online, and you can -- It's been peer-reviewed and published, but the code is available online for anybody to download and access and look at. It's built in R, and it's built in a software called R for doing this sort of thing, building operating models and conducting MSE.

I won't get into all the details of it right now, but you can go to this website, openmse.com, that describes, in quite a bit of detail, the operating model, with the MSE framework and the various features of it, and it's a typical age-structured spatial fisheries operating model, and it's the same as the sorts of models that you're familiar with in stock assessment, but this is sort of a standardized framework for doing these sorts of analyses.

We have what's called a GitHub repository, where all the code specific to this project is available at this link here, and it's early days now, but all the code that gets used to convert the fishery data for these fisheries into operating models and do the closed-loop simulation evaluation is available here in this repository, so anybody can download it, if they wish, and reproduce the analyses, and just, finally, we have a project homepage that's linked to that GitHub page, at that link there, and that describes a --

It has some resources, but the main part of that is what we call a trial specifications document, or it's a description of the MSE process, and so it captures all the records, the decisions that have been made by the group that is involved in this process, and so it describes how the operating models are built, what data is being used, and the whole point here is about transparency, and so anybody can see how these decisions were being made and building the various components that go into this management strategy evaluation analysis, and, if they wish, use the code and reproduce it themselves, and so thank you very much. Do you have anything to add, Tom?

DR. CARRUTHERS: So you might be asking, okay, I'm a bit overwhelmed, and it's like what the heck -- What just happened, and how do I get involved, that kind of thing, and three big things that will be asked of a group like you, going into something like this, is the top-left-hand corner, the performance metrics, in the green box, and what's good, and what's bad for you, as people entrusted in managing a resource. The big blue box, the operating models, what things do we think are actually happening in this fishery or not, and the bottom orange box, and what handles can we pull, what levers can we pull, to manage this resource, size limits, effort controls, TAC controls, and those are the key inputs that shape what is essentially a calculator. It can look quite complicated, but never -- I wouldn't leave with anything other than take-home, and it's the construction of a calculator for testing ideas on how to manage your fishery. Thank you. Thanks, Adrian.

DR. COLLIER: Thank you very much for the presentation. This is the council's opportunity to ask questions about the MSE, and this can be a complicated process. It's very new to the South Atlantic, and so don't think any question is crazy. If you have a question about it, ask it now, and these are the experts, and they're going to know, much better than me, three months from now, if you have a question, and so I would prefer you guys to reach out to them.

One thing that I wanted to point out is, Adrian, can you go back to Slide 31, and it was the MSE operating model, where you showed the stock assessments, and so there were a couple of things that I was thinking about with this. One is, when you use something like an MSE to test out how the proportions of discards and kept, and how you proportion those, and so if you could advance the slide through the animations, and so, at the bottom there, you have your discards, and you have your landings, and the MSE could definitely be used to test something like, all right, what would happen if we shift this amount of discards over to landings, correct?

DR. HORDYK: There's two ways of dealing with that. One is like if there's only uncertainty historically, and like what ratio of landings, discards to landings, are, and we can capture them in the operating models, different hypotheses of what they are, and then, certainly, in different ideas, you could say, for example, what would happen if the fishery, if the red snapper fishery, was open all year-round, and everything was retained, and what would that look like, or what would it look like if it was the opposite, or anything in between there, and so that's exactly the sorts of ideas that you are testing in management procedures.

MS. MCCAWLEY: Laurilee.

MS. THOMPSON: So what are we going to use this for? Once we're done with the MSE, does that go to the SSC? Are we asking the SSC to also incorporate this kind of data in with the stock assessments, to reach their recommendations?

DR. COLLIER: The SSC is part of this process right now, and so they're kind of the science advisors on this, and they're going to review it in the end, but the goal is to use the Snapper Grouper Advisory Panel as the stakeholder involvement and guide this to say this is what we see of the fishery, and can we maintain a sustainable harvest, and so we've got to have those guidelines on there, right, and you've got to have a 50 percent probability of being over your MSST, and you can't be overfishing, and so it has those guidelines that are already baked in, but then we want to hear, from the stakeholders, exactly what they want to see out of the fishery.

Do you want -- Like some of the things that they could weigh is what if we were to increase the size limit, but potentially decrease the bag limit, or something along those lines, and you can evaluate those two different options through something like an MSE, given that the stakeholders say I would rather have a larger fish, but fewer of them, and so there is a possibility for that situation, and it could be tested through MSE, correct, Tom and Adrian?

MS. THOMPSON: That makes sense, and, I mean, I understand what the goal is, but how is this going to change the SSC's estimates on discards? I mean, what if you're putting questionable data into their model of 800,000 discards a year, or whatever it is, and how is this going to change that?

DR. COLLIER: The goal of this is to -- You start off by testing the uncertainty associated with that, right, and you can look into the model and say, all right, how important is it that we get these estimates of discards correct, and that's some of the test of your confidence of the models, and, if your model is fairly accurate, or is heavily reliant on that, like Adrian had mentioned, that could be something that you might have to do additional research on, to make sure that that is truly the best estimate that you can get, and then figuring out the best ways around that.

There are groups working on trying to figure out our estimates of discards for the recreational fishery, and Dewey had asked about that, I think at the last meeting, or maybe it was through email, but Dewey was asking about estimates, recreational estimates, for rare-event species, and so there is a working group that's working on that, but I think Adrian might have some -- Do you have any?

DR. HORDYK: Well, in some ways, MSE doesn't necessarily resolve uncertainties. If you have uncertainties in data, for example, MSE is not going to be able to resolve that for you, but what it can -- What it tries to do is try to identify ways of managing the fishery that would work with those uncertainties or identify what sort of the priorities are, in terms of uncertainties, what uncertainties are most important, and so one of the things that we haven't really talked about is a think called available information analysis.

You can say, even at current uncertainties in this system, this is the best way to manage the fishery, and discards might be unknown, and, therefore, we have to have fairly strict management rules to be able to achieve our objectives, but, if we were able to quantify uncertainties, the value of that information -- We could then manage it under a different set of rules, and so you do an analysis of what if we had better information on discards, or whatever, and how could you manage the fishery under those situations, and, if you can show that there's a high value in being able to reduce uncertainty, or collect a certain type of data, that allows you to prioritize data collection, or, you know, which uncertainty to deal with first.

DR. CARRUTHERS: That's exactly how I would answer it, and I think you, obviously, have a valid concern about the way that we would say what the state of the system is right now, based on the way we've processed data, and it may be the case that that is really critical. It may be the case that, if we run it through with one interpretation of your data, we reconstruct these operating models and it tells you that, no, your management would be -- Your current status quo could be problematic.

On the other hand, it may say the opposite, and it may say, actually, it's not that consequential, and a much bigger uncertainty, a much bigger problem, that you guys face is something to do with the post-release mortality rate, under certain circumstances, or the spatial distribution of fishing, or something like that, and so I think one of the reasons we're here is to exactly get the feedback that you're providing, that this is a serious issue, and we are, qualitatively, very concerned about this issue, and make sure that that makes it into an operating model, please, and so this is what this process is about.

In your current status quo, what you will end up with is two stock assessments that don't agree with each other, and what are you going to do with that, and so the idea here is to try and map out a way forward and refocus on quantifying that better, and do we need a different type of management procedure to navigate that, and, until you start formalizing that like this, it's not clear how that stock is being an obstruction, and it's just we don't know what it is.

For example, in some fisheries, we really don't have a very clear understanding about what the future productivity is going to be, and it might be a continuation of the current climate scenario, which is going to be -- In our Canadian fisheries, for example, we see large influxes of stock from the U.S., across the U.S. border, for example, and we don't actually know if that's going to continue or not, but we can devise a management procedure that can survive it, that operates well, and reference points that work, but, if we just stick to the stock assessment, we're left with we have no idea what's going on, and so it provides a way forward, is the idea.

MS. MCCAWLEY: Dewey and then Carolyn.

MR. HEMILRIGHT: Well, it's a lot to take in here. Is it possible to overwhelm the MSE process, where it collapses?

DR. CARRUTHERS: Yes, absolutely, and it would be -- I think, because we've developed the software, and we've gone this route, it would be tempting to see us as sort of evangelical about MSE, like this is something we're promoting, and it does have a number of flaws, and I think one of them would be exactly what you're talking about, is too many different objectives thrown at it, too many different operating models, too many different ideas about how to manage it, and I think that would be a flaw, and it could happen, and I think it takes a certain amount of discipline to stop that from happening, to keep things going, and so I think that's a valid -- That would be a valid concern. I think the real question is what's the alternative.

MR. HEMILRIGHT: I think that it's an interesting process and concept that you have here, but, until you start plugging and playing this mixed fishery in the snapper grouper fishery in the South Atlantic, where you have open access, closed access, just technology differences, all these things like that -- I mean, I'm a realist of a visionary, of like looking at something on a boat and, when it's broke, how to fix it, and so I visualize something I need to see in front of me.

Like take an instance for something, one species we've got now, whatever that may be, and plug it into your thing, to see what it could possibly split out, because there is a lot of variables, of high uncertainty, in these snapper grouper fisheries in the South Atlantic, and there's no doubt about that, based on the history and how it's taken place, and so I just wonder how, going forward, and, when you say testing in front of your Snapper Grouper AP, it might be some more -- It might be some more of some way of testing things where you take one species and plug it and play it and

show all the challenges, and I will use “challenges”, because I know everybody would rather have that word than “failures”, but challenges out there of what it is, but to take one species and run it through your process.

I think you have a monumental task, when you put snapper grouper, and all the species that’s managed, and the difficulties here, to get people’s buy-in to look at something, because it’s overwhelming, and we don’t have that data, that certainty, or even close to certainty, and it’s highly variable, but we’re under the guise of best available works, and so you can have not a zero, but the next thing right beside a zero, and that can be best available, and that works today in the management system, and that’s the difficulty that I know some -- That I have with the process of stock assessments, management, management uncertainty, and it doesn’t seem to be an equal, level playing field, when it comes to -- You know, we have ACLs for different, for commercial and recreational and stuff like that, but I will keep paying attention and hope to learn more, but you’ve got a difficult task ahead.

DR. CARRUTHERS: I think it’s really fair comment though, the idea that it could get complicated quickly, and we have to be mindful that any progress we make starts off in the clearest, simplest way, like you’re saying, for something -- For one or two fisheries at a time, before this gets too complicated, and I think that’s a fair comment.

Whenever we’re talking about the limitations of something like this, we’ve got to come back to this idea of, well, what are you doing, and what’s the alternative, you know, and so building a conceptual model of how your fisheries operate, and testing management ideas, could have pitfalls, but how you’re making the decisions currently -- Is it -- Would it be as defensible, things like that, and so the idea is to move towards something where you can say why you’re doing what you’re doing, or even why you’re proposing what you’re proposing.

MR. HEMILRIGHT: What happens after the end of this exercise, or not exercise, but this process that you all, I guess, have been hired to do, and it comes back, and is it a decision that this is the process that’s going to go forward, that the council has chosen, or does it come back before this council, and the council say, no, we don’t want no part of this, and so, basically -- The way I see this, I think there’s going to be some less catching, for some sectors, and they’re not going to like that, through this process.

DR. COLLIER: The beginning of this process, and when they finish up, that will essentially be the scoping for this amendment that doesn’t have a number yet, and so what we’re doing is getting all the information together, and then it’s going to be going through the public hearing phase afterward, and so that’s when the council is really going to be digging-in and looking at the alternatives that they think are going to work and if they want to proceed forward with it.

MS. MCCAWLEY: All right. We’ve got a list of hands. Carolyn, Andy, Mel, Trish, and then Tim.

DR. BELCHER: Thanks, Jessica. The first question is just kind of more general, and you had mentioned about forward estimations of twenty to thirty years, and is that a rule-of-thumb, or is it something that’s dictated based on the folks that are helping you with your operational models and all, because I think about us, with uncertainty, and some of it is like five-year definitions, and so

is there kind of a rule-of-thumb that you use to determine what your forward projections would be?

DR. HORDYK: Really, the amount of time when the performance metrics get calculated depends on your objectives, and so, if people care about things in five years' time, that would be coming into the performance metrics, and we would say we want to know what the probability of being at some level in five years' time, or whatever it is.

The amount of time -- You know, the model can keep going forward in time, and there's no real cost in predicting it forward beyond that, but the idea of doing it for a longer period of time is really just sort of related to the lifespan of the animal, and it's just to see the long-term expected outcomes, the expected emergent properties of a management approach, and so you might find that something achieves what you like in five years, and, even though no one is really proposing to adopt a management procedure and keep it in place for thirty years, you would like to know whether this thing, in principle, is going to achieve long-term objectives or if it's, you know, going to give you what you want in five years, but, after that, it's just going to result in really bad outcomes.

We usually do it something like at least the longevity of the animals, and so you've got like the population is -- The whole population has gone through the system, but the actual way that you calculate those performance metrics depends on the things that people care about, and so, if it's things like five years, that's what we would calculate them at.

DR. BELCHER: Then the other question I had was just -- This is the science person in me, but are there papers that you can either recommend, through Chip or whatever, that are like good either seminal papers of what's been done with MSE or case study papers that at least -- For me, I get the big-picture of it, but it would be really kind of helpful, I think, to see something that actually has kind of been put through the rigor a little bit, even if it's just to see the process in action.

DR. CARRUTHERS: A lot of MSE started in Australia and South Africa, and, for that reason, I think Andre Punt, along with Doug Butterworth, did a lot of the innovation, and, recently, and I think it was 2013, and we can send you the paper, Andre wrote a best practices paper in management strategy evaluation, and I don't necessarily agree with everything that's written in it, but it's really well written, and it covers a lot of the background, and it has a lot of good references for other MSEs that have been placed elsewhere, and I think it's the best peer-reviewed paper to review MSE and what would be good and bad. I am trying to think of another management strategy evaluation that would more closely related to the one here, where they've gone through and documented the entire process.

DR. HORDYK: I was thinking -- I haven't seen that paper that -- You can take a look at that, but what I can do is make a list of some recommended papers and send them to Chip to add to that website, and then, you know, Andre's paper and whatever else we can come up with, and it would be one place that people can find.

DR. CARRUTHERS: Although it's been pulled recently for sardine, the longest-running multispecies management strategy evaluation is actually the longest-running MSE processes for South Africa, in sardine and anchovy, and they've managed two species, using a set of rules, but

they're short-lived, and, obviously, a different setting, and that process itself is very well documented, and so you can read how they went about that for the last thirty-odd years, I think.

DR. BELCHER: So what's the -- As far as multispecies, is it pretty much just a couple, or what's been the biggest working set so far?

DR. CARRUTHERS: It's unusual to have a multispecies one, and it's not because it's necessarily difficult, per se, but it's just that the technology and the coding and stuff is more challenging, and now, with modern computing, modern software, it's like a complicated car, and like it's complicated under the hood, but it doesn't make it any less simple to drive, and you could drive it easily enough, but it's just getting the technology working, really.

MS. MCCAWLEY: Andy.

MR. STRELCHECK: Thanks for the presentation. I have two questions. One is kind of along the lines of where Carolyn was heading, but, rather than kind of referring us to literature and other information, to do some deeper diving, could you talk to a relevant example of an MSE, kind of from a practical standpoint, and what was a fishery issue, or a challenge, that they were trying to resolve, and what were some of the model runs, or outcomes, that were produced, and, ultimately, how did that translate into management, and then I have a follow-up question after that.

DR. CARRUTHERS: Okay, and so Bay of Fundy herring was a recent management strategy evaluation we went through, and the key issue was change, over time, in the growth and productivity of the stock, affecting both the reference points in that fishery, but also affecting its future projections, coupled with a disagreement between stakeholders about how to interpret those dynamics. They wanted a simple rule in place to manage the fishery, and that wasn't as reliant on a stock assessment, that couldn't fully capture some of these changes in time, and, in any case, people didn't necessarily want to trust the projections.

One of the issues there was that the industry themselves were making reasonably profitable fishing, given caps in the quota, and so they didn't watch catch increases beyond a certain level, which actually meant that their management procedure that they wanted was quite resilient, in some regards, and so they wanted to see that tested. They didn't want to just leave it up to the Canadian government to have huge fluctuations, and they wanted their own management procedure tested, and so it actually tied in with the objectives of the managers, but the real issue there was reference points of stock assessments and the interaction between those two things.

I don't know if I can get this across, but an assessment explicitly tells you the status of the stock. It gives you what a management procedure implicitly tells you. You can see what it would expect to give you, and they cared more about that than trusting the stock assessment.

Now, John is over there, as our western chair of the bluefin tuna MSE, probably the most complicated multi-stock MSE devised, and I was the technical analyst, and that was devised because the dynamics of bluefin tuna were uncertain, how they mix, how often they mix, and it's probably one of the most data-rich fisheries on Earth, and yet it's quite uncertain, because it's managed in two areas, in east and west, and we know the two stocks mix throughout that range, and so bluefin tuna was all about trying to develop rules that could survive against the considerable uncertainty about the stock dynamics and whether or not we could propose east and west Atlantic

rules for a stock which may or may not mix a lot in some years, in some seasons, some times, and it might go through different productivities, and so that was kind of analogous, in some ways, to a multi-stock fishery like the one you could have here, and those are two examples.

Very often, the issue is uncertainty scientifically and a desire to move to an agreed procedure for managing a stock that a wide range of people can understand and implement, and so those tend to be the key questions. In this particular setting, there is a case to be made that it could be used as a more general purpose tool for guiding science, data collection, and the investigation of other management options.

MR. STRELCHECK: Thank you for that, and then, I think, following-up on kind of Laurilee and Dewey's comments, you know, I think there's questions, and the council is trying to understand kind of, well, what do we do with this, and how do we use it, but, early in your presentation, Slide 25 or 26, was kind of a linear graphic from fishery data to action, and it shows a stakeholder-driven process, right, and I view this council as part of that stakeholder group, right, and, oftentimes, we don't think of ourselves as the stakeholders, but, in terms of informing the operating models, the management policy, everything kind of in that middle area, we will be contributing to, and so I guess I wanted to ask kind of where you're at in the process and how do you see the council engaging in this, going forward, to help inform this process?

DR. HORDYK: So where we're at now is doing operating models, and, as has been mentioned by people, that's sort of the core part of it, and where the complexity is coming into it. We're starting with two species, and we're starting with the assessment, with the assessments, and we're looking at some variance, and some of the assumptions in that, but that's what we're working on right now.

What we need, from this group and from others involved in the fishery, is, one, sort of descriptions, or those different interpretations of the fisheries, or different uncertainties that go into these operating models, and we're only just beginning that process, but if, for example, with the assessment, if people have -- If some groups have concerns about ways each data were or weren't used, or how to integrate this, those are the sorts of things that we can capture and try and investigate in alternative interpretations.

The other, particularly in this group, is the management policy, the potential management approaches, and, particularly, what we're after is feasible management -- Potential management policies, and we can test anything in the MSE, but what's useful, upfront, is sort of proposed ideas for, you know, what would be proposed, or what would be acceptable and feasible for implementing, so we can just do a desktop analysis for a spatial closure, but, if that's not something that would be seriously considered, then it's not -- You know, it wouldn't be a core part of the MSE analysis, and so that would be, I think, what we would like from this group, would be trying to get sort of descriptions of those uncertainties in the fisheries system, and that probably requires sort of a particular meeting where we start going sort of into the weeds of some of these things. Here, more generally, what sorts of management policies, for these two species, red snapper and gag grouper, that could be potentially implemented in the fishery and should be evaluated.

MS. MCCAWLEY: All right. Mel.

MR. BELL: Sort of similar to Andy's question, but I thought I heard you say that we were going to use the Snapper Grouper AP as the sort of input on this, right, and, you know, it is Slide 26, I guess, is the description of the little diagram of the process, stakeholder-driven and all, and I know you've briefed the Snapper Grouper AP already, and there was a briefing, but so the Snapper Grouper AP is made up of commercial, for-hire, and some private anglers, and so not only is it a mixed-species fishery, but it's a multiuse fishery, and so you've got a broad spectrum of stakeholders in there, but were we going to rely on the Snapper Grouper AP for kind of most of that -- You know, what's desirable in the fishery, because, you know, from the commercial perspective, what might be desirable is stable catch in these species over time, and able to maintain a market, you know, for a year or something.

The for-hire, again, theirs might -- Their prospective success might be, you know, being able to run trips, or something, throughout the year, but then the recreational guys are -- Maybe it's just to be able to fish for something 365 days a year or something, but is the -- Are we relying on the Snapper Grouper AP for kind of all of that initial input, but then I heard, Chip, you said something about, you know, we're -- Obviously this is going out to the public and all, but I was just trying to figure through that part of the process, how we're going to bring the other stakeholders, beyond us as stakeholders, in this and then, you know, explain it to them in a way where you're very succinct in what you're asking them for.

What is, in your -- Whatever you happen to be, a recreational fisherman, or a commercial fishermen, what is it that you need to have, or you would like to see, in this fishery, and so it's a process thing, and I'm just not quite sure where we are and how we're doing this and how we're going to tease that information out of whomever it is.

DR. COLLIER: You're right, and the stakeholders were going to be the Snapper Grouper AP, but we're also going to have a public scoping session at the night of the Snapper Grouper AP meeting, so we can get more general, or additional, comments from the general public on how they want to see the fishery as well, and so we're working out the details of exactly how to do that, and, you know, maybe we have additional meetings, where we're trying to reach out to the general public, additional scoping meetings, to make sure that we're addressing all the issues and getting all the feedback that we need to make sure it's incorporating a variety of ideas.

MR. BELL: If I might, and, again, whatever we convey to them, in terms of questions, it needs to be simple and straightforward and very -- Stay in this box. Tell me what, you know, I need to know in this very limited, because, if you see kind of confused looks on our faces, you can only imagine, you know, the general -- The public and all, but, if you ask them very specific questions, and very specific input that you need, that would be extremely helpful, I think, for this.

DR. HORDYK: You're totally right, and the things we're after for those different stakeholder groups is like you mentioned, and it's like, well, how do they describe what a successful -- What is successful management, in their view, and that can be different for different stakeholder groups, but what would they ideally like to see, and, if we can get that information, and also the converse about what's bad, what's a bad outcome, and at what point are you sort of really going to upset, because, often, these objectives is tradeoffs between them, but, if we can find the places where people are willing to accept -- What is their acceptable space, and so it's a policy that's within the acceptable sort of space for all the stakeholders, that's the ideal, and that would be something that you would adopt.

The MSE can't always find that, necessarily, and the actual decision can still be really difficult, but the idea is to try to map out what that looks like, and so at least you can tell whether a certain approach is going to be acceptable to a certain group or not, and, if you can't find something, that's, you know, maybe a hard decision to be made, but at least you've got that information there.

MS. MCCAWLEY: All right. Next up is Trish.

MS. MURPHEY: I think you guys kind of touched on where I was going too, and I was kind of trying to picture the process of working with the stakeholders, or our AP, and so I have a partial picture of it now, and so I guess what I was going to ask is the interaction between you guys and the stakeholders, because -- So you go to the stakeholders, and they tell you what they would like to see, and you run your MSE and do your operating models and what's good and what's bad, and we come back and discuss it with them, and they will decide whether something is -- You know, decide these metrics of what is good or bad or acceptable or unacceptable, and you will go back and do some more and come back, and I guess I'm just trying to figure out the interaction between Blue Matter and the stakeholders, because I did take this as very stakeholder-driven, and so, I mean, is this going to be multiple meetings and webinars, or -- Anyway, I'm just trying to picture that back-and-forth.

DR. COLLIER: Right now, the plan is to attend the Snapper Grouper AP meetings for the next three AP meetings, and so we're going to have the April meeting, the October meeting, and then the following April meeting, and, hopefully, by that following April meeting, we're going to have a close-to-finalized model that they can look at and make sure that they're comfortable with it.

DR. CARRUTHERS: The idea is, hopefully in April, to present to the AP a set of operating models, what we call our reference operating models, and so that's some work we're doing right now, and sort of present it as a like strawman, and this is a description of the fishery, and this is going to -- Based on what we've discussed so far, the things that we think you care about, and certainly we'll discover things you don't like, or things that you disagree with, and that's great, and tell us what they are, but tell us that you haven't thought about this, or you haven't included this, or that's wrong, and then we would say, well, that's great, because that's exactly the sort of information we need, and do you have data to support that particular view, and, if you do, then we'll do another operating model, or, if we're not presenting the results -- If they say we don't care about that, and we care about the probability of catching large fish, and so, often, we find that you sort of present an example, or a first-pass at something, and then people are -- They can point out the things they don't like about it, and then it go as sort of an iterative process to continue to improve and converge on both the uncertainties and presenting the results in a way that are meaningful to people.

MS. MURPHEY: So you will find the sweet spot of the management. Gotcha.

MS. MCCAWLEY: All right. I have Tim and then Kerry and then John and then back to Dewey.

MR. GRINER: Thank you. This is a very interesting process, but it all starts with the data that's input into this system, into this model, and so the data that you're going to get is not going to be any different than the data that goes into that assessment, and it's going to be the same data, and, when we have data that has PSEs of 50, 70, 80 percent, how do you overcome that in this model?

How are your results, regardless of what management policies or operating models -- When you're putting data in that is 80 percent PSE, how does your model overcome that, or is there a point where you just can't -- Where the model is not going to work any better than anything else?

DR. CARRUTHERS: The idea, in the process, where you fit a model with some assumptions, is that it will navigate the fits to the data, and so, if the data are vague, the model fit will be vague through those data, and it's very often the case that the data only inform certain aspects of a model and not others. You will be painfully aware that, in stock assessments, a number of things are fixed, and you can fix those things and still fit the data similarly well.

I think accepting your point about having what is uninformative data -- MSE does provide you a way through it, because you can choose the fixed assumptions that fit the data similarly, and, for any one fit, you can make sure that they go through that range of uncertainty in the data, and do you understand? Do you see what I'm getting at? So you go through the assumptions and you capture just how vague that information is.

If you really know nothing, you are testing your management -- It's a really stringent test of your management procedure. If you really don't -- We're not going to make things up, you know, and the idea here is we characterize what we do and don't know, and, if you really don't know something, we need to have a management approach that can navigate that, and so at no point is there going to be the pretense of creating something that is more certain than you, or anybody else, think it is, and we are explicitly trying to avoid that.

DR. HORDYK: If there is uncertainty, and the data go into the assessment, and there is uncertainties, or disagreements, about what data are used, or how they've been estimated or whatever, you can do like what-if analyses in the MSE, and so we could rerun the assessment process to build an operating model where you may say, well, we actually believe that discards are twice as high as the data, or whatever, and, if there's a plausible case to be made for that, we can just build an operating model with those set of assumptions, and that becomes an operating model, and so we're not saying this is true, and we're saying, if this was true, and it's something we believe it is, and, if it was true, how would we manage the fishery.

The idea is -- When you said the same data goes in, you know, and, if there's concerns about any particular part of the assessment, or assessments, or any other part of the way of constructing the description of the fishery, those are the sorts of things that we would like to hear, and, if you can characterize what those uncertainties are, we can build an operating model that represents, you know, your particular view, for example, of the fishery.

DR. CARRUTHERS: Sorry, but just one follow-up, and it's very common that stock assessment models, the data that goes into them, disagree, to some extent or other, and so one opportunity in MSE is to navigate those conflicts, and so, if you have an interpretation -- In an assessment, you're going to try and get one best model, more or less, but, in MSE, we can fit well one set of data and ignore another, if they're in conflict, and vice versa, and so we no longer have to say we think this is true, and we can say one of these two interpretations, that fits one data and not the other, and those are two different operating models, and so it offers a way of navigating conflict, which is very often a problem in stock assessment, and it may be in yours, and I haven't studied them.

MR. GRINER: So do you see this fitting process where the SSC comes in, to help make those fitting decisions, because the stakeholders aren't going to be able to do that, and so this -- I am just trying to wrap my arms around where do these data decisions, and how does the SSC, come into your process, where this fitting has to be done? I don't see how it would work without some type of fitting, or smoothing, to have, you know, some kind of robust results.

DR. CARRUTHERS: I think the scientific aspects of it, with the experts that were involved in navigating those data, is important, and we're in the process of working with those assessment models, and those data, but we've already had comments from people here about concerns over discarding, and that's pointing us in the direction of reconstructing data to account for that, and the construction of another operating model, and so we're really --

It's the difference between quantitative and scientific, which is the issue you're talking about, and qualitative, people's long-term concerns about the way that datasets have been constructed, or interpreted, and so, you know, I think there's room for both of those things, but that's not to marginalize at all what you're saying, is staying in contact with the subject matter experts, the people that have dealt with these datasets for a long time and can help navigate the qualitative kind of directions that we're getting from other people, and so I think -- I think what you're saying is really valid, and we're mindful of that.

MS. MCCAWLEY: Kerry.

MS. MARHEFKA: Thanks. Where, or will, all the information we have from visioning play into sort of the inputs into this, because we spent a tremendous amount of time and money on visioning, and we already have, you know, sort of this idea of what people want this fishery to look like, through that process, and that was more robust, if you will, than just the AP alone, and so I'm hoping that will be useful, and, if not, what are we doing with all that information that we got way back then?

DR. COLLIER: I think visioning is a really good starting point to look at, as far as what the stakeholders thought was most important for the fishery, how they envisioned it, how they thought about state-based management and how they thought about seasons, and there were a lot of comments in there on exactly what to do, and, when you dive into it, there were also conflicts with each other as well, where they want it as long as possible, and as many fish as possible, and, quite often, those two are in conflict with each other, and so it's a challenge to go through it, and, yes, we are going to be using the visioning as some of the background material.

MS. MCCAWLEY: John.

DR. WALTER: Thanks, and thanks, Blue Matter, for giving the presentation, and I think you guys have chosen wisely, with a team who is very good, and competent, and will really help this council through this process. A couple of things that I wanted to point out is, one, I think -- This is from experience, as Tom noted, with other stocks, and MSEs in other stocks, is to develop a roadmap of specific roles and responsibilities and the goalpost, as to what is going to be the goalpost, and who is going to do what when.

Those are specific roles that need to be played at each step of this process, roles for stakeholders, roles for scientists, and roles, ultimately, for the council to adopt one of these management

procedures, which is going to be the recipe for providing management advice in these fisheries, and that should be the goalpost, and that is, ultimately, going to be the responsibility of this council, but, at each step, each player needs to play a certain role, and, if we can spell that out in the roadmap, I think it would be really instructive for all of us.

I will note a couple of things that I think have been touched upon that would be quite valuable, and that is pulling out the visioning project, which I think defines the conceptual management objectives for this fishery. In concept, what do people want? Then those need to be refined into operational, and so, if people want a large fish, well, how large, and then how many of them, and then at what probability of catching that large fish, and that's turning that conceptual into operational.

Then that can be an output of the operating model, and it says your probability of catching a thirty-six-inch gag grouper is this, out of the operating model. However, when you do that, you also discard a whole lot of thirty-five-inch fish, if you set that as the size limit, and so there's tradeoffs to having a really large fish, versus the number of fish, et cetera, and what I wanted to follow-up on is the other opportunity that going through this process allows, and that is to identify what other operational management objectives that this council may have for the fishery.

Usually, we have the biological musts of not overfishing and of keeping the stock above MSY, or the MSST, but there's a whole lot of other things the stakeholders value, and now is the time to get those other values out there and turn them from conceptual to operational. As Tim noted, stability of yield is a key thing for our commercial fishery, and you've got have a certain amount of yield to have a business model. For the recreational fishery, opportunity is key, that they want a certain amount of quality of opportunity, to be able to go fishing when they want and have a reasonable expectation of catching fish.

Those are the things that need to be turned into management objectives that will be outputs, such that each of the management procedures, or recipes for defining the TAC and how the management is going to go, will then get sorted and ordered based on how well they achieve those different objectives, and you will be able to see, out of Management Procedure 1, 2, 3, and 4, which one is the better one for whatever you might value, and probably the end result is going to be a compromise, as it always must be in these situations where you have competing objectives, but I think that the process is there and set up to fit this within our existing framework, and I look forward to seeing it go through and for the Science Center to be supporting it. Thanks.

MS. MCCAWLEY: Dewey.

MR. HEMILRIGHT: I just hope that -- Through this process, I would hope that maybe one or two species could be chosen to do your analysis on, instead of the whole snapper grouper complex, because I don't know if you really understand, and I said this before, just how difficult the situation -- People's aspirations, in reality, is two different things, and sometimes, around this table, it's way apart, and so I think that, even though you all are looking at this, and it's interesting, the concept of reality, of what's out there, I don't know if you're ready for it yet, because it's a big difference, and I will be -- I don't know why it is, but I've been a commercial fisherman for probably thirty years, and I'm a real good devil's advocate, for some reason, and so I'm looking forward, and it's interesting, as this goes forward and looking at the species you choose, and I'm more than willing

to participate in any way, shape, or form to get there, to let you know the lay of the landscape. Thank you.

DR. CARRUTHERS: Thank you. We would appreciate your feedback. I will simply say that you're not the first person to say that to us, and so, you know, we've had a lot of people tell us that it gets complicated very quickly, and we're mindful of that, and we're trying to approach this from the simplest initial approach type upwards, and so the idea is that, if we are going to build complexity, we build it so that we're not out of sync with the understanding of the various groups that are involved, and so hopefully we can get one up and then move at a consistent pace.

MR. HEMILRIGHT: Does your premise start out with there's a certain amount of catch, there's a certain ACL to each group, and then all this other stuff happens, or is that the ACLs on the ballpark, too?

DR. CARRUTHERS: I mean, it can do either, and so we can design management systems around constraints in ACLs on top of size limits, on top of bag limits, on top of seasonal closures. We need to scope out what those handles are, and what can be used in combination, and what is a non-negotiable allocation or whatever, and so this is the kind of information we're looking for.

MR. HEMILRIGHT: Because there's two things, and one is the allocation issue, and then you've got how much stock each one gets, and then there's stock assessments that change it, and so like they're fundamentally not changeable, and, you know, it could be, if you looked at it, if the council looked at it, five years down the road, and looked at what the allocation is, but I'm just saying there's a lot of -- I am just wondering if your management strategy evaluation starts with the aspect that there's this much pie, and it's split between these two people, or does your management strategy evaluation say, well, we don't know how much pie there is, but we'll still split it between these two people?

DR. CARRUTHERS: That's a feature of the management procedure, the management system, that is testable. If someone says it's constrained by this allocation, then it's constrained by that allocation, and all the management procedures will have that constraint, for example. If it's not, then we can consider alternatives, but that key aspect of what levers to pull, and what management restrictions there are, is necessary information for us, so that we can both describe the status quo, as best we can, but also scope out realistic alternatives.

DR. HORDYK: I think you raise a really good point though, is it's really easy for the complexity to sort of spiral out of control, and so we're starting with -- For this project, we're focusing on these two species, the red snapper and the gag grouper, and, at the moment, we're sort of pretending that this fishery is just those two species, and so we're going to have to make assumptions what goes on outside of that, but that first part, at least, is we're trying to make a simple model of the fishery, just to say, well, to get us all -- To get something that's workable for these species, and your point about management policies, and so, right now, I'm developing management procedures that keep the ACL the same, because it's being proposed, and saying, under those conditions, what are the different size limits, what are the different bag limits, and what are the different seasonal closures, and what would those things look like under this ACL, because there is lots of moving parts, as you say.

Right now, we're trying to figure out sort of simplified two-species model, and, as a first pass, that we're going to do over the next month, I'm going to assume that the ACL is already determined, and the allocation is already determined, and it's just a matter of other regulations, but those are all things that, if people propose alternatives, we can test them.

DR. COLLIER: Dewey, I wanted to respond to you about not doing the entire snapper grouper complex, and we realize that that would be an extreme challenge of trying to build a model for fifty-five species, and what we're thinking about doing is really relying on the species that have stock assessments, and those have been identified as some of the key stocks in the snapper grouper fishery, and we're trying to carry those forward and focus management on -- Or focus this management strategy evaluation on those species.

MS. MCCAWLEY: We're going to take a break, and so, when we come back, trying to get some more of the specifics from the council that they can use in the MSE, and today would be the day to offer some of those suggestions, and so, in addition, they've gotten information from the Snapper Grouper AP, and they're going to continue to go back, but now is the time, and this is why Kerry and I were suggesting that we get this presentation, and now would be the time to offer those specifics, and so let's take a ten-minute break, and then, when we come back, we'll try to talk about that a little bit more.

(Whereupon, a recess was taken.)

MS. MCCAWLEY: Thanks, everybody. We're going to continue this discussion of the MSE, and Chip is going to give us some examples of the types of information that was provided by the Snapper Grouper AP and the type of information that might be useful for you guys to provide today, at this point in the process. Chip is going to give some examples of what the Snapper Grouper AP talked about and some of the items that they provided during their discussion, so that maybe we can get a little more discussion today from the council members themselves.

DR. COLLIER: We transitioned maybe a little bit on thinking about some of these conceptual management objectives, and, in listening to the fishermen at the Snapper Grouper Advisory Panel, they definitely wanted as much access as possible, or opportunity, and, you know, it's always a concern, with the number of discards that they're seeing, especially in the red snapper fishery, and they want to convert some of those to kept fish, but that's not the only fishery that has issues with discards. Black sea bass is another one where there's a lot of discarded fish, and there's differences between a size limit of the commercial fishery and the recreational fishery.

Some examples of commercial, like Tim brought up today, is stability for the commercial fishermen, and also yield, trying to get as much bang for your buck, and convert discards to kept fish, and that's also a concern for commercial guys, and so these are just some ideas that we pulled up real quick, in order to maybe instigate the conversation, and so have at it, and say if we're wrong, and say what ideas you like as well, and if, Adrian, or Tom, you guys have anything else to add in the conversations you heard from the fishermen, please speak up.

MS. MCCAWLEY: All right. I have Kerry and then Tom and then Laurilee.

MS. MARHEFKA: For the commercial fishery, I think one of things we're still grappling with, and I'm not sure how to word it, is sort of what the right number, what the right amount, of effort

is, and so, in particular, do we stay at two-for-one, or do we go to one-for-one, and that's a big question that I was hoping would sort of get answered through this process.

MS. MCCAWLEY: Thanks, Kerry. Tom.

MR. ROLLER: This implies, I think, under opportunity, but look at ways to maximize -- For recreational, excuse me, but, you know, particularly for for-hire, figure out a way to maximize some of those more peak and important summer season dates, or whatever season is more applicable.

MS. MCCAWLEY: All right. We're getting that typed on the board. Laurilee.

MS. THOMPSON: I would say that the commercial industry -- We also want opportunity, but my burning question is, again, how we're going to use this data, and so you're going to be talking to the AP, and probably us, and you're going to be getting real-time information, but yet the SSC is working off of stock assessments that, by the time they get them, they're three or four years old, and so how do you balance the reality of what's happening now versus what happened from 2012 to 2019? Our information is always old, by the time we get it.

MS. MCCAWLEY: Andy.

MR. STRELCHECK: Well, and I would love for Blue Matter, or others, to weigh-in on this, and I'm hearing a lot of, you know, concerns about the uncertainty in the data, and I think those are well justified, right, but think of this process as like you're starting your management strategy evaluation from the same state, right, the same place, and regardless of right or wrong, right, or judgment, and you're trying to understand your management strategy and how that might then change the future state, right, and what my understanding of the MSE is, and what these guys can do, is also look at those uncertainties in the modeling, right, to capture, and address, those uncertainties, but I think we have to keep in mind that we're really comparing kind of the management strategies against themselves, as well as then how sensitive they are to these broader uncertainties, and that kind of snapshot, or state, in time is really critical to kind of have stability, in terms of how we do that evaluation, and so I don't know if anyone wants to add to that, but I think it's really importance, in terms of a difference between like a stock assessment and a projection and kind of the lag in timing, versus strictly evaluating management measures.

MS. MCCAWLEY: John and then Spud and then Laurilee.

DR. WALTER: Laurilee, that is a really great question, because our standard way that do management advice is several years in the past, in terms of the terminal years of data, and then we project forward, and, by the time it goes through all the regulatory processes, it could be a little late to the game, for stocks that might be highly dynamic.

That's a part of the process that would be basically the status quo against which we would test alternative management that might be able to be more responsive to those things, and a good example being the dolphinfish MSE, where we think a full stock assessment, plus projection, really wouldn't be very useful for something like dolphin, and it's highly dynamic, and that's where an empirical, or model-based, management procedure would probably be more useful. If you had an index of what was coming into your fishery with dolphin, you could adjust the catch limit relatively

rapidly, go up or go down with what comes in, and then spread out the fishery to provide opportunity across the multiple different states and sectors, and that's basically the concept for the dolphin MSE.

In this case, if it turns out what worries this council is the delay between the end of a stock assessment and the timing at which management goes in, that's a thing that you need to bring up and say, when this council adopts a catch limit, this is what worries us, that this might be maybe a little old, and then what you would say is can you build a management procedure that is faster, and more responsive, and that's what would be developed and tested. Then can the agency develop the architecture to get it in place? If that is what you want, now is the time to bring that up. Thanks.

MS. MCCAWLEY: All right. That was helpful. Spud and then Laurilee.

MR. WOODWARD: Thanks. I want to follow-up on what Andy said, to make sure I understand it, and so, in this process, some of the uncertainties in the stock status determinations can be explored, in terms of looking forward to what you want management outcomes to possibly be, and that is a correct understanding of that?

DR. CARRUTHERS: Yes.

MR. WOODWARD: Okay. All right. Then one to add to this, I think, under -- Well, it would be under both recreational and commercial, and it's we certainly have heterogeneity of effort along the South Atlantic, and we need to explore how to address that in management, where you have, you know, a high level of effort in some areas and a low level of effort in others, and so access and opportunity really needs to be matched up to effort, and so --

DR. COLLIER: You want that for recreational and commercial?

MS. MCCAWLEY: All right. While Chip is getting that on the board, Laurilee.

MS. THOMPSON: This is a follow-up to my previous question, and we are tied, by the MSA, to have to base our management decisions on what the SSC gives to us, and, you know, over the years, there's been many, many times when the fishermen have questioned the modeling of the SSC, and how is this going to change how the SSC is doing their analysis of the stock assessments and stuff?

DR. COLLIER: The SSC is just a reviewer of the stock assessments, and they're not the -- They're not conducting the stock assessments, and, you know, this can help them in a variety of ways. You know, what we're looking at, with this one, is we're not necessarily looking to set ACLs. We're looking to evaluate management strategies. The ACLs have been set by the SSC, and so we could potentially come in there and say, if you do this, given the stock assessment output, we could potentially change -- I said we weren't going to change ACLs, but what I'm talking about is the overall ABC, and so, right now, we have an ABC for the stock that includes landings and discards.

What would happen if we change some of the landings -- Some of the discards to landings, and what management strategies would need to be in place to ensure that we have a sustainable stock going forward, and it's not going to say you can automatically harvest as much as you want

anymore, and it's not going to do that. It's still going to make sure that you're maintaining a sustainable level.

MS. MCCAWLEY: John.

DR. WALTER: I think that's a good question, about the role of the SSC, and I think there is a clear role that probably should be defined a little clearer in this process, as to where the SSC is going to weigh-in and what decisions are SSC decisions, versus what are council decisions, but I think the roadmap can help spell that out. The way I could see it going is that the SSC would have a role in approving the recipe for generating the ACL, which the management procedure would be that recipe.

Then that recipe would be applied every one, two, or three years, depending on the periodicity, to define an ABC and an ACL. The SSC would then review that for consistency with the recipe, that was already spelled out and approved by the council, and then would then become the ACL and ABC, giving the SSC a role in both the process of the MSE, in determining if the recipe meets the scientific requirements, and then every year when that ACL comes into play, that it indeed would still fit with the other information that would be evaluated when that gets put into place, and like has there been something exceptional that would mean don't follow your recipe. At least that is the process that's been outlined in some other bodies, where you have both a scientific advisory body and then a deliberative body. Thanks.

MS. THOMPSON: So, you know, a lot would depend on at what point the SSC comes in, because, if the MSE produces some different data, or different strategies, is that going to be given to the SSC before or after they set the ABC, because, once they set the ABC, we're done. You know, we're just going to be going, well, wait a minute, and we'll be like Pegleg, going wait a minute, wait a minute, and we think that this should be used, or that should be used, and so the SSC -- They should be getting this data before they make the ABC, before the set the ABC, in my opinion.

MS. MCCAWLEY: All right. Other comments? We have some there, the conceptual management objectives there on the board. Anything else that we want to add as part of this discussion? Spud.

MR. WOODWARD: We're going to lean heavily on the AP to sort of tweak some of this, and, well, something -- I think we've all seen this, and, obviously, the interpersonal dynamics in APs are highly variable, and some people are very outspoken, and some are not, and so perhaps it might be worth considering having this facilitated, maybe to help someone draw out those people who are a little more introverted, perhaps, to make sure that their opinions, or perspectives, are brought forward and considered, because that's just the dynamics of groups, and all are not -- You know, there's a lot of people with strong opinions, and everybody is just not as willing to express them in a group setting, and so maybe that's something we could think about.

MS. MCCAWLEY: Thanks, Spud. Laurilee.

MS. THOMPSON: Maybe you could put this out to public comment, because, you know, in reading the public comments for this meeting, there was a lot of good suggestions that were put out by people who are not on the Snapper Grouper AP, and so maybe the universe of input needs to be a little bit -- You know, it needs to be larger than just the Snapper Grouper AP.

MS. MCCAWLEY: Spud.

MR. WOODWARD: Along with the visioning, just to remind everybody that Kari Buck did those listening sessions around -- I guess it was 2018 or 2019, something like that, and that's another source of some information. Laurilee, we had these meetings, where people would just come and share their opinions, and so all of that can kind of get factored in together, I think to help sort of put sideboards on what people's desires and expectations are.

MS. MCCAWLEY: Andy and then Laurilee and then Dewey.

MR. STRELCHECK: I guess a quick question for Blue Matter, and how do socioeconomics factor into the modeling work that you're doing?

DR. CARRUTHERS: Well, they factor insofar as you can link them to the modeling output, and so, for example, if you can propose a relationship between, for example, you know, fishing capacity and employment, revenues versus profits, against varying yield, for example, varying catch, then you can incorporate those, and so it's actually not difficult, in a certain sense, but what it requires is an interpretation of the types of data that we get, and so the variability, for example, and yield between years.

In some fisheries, high variability means they have to maintain lower capacity. If they have lower capacity, they have lower employment. If they have lower employment, then the marginal value of that industry is seen differently, basically, and so those are the types of relationships, and data, that you would need, but there is absolutely no reason why, if this group, or another, has the data, and wishes to pursue objectives that are more on the socioeconomic end of the spectrum than just catch, and variability in catch, and there's no reason why we can't incorporate those, if you would like. It's not done as much as it should be, and so that's all I've got to say about that.

MR. STRELCHECK: Thanks for that, and so I guess a couple of things that come to mind then, in terms of optimizing yield, is, in this region, we have the kind of push and pull of competing management objectives, or social objectives, between the recreational sector and the commercial sector, right, and so I think it's partly captured on there with recreational, in terms of opportunity and for commercial yield, but, really, there's an optimization there, in terms of how you balance the two, and so I'm interested in kind of, on the recreational side, and the commercial side, kind of that access opportunity, versus kind of the quality of catch experience, within the MSA construct.

Then reducing discards, and this might be a little bit too prescriptive, but I feel like, with fisheries management, we've kind of pushed the limits on our size limits, and we've produced our bag limits for a lot of species to one, you know, and so I would be really interested in kind of understanding, you know, where we could maybe gain some benefits by changing those size limits and bag limits and reducing discards, just based on the management structure we've put in place to-date.

DR. CARRUTHERS: I am noting that point, but, to the earlier issue of what people value, as opposed to -- You know, do they value a large number of successful trips, or a fewer number of really mega successful large fish, high catch rates, we did a 1,000-lake model for B.C. trout, where we just interviewed people, and we essentially had them select between the outcome of various

fishing trips, and so, if you want to know what recreational satisfaction is, there are quite well-established survey techniques to get that type of feedback, and you can interpret those and start to quantify, in terms of -- It might not be economic, and it might just be a satisfaction, an angler satisfaction, where you can quantify the relative merit of two alternative trips, and you just literally pose people with three options, and you need to get a social science team to do it, because they do it correctly, but you can do that, and very quickly get information about what a recreational angler considers to be good or bad, and across different angling groups, and so we actually did that in B.C.

MS. MCCAWLEY: All right. I have Laurilee and then Dewey.

MS. THOMPSON: I have a question for Andy. You mentioned the listening sessions, or maybe John did, and were they separate listening sessions dedicated only to the South Atlantic, or are you talking about Congressman Huffman's listening sessions, when they went all over the United States?

DR. COLLIER: I will answer that, and it was Spud that made the comment about the listening sessions, and what it was is I think it was ASA had sponsored some listening sessions for Kari to reach out to the recreational fishery, to see what they wanted, whether it -- I can't remember exactly what the terms of reference were, and do you remember, and I think they explored season length, spatial closures, gear restrictions.

MR. WOODWARD: It was basically what makes a good trip, and what do you all desire in a trip, and, basically, it came down to just, if I remember correctly, that, if we can have one big fish, kind of a -- I call them an ooh-ah fish, and then a few small fish, and that was generally what people said would be a good trip, and so what they want is opportunity to go, when conditions are good and they have availability, and not necessarily deck load the boat, but have, you know, a few fish, with like one big fish that can be shared, and that was a generalized term of satisfaction.

MS. THOMPSON: All right, and so I would like to see added to the commercial section the impact -- There is so much pressure on the commercial fishing industry, and you've got the two-for-one permits, and the fleet keeps getting smaller, and boats are being sold overseas and not to be replaced in the fisheries. The market value of dock space -- Our dock space is evaporating, and so how are all of these factors going to impact the public's -- Not the recreational fishermen that are going out in boats, but how is all of that going to impact the public, the shopper from Kansas that wants fresh, domestic, American fish, and how are all of these obstacles that the commercial industry is facing going to impact the ultimate, you know, production of the commercial industry?

MS. MCCAWLEY: Thanks, Laurilee. Dewey.

MR. HEMILRIGHT: How about the overcapitalization of the recreational industry, and the for-hire, because I guess some of the tradeoffs would be, if you have a certain bag limit right now, and there was more people coming, would they be accepting of a lower bag limit, to have more folks in the fisheries, and definitely, if we have our -- If the commercial was overcapitalized in 1999, with the two-for-one, it is definitely overcapitalized with the recreational fishery and the for-hire now, and that's just plain, as you can see out there in what's happening. Thank you.

MS. MCCAWLEY: Tom.

MR. ROLLER: I just have a clarification, Dewey, and are you saying recreational and for-hire or recreational for-hire?

MR. HEMILRIGHT: Both.

MR. ROLLER: Both. Okay.

MR. HEMILRIGHT: Equal.

MS. MCCAWLEY: Spud.

MR. WOODWARD: Just a point, I guess, and I've heard the term "overcapitalized" being used in the private recreational sector, and I think -- I know what it means in the context, is that there's so much effort out there that you're not necessarily generating -- You've got a supply-demand imbalance, but I think we need to be cautious about applying sort of a business term to private recreational fishing.

I mean, "overcapitalized", to me, in the classic sense, means you've got more units of operation than you have supply to generate profitability, and, in private recreational fishing, that's not really the case, because satisfaction, in private recreational fishing, goes from somebody not keeping any fish all the way to some people keeping fish, and so I think it's just we need to make sure that we're using consistent terminology here when we talk about it. I mean, you can overcapitalize in the for-hire industry. If you've got more boats than you've got customers, then yes, or you've got more boats than you have the opportunity to go fishing to provide satisfaction for your customers, then, yes, I guess you could technically have overcapitalization, but I think we've just got to be careful of mixing our terms here.

MS. MCCAWLEY: Dewey and then John.

MR. HEMILRIGHT: Given that, I will change my terminology to over-effort for the private recreational and overcapitalized for the for-hire. I want to make sure my English is right. Thank you. I don't want nothing mixed up.

MS. MCCAWLEY: John.

DR. WALTER: The economists have a term called "angler welfare", and it could be applied to commercial welfare, and it sort of gets to some of these points about welfare can be both in strictly economic terms, about what you're deriving from it, or it can be in non-monetary benefits that you're deriving from it, and so I think, in this case, it would be some measure of commercial and recreational welfare, and I would point people to the Mid-Atlantic Fishery Management Council's MSE for summer flounder, where they've actually tried to quantify recreational angler welfare with some discrete choice experiments, to determine what benefits they would accrue to different management of summer flounder, that has a really high discard problem as well, and so they have kind of already blazed the ground for that, and there's a terminology that's a little bit more neutral than to say that something is over or undercapitalized, because that's really a value judgement, I think, and what this body is going to be determining is a management procedure that gets to

achieving multiple objectives, and, ideally, the sweet spot between say commercial and recreational welfare, if they are indeed competing, and maybe that might help with that. Thanks.

MS. MCCAWLEY: Other thoughts here for the MSE? Tom.

MR. ROLLER: I just want to kind of reiterate -- Go back to Dewey and Spud's comments, and I appreciate your clarification on your English. I think that really clarifies those thoughts, looking at, you know, high effort in the private recreational, versus the overcapitalization, and I think both of those are worth discussion.

MS. MCCAWLEY: Anything else here on the MSE? Any more comments, Chip, or questions? John Walter.

DR. WALTER: I just wanted to come back to the economic considerations, because that is a key decision point as to whether those are explicitly going to be accounted for in the operational management objectives or not, and, in some cases, because they are contentious, MSE groups are told don't go there. However, ultimately, at the back-end, the decision often becomes something that has got economic elements to it, and so, at the outset, does this body want the economics explicitly considered, in which case the process would need to get put in place to be able to quantify those, or do you say, no, we'll deal with that kind of later on, and I think that's something that needs to be decided upon pretty soon. Thanks.

MS. MCCAWLEY: Thanks. Chester.

MR. BREWER: Maximum yield. I mean, you do have to put some sort of economic data, or parameters, or whatever you want to call it, into -- At least in my mind, into your formula, because, otherwise, you're going to get -- At least to my mind, you're going to get something that is very, very slanted towards the -- I am not coming up with the right word right now, but towards, you know, having the, you know, maximum number of fish in the water and whatnot, whereas, as we've talking about, and, actually, a lot of this comes into the, quote, overcapitalization and other -- But I do think you have to have some economic data that goes into your modeling. I think you just have to.

MS. MCCAWLEY: Spud.

MR. WOODWARD: I agree. I mean, I think you've got to do it, and, in fact, when we worked on our allocation decision tree, you know, we're including social, economic, ecological, biological, all those elements in there, and so the money part of it, as contentious and cumbersome as it may be, needs to be considered. Now, that's easier said than done sometimes, because of, you know, the quality and availability and relevance of that data is always something that challenges us, but it doesn't mean that you shouldn't at least try to include it in your decision-making process.

MS. MCCAWLEY: Dewey.

MR. HEMILRIGHT: When it comes down to economic data, I would use both the economics of what they were through something like that, but also what the fishery has lost, both in commercial or recreational, because there is a price to pay, and the commercial has had a price to pay for recreational dead discards of red snapper over the years, to the tune, in twenty years, of \$25 million,

if you took the percent of money that was for the -- A percentage of the commercial 28 percent and took it out of the discards, and it's over \$25 million that it's cost the commercial industry, and there's only less than a thousand, and now it's down to 500, and so that's an amazing number right there, looking at that, what it's cost the economics of what's been lost.

In the blueline tile fishery, overages of ACLs, to the tune a million dollars, and, when you only have so many participants, that's pretty much -- Like that's almost \$50,000 to \$100,000 for a few boats in North Carolina, that they lost, for overages of going over the ACL and not properly managing, and so I think we also need to include the losses, when we look at economics, because of challenges that management has had, around this table, for the different species, also, to include that. Thank you.

MS. MCCAWLEY: Kerry.

MS. MARHEFKA: Again, I'm not sure how to word this, or even if this makes sense, but I am going to say it anyway, and I would love to see the -- When we look at the economics of the fishery, whatever that looks like, that we take into account somehow beyond ex-vessel value. One of the things that I think is very unique about our fisheries -- Especially in the South Atlantic, we're becoming more and more boutique, and much of our fish -- Unlike in other regions, much of our fish is actually -- It has a different supply chain, because it's staying local, and it's staying in the local economy, and the fisherman is the dealer. The economics of our fishery look, I think, a lot different in the snapper grouper fishery than they do in other parts of the country, the commercial fishery that is.

To the extent that can be considered, beyond just what the boat gets paid, I think it's really important, because I think, when we first started doing economic analysis of the snapper grouper fishery, it made sense to look at ex-vessel value primarily, because things were going to one wholesale, or they were getting shipped to New York and Baltimore, and that whole traditional process was happening, and now I think that's happening less and less, and so I hope that that somehow is factored into that.

MS. MCCAWLEY: Andy.

MR. STRELCHECK: Spud, you had mentioned spatial management of effort, and I want to go back to that, and so you were referring to like differences in effort based on kind of geographic area along the coastline and managing differently because of that?

MR. WOODWARD: Yes, and, I mean, that's my -- I mean, in a perfect world, yes, I would like to see opportunity and access more balanced back to effort, and where that effort is expressed spatially and temporally, and, you know, it's a big lift, but I think we need to at least, if we're going to go through this process, consider is that possible, and how would you manage that, and there is certainly mobility, and I know that some commercial fishermen transit through the whole South Atlantic, but, at least in the recreational sector, while there's some of that mobility, people typically fish in proximity to their port of origin, and so, you know, we've certainly got a situation, in the South Atlantic, where -- Not to pick on Florida, but there's a lot of effort expressed in Florida compared to the rest of the South Atlantic.

MR. STRELCHECK: Okay. That's helpful, and so I would add depth to that, because I know we've talked about that conceptually, in terms of kind of managing effort and fishing from a depth spatial management perspective, and so we could expand that out.

MS. MCCAWLEY: Laurilee.

MS. THOMPSON: Kerry touched on what I was going to talk about, you know, the disparity between how the economics of recreational fishing is calculated versus the ex-vessel price of commercial fisheries, and so I want to make sure that that's included, but there's also an access issue for recreational fishermen, too. I mean, you should see some of the chaos that takes place at the boat ramps in Florida, many of the boat ramps in Florida, because, again, the value of a condominium is way higher than that of a marina, and we're losing our marinas, you know, to development, and that is resulting in a lot of people trying to use the few boat ramps that are left, and that needs to be brought out.

MS. MCCAWLEY: All right. I am looking over there to see if Chip is capturing recreational access, such as boat ramps, and it looks like it. What else? Dewey.

MR. HEMILRIGHT: How about quota? I mean, is that going to come out of the --

MS. MCCAWLEY: Do you mean ACL? Is that what you mean?

MR. HEMILRIGHT: Well, I guess, ACLs or -- I mean, we've got all these conceptual management objectives here, and a lot of different things here, but it's all based on how much fish you get, and so where does that -- I mean, to me, that's the top dog, is what's your piece of the pie, and then the rest of this is how it reverts out. I'm just -- I mean --

MS. MCCAWLEY: Do you want to answer that, Chip, or Blue Matter? Is that a question for Blue Matter, about how ACLs and quotas are factored in here, or John Walter?

DR. WALTER: I will try to help a bit, and maybe phrase this in the form of a question to the council, and so the ACL is a product of an allocation, an assumed allocation. That allocation can be fixed, or it can be variable, and you might better achieve some of these other objectives by having variable allocations, and does the council want to consider some scenarios that might have -- If the management procedure goes all the way to actually specifying an ACL, which ideally it would, if it's the full recipe for getting the ACL, then what it could have is a variable allocation scenario, and that might be better than a fixed allocation scenario, and I will illustrate with an example, and I believe this is the way the striped bass is managed, in that the commercial fisheries allocation is much more constant over time, and the recreational allocation goes up or down with the stock assessment and the abundance. The recreational has much higher variability. When the stock is abundant, they get to reap the abundance, but, when it's down, they have to fish for something else, but the commercial fishery has got more stability.

There's a few other stocks that I think are managed in a similar manner, and that's something that could maybe find a better solution space to that stability and opportunity tradeoff, or do you want a fixed allocation scenario that uses something historic from the stock assessment, and that's the question. Thanks.

MS. MCCAWLEY: Laurilee.

MS. THOMPSON: How often do they do striped bass stock assessments? Is it more than every eight or ten years? I mean, how do they set whether the recreational allocation is going up or down?

MR. WOODWARD: The frequency of assessments is about the same as here. I mean, they're on like a four to six-year, you know, schedule, something like that, and it's the same thing. You end up with the terminal year being, you know, sometimes three or four years out from your actual management decision, and that seems to be the one constant in this world, is that there's always that gap in there, but, just kind of back to that, I mean, we wrestled with this kind of variable allocation issue with menhaden, the same thing, and trying to say, you know, do you have a variable allocation, so that you're better connecting available of fish to opportunity to harvest those fish, and that just made everybody kind of -- We curled up in a fetal position, and just went -- Because we want predictability. I mean, that's our problem, I think, in this world, is we want -- I guess I will call it stable flexibility, you know, that you want to be flexible, but you want to know what it's going to be, and I think that's one of the conundrums that we deal with in this business.

MS. MCCAWLEY: Any more discussion on this? All right. Anything else that you want to add here, Chip?

DR. COLLIER: I think next is -- I think John Walter put this really well, when he talked about it, and what scares you about some of the stock assessments, or the data, and so what are the key uncertainties that you're seeing? I've heard you guys speak, many times, about the PSEs for the recreational fishery, and what are some of the other concerns?

MS. MCCAWLEY: Spud.

MR. WOODWARD: Those of us who were involved in the climate change scenario planning process, that's another element I think now that we're going to have to deal with, is some of these stocks are changing in their distribution in time and space, and is that going to increase uncertainty in some of these stock assessments, when they're set based on certain parameters that have historically existed, but might not exist into the future?

MS. MCCAWLEY: Kerry.

MS. MARHEFKA: We talked about this in the group, but like, you know, this whole concept of a regime change, which may be climate related, or it may not be, and we don't know what's going on with red porgy and red grouper and scamp, and so that scares me a lot.

MS. MCCAWLEY: Laurilee.

MS. THOMPSON: I forgot what I was going to say. Let's see. Give me a minute. The uncertainty in the data collection, and there is always questions about how the data was collected, what methods, and, if you use chevron traps, you only get small fish, and, if you use cameras outside the chevron traps, you see bigger fish, but you can kind of get a length on them, but you can't get their age, and, you know, the fact that hook-and-line collection of fish yields larger fish, and so there is a lot of uncertainty in how the fisheries-independent and dependent data is collected.

MS. MCCAWLEY: Chip, I see data collection, indices of abundance, and she was suggesting fishery-independent and fishery-dependent data. What else? Dewey.

MR. HEMILRIGHT: I think you would put size of fish collected, like, you know, for instance, snowy grouper being 8.8 pounds and golden tilefish being under nine pounds, or something like that, and so I would say your size fish, and it might even be smaller than that, but I would say size of your fish, and your low intercepts that you're arriving at them numbers, which is troubling to me, that you have to do other -- That you have to do other weighted parts, or do something different, to actually get a number out of something, because there's so less frequently collected, and I think that skews that, and so, if that's got low intercepts, size of fish, and you might put PSEs over 50 percent. You know, it's highly variable, and it shouldn't be used for management, because you have some PSEs, and particularly -- The charter boats on some things are better than the private recreational angler, but I think you've captured it there.

MS. MCCAWLEY: Andy and then Laurilee.

MR. STRELCHECK: I mean, I would encourage Blue Matter, for the assessment uncertainties, to really talk extensively with the Science Center, and I think this could turn into a laundry list of uncertainties, and some uncertainties are more important than others for us to understand, and so, like thinking about red snapper as an example, natural mortality has a pretty big influence on the assessment, the magnitude of discards, discard mortality rates, right, but I don't want to generate a laundry list, because they could be off chasing rabbits for quite some time, and so we really, I think, need to focus in on what's most uncertain about the assessment and focus in on those.

DR. CARRUTHERS: I agree, and I think one of the starting basis -- No matter where we go from, whether it's the basic assessment or some radically-different version, you know, you already do have sensitivity analyses peer reviewed, as part of the assessment process, that get into natural mortality and somatic growth and selectivity, and so a way of addressing the science team's uncertainties is to just use the sensitivities that they've come up with in the assessment, and so that's quite -- Because it's been documented, and it's reproducible, and so that's one of the first kind of -- On that side of things, that doesn't get to a group like this, and what a group like this is concerned at, but we would probably try and recreate some of the basic sensitivity analyses that you used in the actual stock assessment, and so it deals with things like M.

MS. THOMPSON: I have two more things. The backlog of analyzing the otoliths -- Like I don't know that for a fact, but I have heard that there are lots of otoliths that haven't been analyzed and are just sitting in boxes somewhere, and, also, the impact of development on our estuaries I believe has an impact on recruitment into the fishery. If we keep destroying our estuaries, you know, then how long can we expect decent recruitment of the fish that use the estuaries as a nursery, and how long can that continue? I believe that the low recruitment of gag grouper has, you know, something to do with what is happening in our estuaries.

MS. MCCAWLEY: Thanks. I was trying to see how that was being captured by Chip, and it's estuaries issues or recruitment in general, and I don't know how you want to capture that. Go ahead.

DR. CARRUTHERS: It might be useful just to highlight that we generally have two different kinds of operating models, and like one is what we call reference set operating models, which are like the things that are core uncertainties that the group is worried about, and they might be things like traditional sensitivity analyses, but we have another set called robustness set operating models, which are things for which we may not have a lot of empirical data, but we might have a concern about it, and the type of concern that you just raised, about recruitment strength in response to an environmental condition, is one such thing that would typically put in what's called a robustness set.

The idea here is that we may not have the data to tell us what the future recruitment is going to be or not, but imagine that we could select between five management procedures that all did quite well with the reference set, and why would we also not then choose the one that could survive the robustness test? Even though it doesn't have empirical evidence, we could choose a management procedure that was otherwise as good as the rest, but just have the ability to also navigate that particular robustness test, and so it's just to remind the group that we don't necessarily need to have data and, you know, peer-reviewable absolutely water-tight modeling, and we can actually put concerns and future projection scenarios into what's called a robustness test and see how well our management procedures would perform under these hypothetical scenarios, similar to the one you've got, because, ultimately, we might be able to use those to discriminate between groups of management procedures.

MS. MCCAWLEY: All right. Any more discussion on this? Chester.

MR. BREWER: I don't know how it actually -- Whether it fits in well with what we're doing, but something that I think is starting to make a big difference, and probably in the future will make more of a difference, is artificial reefs and habitat restoration, which kind of goes along with what Laurilee was talking about, but there have gotten to be some fairly sophisticated artificial reefs out there that hopefully are going to be helping with recruitment.

MS. MCCAWLEY: Anything else? Chip.

DR. COLLIER: One thing I'm not seeing is anything, any concerns, with the commercial data, and the commercial data seems like it's pretty good, and any concerns with it?

MS. MCCAWLEY: Tom.

MR. ROLLER: Not a problem with commercial data, but, if we're on that note, I would say lack of validated for-hire data, for future record-building purposes.

DR. CARRUTHERS: So you guys all know each pretty well, and so you can probably interpret the hysterical laughter, but I don't know what this means. Maybe you could put it in words, possibly. That would be useful.

MS. MCCAWLEY: Go ahead, Kerry.

MS. MARHEFKA: I'm surprised you called on me to do it politely.

DR. CARRUTHERS: Or not.

MS. MARHEFKA: Here, and I'm sending it. I am mind-melding it to you, and are you getting it? No, but I think that we were laughing because I don't think that we feel like even the commercial data -- We don't have -- There doesn't seem to always be a level to have faith in all the data, or at least it seems to be, for the people who are looking at it, good in some circumstances, but not good in other circumstances, and so we collect a lot of data from the commercial fishermen.

As someone who reports that data, it feels comprehensive and useful to me. Often then we hear that that data is maybe not good enough for X, Y, Z, whether it's the stock assessment or whether it's, you know, determining discard mortality or things like that, and so I think there's a lot of questions around the use of the commercial data, who considers what accurate, because -- So we collect -- Right now, we have a catch logbook that has a lot of information, gear type, area, and not pinpoint area, but a big area, some economic data on that, and then there's a lot of questions, if you will, about sort of how reliable and accurate bycatch information is.

MS. MCCAWLEY: Dewey, John, and then Tim.

MR. HEMILRIGHT: How about ways to improve on the data, given that, for like snowy grouper, we have a 200-pound trip limit, and how hard would it be for each dealer to weigh 200 pounds of snowy grouper and get the individual weights of that fish, and the same for recreational, and there's only, this year, I think going to be 1,670 fish, 1,670, and it's only one fish per boat, and so just think if you could get half of the boats to weigh a fish, or give a measurement, and, I mean, how hard is that, and, I mean, wouldn't that help and tell what you're doing, or looking at, in the future?

Something else is the commercial entity -- They implemented, last year, an increase greatly from observers on boats, and so that work is ongoing now, and I think, next year sometime, it will be one year under the belt of the increased observer coverage, which, I believe, hasn't been done before in the past, and so you have two avenues. One, I mean, I find it hard to believe that we couldn't -- That there wouldn't be some futility in management to weigh each snowy grouper, because you've only got 200 pounds, and then that's going to tell you where it's coming from, out of which port, and it's going to tell about the spatial part of where management could be in the future, possibly, that Spud was talking about, and Andy mentioned, and the same with your recreational snowy grouper.

The pictures I've seen on Instagram, I don't see no eight-pounders, and Andy made a great point, at the last council meeting, of how nobody takes pictures of their small fish, but you're only allowed one, and so they must have threw their small fish back and got a picture of their big fish, but I'm just saying, and, you know, it's stuff like that that it seems like the industry would -- The recreational, and the commercial too, would want to step up to the plate and say, yeah, man, we'll weigh these ten or fifteen fish, and that could be very helpful, if you got 75 percent of your fish have been weighed, or measured, to go in some way to report it, but I am just throwing that up there to think about it. Thank you.

MS. MCCAWLEY: John and then Tim.

DR. WALTER: I would be remiss in not bringing up the commercial discards, and I see that we have discard logbook and observer coverage, because those are -- They come from the logbook

self-report, and they often don't have any validation, and only recently have gotten the increased observer coverage.

The only thing that I'm surprised hasn't come up is implementation uncertainty, and so such that, when management gets implemented, it's not 100 percent followed, and, since there's been a lot of discussion on the percent utilization of descender devices and things like that, but that's usually pretty standard that, whatever management puts into place, it's not going to be 100 percent perfect, and usually it's something that should be considered as implementation uncertainty in the management, that the management isn't perfect. It usually doesn't need to be in the operating models, necessarily, but it just needs to be that nothing we do, and put into place on the books, is perfect, and sometimes it's more or less perfect, and the descender device, and how the ACL is often dependent on that assumption, became a pretty big source of uncertainty.

The last thing I will mention is that I think that this is the kind of thing that, on key uncertainties, is something that the SSC would probably have a value in weighing-in on, given that they often deal with these uncertainties when they review the stock assessments, and so I think those uncertainties weigh heavy on their minds as well. Thanks.

MS. MCCAWLEY: Tim.

MR. GRINER: Just one more point of clarification on that logbook data, the commercial logbook data, and the discard and the economic data is a subset of the overall permit holders, and it's a very, very small subset.

MS. MCCAWLEY: All right. This has been a good discussion, and we're nearing the end of our time today. I want to thank Blue Matter for joining us this week. Any more final thoughts on this topic, before we wrap up? Go ahead.

DR. CARRUTHERS: I thank you very much. I mean, it's a brief introduction, but all your comments have been very useful, and we do encourage all of you to write emails to us, and we're happy to hand out cards. If you have any questions of clarification, send us an email, or pick up a phone, and so, if you feel like the material is not clear in any way, again, the same thing, and so we're here to try and help the technical side of it sort of it be less of an issue, and so thank you very much for your comments and your time, and it was great to come here and, like Adrian said, see real people for a change. I am thoroughly, thoroughly sick of webinars, I can tell you. Thanks.

MS. MCCAWLEY: Thank you. All right, Madam Chair, I'm going to turn it back to you to decide what we're going to do with the last fifteen minutes here.

DR. BELCHER: Okay. I had asked Monica if she would go ahead and give us the litigation brief, just to have a few words for open session, and we'll see where that takes us. I know Doug -- I've kind of gotten a little bit of mixed messaging, and I thought we had to be there for 5:30, and Doug says we're not eating until 6:45, and so I think the plan is the boat on the front, but so, following-up with that, I'm going to go ahead and just, again, make sure that we break at 5:00, and folks can figure out how we're going to do the carpool, but we'll let Monica give us the litigation brief update, and we'll go from there. Spud.

MR. WOODWARD: I believe the bar will be open at 6:00, and so just factor that into your plans.

DR. BELCHER: Monica.

MS. SMIT-BRUNELLO: Yes, hi, and I wanted to give you an update on two cases that I have been telling you about that we would receive judicial decisions on, and both of them are Gulf of Mexico FMP cases, but I think they're relevant to what we all do over here, and so one of them was a lawsuit brought on Gulf Reef Fish Amendment 53, and so, in May of 2022, some commercial fishing organizations filed a lawsuit in the District Court, in the District of Columbia, challenging the final rule that implemented Amendment 53 to the Gulf Reef Fish FMP, and that amendment updated the red grouper allocation between commercial and recreational sectors, among other things.

The plaintiffs alleged that the amendment and rule violated the Magnuson Act, the Administrative Procedure Act, and the National Environmental Policy Act. The plaintiffs argued that the final rule was not based on the best scientific information available, as required by Magnuson National Standard 2, that it wasn't fair and equitable, or reasonably calculated to promote conservation, particularly the allocation portion, under National Standard 4, and it didn't minimize bycatch mortality, minimize bycatch and bycatch mortality, under National Standard 9, and also that, under the NEPA, it didn't take a hard look at the alternatives.

This amendment was one of the first to incorporate the MRIP revised estimation of recreational catch, using the Fishing Effort Survey, and I think the commercial sector was very unhappy about the change in allocation using that survey, and so the District Court, on January 6 of this year, issued a decision that rejected all of the plaintiffs' claims and denied their motion and granted the defendant's motion for summary judgment, which means that the government won that case. However, the plaintiffs appealed, on February 3, to the D.C. Circuit Court of Appeals, and so that case is ongoing, and we'll see what the Court of Appeals rules, and I'll keep you updated on that one.

The second case I wanted to tell you about was one that the Fisheries Service lost, and that was on the Gulf for-hire electronic reporting rule for Gulf of Mexico for-hire vessels, and so, in August of 2020, several captains and owners of vessels with Gulf of Mexico for-hire permits filed a lawsuit in the Eastern District of Louisiana, in federal court, challenging the final rule that implemented the new electronic reporting requirements, and the requirements were such that anyone with a Gulf of Mexico for-hire permit had to submit an electronic fishing report, via NMFS-approved hardware and software, for each trip, to hail-out prior to departing for any trip, to declare whether they were on a for-hire trip or on some other trip type, and to use NMFS-approved hardware and software with a global positioning system location capabilities that could archive the vessel position data during the trip for subsequent transmission to the Fisheries Service. Sometimes we refer to that, kind of in a shorthand way, as vessel monitoring systems, or VMS.

The plaintiffs alleged that the rule violated the 4th, 5th, and 9th Amendments of the U.S. Constitution, it exceed the Fisheries Service's authority under the Magnuson Act and under the Regulatory Flexibility Act and the Administrative Procedure Act, and they alleged a number of violations.

It was interesting, because that lawsuit got certified as a class action, meaning that it covered all -
- It covered all of the permit holders in the Gulf, which I think it would have anyway, but, at any

rate, the court certified it as a class action, and then, during the litigation, briefs were filed in support of those charter boat fishermen, but a number of entities, including some states, and Louisiana was joined by Alabama, Mississippi, and South Carolina, and then briefs favoring the agency's position, and the Gulf Council's position -- Briefs were filed by the Charter Fishermen's Association, Destin Charter Boat Association, some other organized charter boat associations, and also by two environmental groups, The Environmental Defense Fund and Ocean Conservancy.

In February of 2022, the District Court in the Eastern District of Louisiana found for the government and rejected all of the plaintiffs' claims. They subsequently appealed, the next day, and then, just recently, on February 23rd, a three-judge panel of the 5th Circuit said the district court was wrong, and they reversed the district court's order, and they set aside the entire final rule, which means that the for-hire reporting requirements in the Gulf were completely set aside and not just a portion of them.

The panel, the 5th Circuit, said that the Magnuson Act didn't authorize, in this case, NMFS to require that kind of tracking equipment for data violation, and they said the rule was arbitrary and capricious, under the Administrative Procedure Act, because the service failed to address 4th Amendment privacy concerns. They didn't find that the decision made by the Gulf Council, and therefore NMFS, was rationally connected to consider the costs and benefits to these fishermen, and a number of other things.

Then they said that the service violated the Administrative Procedure Act, by failing to give fair notice that it would require the type of economic data specified in the final rule, and so the Fisheries Service, and Andy, are trying to figure out how to undo the rule that was put in place for all these fishermen. It doesn't affect the South Atlantic's for-hire reporting rule and any permit holder that had a Gulf for-hire permit and a South Atlantic permit will still be required to report under the South Atlantic requirements.

The government, the service, is figuring out what to do, if anything, going forward, and they will weigh their options and decide whether to, in a sense, appeal that decision, and they can't really appeal it. They could request that the Supreme Court hear the case, or they could ask the 5th Circuit, the entire 5th Circuit, to hear the case again and to issue another judgment, but that decision hasn't been made, and so I just wanted to bring you up-to-date on that, because some of those cases have been going on for quite a while, and, at the next meeting, I will update you further, and, if anything happens in between, I can send an email to Kelly and send it to you all, and I will also send both of those decisions to Kelly to distribute to you all at this meeting.

DR. BELCHER: Thank you, Monica. Are there questions for Monica relative to those cases? Okay. Seeing now, we're about five minutes in front of five o'clock, and so I'm going to go ahead and recess us for the evening, and we'll start back tomorrow morning at 8:30 in the Snapper Grouper Committee with Jessica, again. For those of you who need rides over to Coastal Resources, like I said, when we finish up, just come talk to me, and we'll figure out how to get everybody over there, and so, again, we're recessed until 8:30 tomorrow. Thank you.

(Whereupon, the meeting recessed on March 6, 2023.)

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MARCH 7, 2023

TUESDAY MORNING SESSION

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The Snapper Grouper Committee of the South Atlantic Fishery Management Council reconvened at the Westin Jekyll Island, Jekyll Island, Georgia, on Tuesday, March 7, 2023, and was called to order by Chairman Jessica McCawley.

MS. MCCAWLEY: Next up on the agenda is the Red Snapper 2023 Recreational Season, and I assume that's going to be Andy that's going to be talking to us about that.

MR. STRELCHECK: Thanks, Jessica. We don't have the normal presentation or projections for you today. We did get data, and information, from the State of Florida for the landings estimates recently, I think within the last couple of weeks, and we've done some initial calculations of -- Last year's season was a particularly bad weather timeframe, and so landings, catch rates, were down during the season last year.

Depending on, you know, if you assume, you know, weather is going to be similar to in 2023, or you assume kind of it goes back to kind of past conditions, in terms of catch rates, the maximum season would be no more than two to three days, and the reason it would be two to three days is because, right now, you have not adjusted the catch limit, and so we're still fishing at the higher catch limit, and Reg 35 is the action that adjusts the catch limit. We will, obviously, make decisions about the season, and those, in part, could be contingent on decisions at this meeting as well, and so we're prepared to, obviously, discuss the season and get more information out, obviously, after this council meeting. Thanks.

MS. MCCAWLEY: Thanks, Andy. All right. Now we're going to dive into Amendment 35, and I'm going to turn it over to Mike to give us an overview.

DR. SCHMIDTKE: All right. Thank you, Madam Chair, and so we've got Regulatory Amendment 35, looking at red snapper catch levels, and the way that we're going to go about doing this, just kind of noting the items, the sub-points, that we have in the agenda, and I will pull that back up, briefly, and so we're going to go completely through Regulatory Amendment 35, and you all can have your vote on whether that will be approved, and then, after that, we'll go through the best fishing practices update and then the update on South Atlantic Red Snapper Research Program, and so that's kind of the sequence of events.

I will start out Reg Amendment 35 with just a brief background, and then I'll pass it to Andy for some discussion about the EFPs that have been talked about related to this action, and so, just as a reminder, Regulatory Amendment 35 was initiated in response to the most recent red snapper stock assessment, and that had the stock of red snapper with a status of overfished and overfishing occurring.

This action, or this regulatory amendment rather, is one of several steps that are being taken by the council in order to address the overfishing of red snapper, and so the council has stated that it acknowledges that this one action, in and of itself, is not going to end the overfishing, but the

combination of this action, along with expanded best fishing practices, along with the amendment that will follow the management strategy evaluation, and a host of other projects that are going on right now, that the cumulative effects of these would end the overfishing of red snapper, and so that is how the council has addressed that status.

The changes that are in this particular amendment are adjusting the catch levels for red snapper in the South Atlantic and prohibiting the use of more than one hook per line for the recreational sector of the snapper grouper fishery, and so I'm going to -- Actually, I will continue going through here, before I pass it for EFP, and so this meeting will be looking at the modifications to purpose and need, as well as the Action 1 alternatives that you all had requested from the last meeting, and those have been updated, and the council conclusions have been drafted, and so you all are going to review your draft rationale for each of these actions and then decide on your final approval at the end.

The timing of this, we're at the last stage, and so this is the approval for formal review, and the expectation is that regulations would become effective in mid to late 2023, and so now I will pause and pass it over to Andy to discuss the exempted fishing permits that have been talked about related to Action 1, in particular.

MR. STRELCHECK: Thanks, Mike. If you recall, at the end of the last council meeting, I made a statement, and then I think the bottom line, for me, is I don't think Reg 35 does anything for us. I don't think it's a solution, and I think it's just going to create more anger with anglers, and I think it's ultimately not addressing the crux of the problem, which is, obviously, reducing discards and trying to shift discards to landed catch.

The agency spent a lot of time kind of thinking about how we can improve the situation, and, to me, what we need to do is spur innovation and creativity and, ultimately, allow for some testing of experimental fishing activities, and, for those that may not be familiar with an exempted fishing permit, it's something that the agency can authorize, through approval by the Regional Administrator, and it allows for exemption from specific regulations that are identified as part of that exempted fishing permit, and it's intended to test -- To conduct research activities or test kind of innovative new management strategies.

We've used this for things like testing the state regional management in the Gulf of Mexico for red snapper, and we did a headboat collaborative program, which was a catch share program in the Gulf of Mexico, and we allow for exempted fishing practices for collection of various species for research and aquariums, and so it's not uncommonly used, and I think it's an opportunity to spur some creativity and innovation, and so, right now, where the agency is at is we are developing a notice of funding opportunity, and it be a grant that states, academics, and others could apply for the. The funding amount is yet to be determined, but the idea here is that that notice of funding opportunity would focus on reducing discards of red snapper, as well as more broadly reducing discards in the snapper grouper fishery, with the emphasis on various management strategies that could be tested and evaluated to do that.

We would expect this notice of funding opportunity to go out in the next several months, and it would not be available for funding and implementation until the 2024 fishing year, and so I just wanted to share that with you, because I view this as much more of a path toward a solution, rather

than where we're at with Reg Amendment 35, and the agency is trying to put some effort and time and energy behind this.

The one other thing that I will mention -- Well, a couple other things I will mention, and so this funding opportunity would be specific to recreational fisheries, and we see a separate path for some sort of exempted fishing permit program for commercial fisheries that could potentially be more internally funded by the agency, and so we're working that out, and so it does not exclude commercial fisheries from the EFP process, and it just would exclude them from the funding opportunity that would be made available, and then, you know, going forward, there would be a review and approval process that we're still working out, but there's, I think, some things that we would want to discuss with the council, in terms of how we would bring this back to you for discussion and conversation, as the proposals are submitted, or approved, for action. We do have a requirement to publish EFPs in the Federal Register, if we believe they're worthy of moving forward, and then brief you, at the council, and so I will stop there and answer -- I'm happy to answer any questions.

MS. MCCAWLEY: Thanks, Andy. I had a question, and so the funding opportunity -- Would it just be a single year's worth of funding, or a couple of years' worth of funding?

MR. STRELCHECK: Our goal was to try to do this for multiple years, and it may be that you have to apply for the funding on an annual basis, or at least indicate this is a grant program and your intent to try to do a study for multiple years.

MS. MCCAWLEY: Thanks. Dewey.

MR. HEMILRIGHT: With the EFP, what are you trying to achieve? Most of the time, an exempted fishing permit is looking at achieving something, and it's similar to when North Carolina, in 2011, did one to show that we didn't catch speckled hind and warsaw grouper up there, and so what are you trying to achieve with the EFP, what specifically?

MR. STRELCHECK: I mean, the EFPs will potentially vary, because we're going to have, you know, a scope of work that would allow people to, obviously, submit proposals over a -- I won't say a wide range, but a range of, you know, concepts, but the overarching goal is to find ways to reduce discards and discard mortality in the red snapper and broader snapper grouper fishery and figure out, you know, innovative management strategies that can convert discarded fish into landed catch and make this a more efficient, effective fishery, to help end overfishing.

MS. MCCAWLEY: Any more questions for Andy? All right. I am going to pass it back to Mike. Sorry. Mel.

MR. BELL: Just so I'm following you, and so this would be potentially available for 2024. In the meantime though, we would move forward with 35, because that's what we're trying to do in an immediate sense, to at least address, although not totally cure, the overfishing issue, right?

MR. STRELCHECK: Correct. Yes, this would not set aside any work by the council.

MS. MCCAWLEY: More questions? I think this was part of our game plan, was the short-term was Amendment 35, and the mid-term was EFPs, and the long-term is the MSE, getting to the next

stock assessment. I know that, in Florida, we're definitely interested in submitting an EFP, but I saw some hands go up over here. Judy and then Laurilee.

MS. HELMEY: Thank you. Did you -- Did I hear you say that we would have a season in 2023?

MR. STRELCHECK: So, at this point, the catch limit that's in the regulations was previously approved by the council, I don't know, several years back, right, and so that has not changed. Reg Amendment 35 will be voted on this week, but the change from that reg amendment may or may not be in place for this fishing season, and, depending on what you select, in terms of a preferred alternative, right, assuming that's not in effect, we default to the current regulations that are on the books, right, and so we are estimating, based on prior catch limits and prior fishing activity, there would be a short fishing season.

MS. MCCAWLEY: Laurilee.

MS. THOMPSON: So who gives the permission for the EFP? Is that you? Is that up to the Regional Administrator?

MR. STRELCHECK: Yes, it's approved by NOAA Fisheries.

MS. THOMPSON: Okay, and so it might be too late, because it wouldn't be included in public comment, but couldn't we add that as an action in Amendment 35, that, pending acquiring funding, that we are going to do this EFP, or can it be added to Amendment 35?

MR. STRELCHECK: Well, I will look to Monica, and I think you can discuss it, in terms of kind of your overall approach to helping to end overfishing. When I spoke, at the last council meeting, I was pairing the exempted fishing permits with the Alternative 5 as the preferred, and I don't view closing the fishery as a solution. What I do view, as an at least partial solution, is that we take an ACL equal to zero and then do some exempted fishing permits to allow for some management testing of innovative approaches, but, at least by reducing the ACL to zero, you're further reducing fishing mortality directed in the fishery and then exempting for some of these innovative management strategies.

MS. MCCAWLEY: Monica.

MS. SMIT-BRUNELLO: Laurilee, I believe that the draft I saw, before it went into the briefing book, did have a little bit of discussion, and Mike can pull that language up, I think, about the possibility of exempting fishing permits, but it was kind of in the background of here's what the council is doing, and this is one of the things, and not just what the council is doing, but the Fisheries Service is looking at, some sort of exempted fishing permit. Those kinds of -- If you remember, when you -- When the region gets an EFP, it's supposed to consult -- Or an application for an EFP, it consults with the council, and so I believe those kinds of applications will be brought at least to your attention, and then you can weigh-in on them.

DR. SCHMIDTKE: That brief portion of EFPs -- There are a couple of links there that you can follow, and that's on page ii of Attachment A3b in your briefing book, and that's Roman Numeral ii.

MS. MCCAWLEY: Tim.

MR. GRINER: Thank you. Andy, you touched on setting the ACL to zero to do this EFP, and the EFPs are a recreational-guided idea, and does that mean that the ACL would have to be zero for the commercial sector as well?

MR. STRELCHECK: Well, we set the ACL for a fishery as a whole, and I don't see a path where you could allow for a commercial harvest and not allow for a recreational harvest.

MR. GRINER: Thank you.

MS. MCCAWLEY: Go ahead.

DR. SCHMIDTKE: Just a clarifying question, Andy, and is the -- Any allowance that would be made for harvest for the EFP, is that still subject to the ABC? Is that limited by the ABC?

MR. STRELCHECK: You're talking allowance under the exempted fishing permits? I don't think there's anything that would strictly prohibit us from allowing harvest above the ABC, but I think there would be a record problem for the agency to justify that, from the standpoint of is what we're doing, under the exempted fishing permit, resulting in overfishing or, you know, further harvest of the resource that would have not otherwise been -- Or that would have otherwise been -- Sorry. Would have otherwise been implemented through the council, through Reg 35.

MS. MCCAWLEY: Back to Mike to keep walking us through this document.

DR. SCHMIDTKE: All right, and so next up in the document was the public comment summary, and so there were six in-person hearings that were held, at various sites, and there was one in North Carolina, one in South Carolina, one in Georgia, and then three in-person hearings in Florida, as well as one webinar hearing. We also collected submitted written comments, and we had, actually, two different pages that were up where comments were submitted, and so that's why you see two different links, and so you'll see there were some comments that were submitted to the scoping page, after the formal scoping period, and there's a link there to the comments that were submitted there, and so you get the totality of the comments submitted, as well as those that were submitted within the council meeting comment periods, and then, finally, the formal public comment period, and those that were submitted to that page are linked as well in your attachment.

There is a summary of the comments that were provided, and that's kind of a brief form that's included in the decision document, but, if you take a look at Attachment A3d, there's a bit more of a breakdown of the information there, and you have your number of attendees, those that commented, any stated affiliations that they had at those meetings, as well as the actual transcripts, and I'm scrolling down a bit, so you can see at least the first transcript, and you have the transcripts from those meetings, and so those are all included in your materials. I'm not going to go through all of them, but they are available for your reference, as you have your discussion about these actions.

There are summarized comments that are included in the decision document. Just noting that these initial ones that were stated weren't pertaining to any particular action in Regulatory Amendment 35, and they were just more general comments, and we included those upfront here, some of the

more frequent ones, and then those that were pertaining to specific actions in Regulatory Amendment 35 are included further down in the document with those actions, and so I guess I will pause here and see if anyone had any questions about what was stated at the public comment hearings or how those went.

MS. MCCAWLEY: Any questions? Laurilee.

MS. THOMPSON: I just wanted to comment that, you know, there was a lot of opinions, in the public comment, that this is a joke, and it's not going to end overfishing, and, you know, we, as a council, need to take some kind of positive action, as quickly as we can, to try to get some fish for people, so they can take them home, instead of throwing them back in the ocean, and I don't think Regulatory Amendment 35 is the answer.

MS. MCCAWLEY: Judy.

MS. HELMEY: I kind of agree with Laurilee, and it's so crazy, because, in Savannah right now, there's a group of guys getting together, allegedly, and they're forming a group, and they're collecting money so that they'll have money to pay for the fine that they're going to get when they bring the red snapper in, and so they're actually actively bringing in red snapper right now, and so they're using that against everybody, because they don't feel like any of this is correct, based on what they see when they go fishing, because all they can catch is red snapper, and so I don't know what the answer to it is, but we have so much red snapper that it's ridiculous.

MS. MCCAWLEY: Mel.

MR. BELL: Just to be clear on something, and so I think what we're hearing from the public is they don't believe that there is an overfishing problem, and so, when we talk about what they would like to see, it's the ability to retain fish, and that doesn't -- If you're retaining red snapper, that doesn't necessarily comport with ending overfishing. What they're -- What they're maybe saying is the actions that we're taking here are not going to end overfishing, which they're not, but they are a step in the -- At least a step in the direction towards ending overfishing, but I think the real problem is the public, and I'm hearing it too, they don't believe that there's an issue with overfishing, because of what they're seeing.

They're seeing just record abundance of these things, and we're seeing record abundance in areas where they've never been before, and so that's what they're concerned about, I think, and it's that they don't believe the overfishing, you know, status, you know, based on what the stock assessment says, but -- That's, I think, what we were kind of hearing at the hearings, is just frustration over this. We're trying to do something to at least take us in the right direction, but they don't really believe that there's overfishing, and I think that's what we're hearing.

MS. MCCAWLEY: Judy.

MS. HELMEY: Another problem is the discards. I mean, we have all these discards, which we're putting back in the ocean, and so now we're feeding more sharks, and we have all these problems with all the sharks around the boats, and so, if you go fishing, and you actively catch twenty red snapper, and release them properly and everything, the sharks come and eat them, and so, you know, it's just what they're thinking is what's happening to them, and it's not just one person that

it's happening to, and it's everybody. It's the same situation everywhere, with the discards, and, you know, why can't -- They want to keep the discards, and that's pretty much what it boils down to.

MS. MCCAWLEY: Andy.

MR. STRELCHECK: I guess I just wanted to comment to Mel's point, because I think it's reasonable, right, and I think, Mel, what the fishermen are seeing on the water is consistent with the assessment, which is indicating, you know, high levels of abundance of red snapper. What they don't understanding is how it can be undergoing overfishing at that point, and I think there's justifiable frustration, and I think you made the comment, you know, that we're trying to move in the right direction, or something along those lines, and I view Reg 35 as not moving in the right direction, because essentially what we've done is we've reduced the catch limit, and maybe slightly reduced discards, with, you know, changing the hook, but, at the end of the day, it's still the same experience for those recreational anglers that are out on the water, with is a short season, lack of access and opportunity, right, and so that's where the frustration is coming from, and that's where I think we need to get our heads wrapped around how do we get a hold of this discard problem and start addressing these discards, and, like Judy is saying, figure out ways to move those discards into landed catch.

MS. MCCAWLEY: Judy.

MS. HELMEY: Well, that would be kind of wonderful, wouldn't it, if we could do that. Our other problem is that we have so many red snapper that they can't catch anything else, and so literally the fishing fleet is down to about zero, as far as people fishing, and I don't really see a bunch of people, and so the only way we're going to turn all of this around is to give them something that they can hold on to, and maybe -- Because they can't keep red snapper, and so they can't catch anything else, and this is another frustration, too.

Even the artificial reefs in forty-five foot of water are holding the largest red snapper I've seen in a long time in one area, and I'm not exaggerating, and, I mean, it's obvious, and you can go out there and see them, and it's just ridiculous, to me, for everybody, and that's why they don't understand this.

MS. MCCAWLEY: Dewey.

MR. HEMILRIGHT: I probably -- Well, I'll say it. The only way to fix this is you're going to have to have some type of rolling closures, small, segmented closures. It's the only way that this is going to be fixed. In 17B, this council chose to have an area closure 240 foot out, and, when you go look at the data for snowy grouper and blueline tilefish, you had a reduction in catch that year, and it's there on paper, and it happened. We experienced it. Fishermen -- We had to go other places to fish, and so until -- I mean, the elephant in the room -- Magnuson doesn't say incremental steps to get you there.

It doesn't say that. It says, within two years, you have to end overfishing, and, the way I look at this gameplan, it's going to be three or four years, in a perfect scenario, before you'll have to where it might be ending overfishing, and, in the meantime, you have, continually, rec discards that are affecting the commercial industry of their allocation part. Had this stuff been fixed, they would

be harvesting red snapper and making money, their 28.07 percent, and so, while this council is sitting here deliberating Amendment 35, which is not enforceable for the one-hook rig, according to law enforcement -- It's like it's not going to end overfishing, and so I just see it as leaving itself open to litigation, and that's crystal clear in the administrative record of what has not been done and what Magnuson says has to be done.

I wonder at what point does the agency say, okay, the council is not going to do its job, as far as Magnuson, and at what point do you all step in and take over and have to do something to end overfishing, because it's clearly not happening, or going to happen, in the present route of everybody -- The direction that folks want to go. I understand that maybe there needs to be a challenge of litigation to the science part, if that's what everybody doesn't want to believe, but that's the best available information we have, is SEDAR 73 that's been approved by our SSC, the council's SSC, and so this conundrum of exempted fishing permits and looking at different things -- Hard choices should have been made in 2010, when there was a change for area closures specifically to address red snapper.

This council, at the time, and most of the folks around this table wasn't here, said, no, we don't want to do that, and so we'll do this 17B stuff, to close it, but we saw a reduction in catch, and that's how you're going to get a reduction in catch, and I'm not saying that you need to close the whole ocean, but something has definitely got to be done.

If there's so many red snapper everywhere, you've got to close off a portion of an area that says there's so many red snapper, and that's all there is, and then you have the data to do that, and you also have the legal authority to do that, and I wonder when the Southeast Regional Office, and its authority, is going to take over, because you clearly say that Amendment 35 is not going to rebuild, but we're working in steps, but I don't see Magnuson saying you've got incremental steps. It says you have to end it, and so I will leave it at that, and I think there's a way for some type of rolling closures, similar to what could be like in the scallop industry, portions or something like that, but it just don't appear to be the wherewithal, and, as long as the council has the ability to kick that can down the road, then it's going to be up to the Southeast Regional Office to say I'm here, and I've got to uphold Magnuson, and so it's going to be interesting to see the outcome of this in the near future. Thank you.

MS. MCCAWLEY: Laurilee.

MS. THOMPSON: In SEDAR 73, they changed the equation for natural mortality, and they lowered it from 0.13 to -- No. They raised it, or something, from 0.13 in SEDAR 73, versus a natural mortality of 0.11. I'm sorry. I had it backwards. It was 0.13 in SEDAR 41, and they lowered it to 0.11 in SEDAR 73. You know, if they had adjusted it a little bit higher, and set the natural mortality rate at 0.2, which was done in a model sensitivity run, that would actually improve the stock status to a rebuild stock status of not overfished, and it would have a much lower overfishing rate, and so how is that possible?

Killing more fish, with natural mortality, creates the rebuilt stock in the model, and it reduces overfishing faster, and so, as a council, can we go back to the SSC and recommend that they use the natural mortality rate of 0.2, instead of what they actually used? Can we ask them to rerun the model, or, I mean, why did they pick that particular model? If they ran multiple models, how did they decide which model to pick? How does that happen? What is that process?

MS. MCCAWLEY: John.

DR. WALTER: I will answer that, and natural mortality usually is estimated by the maximum age of fish, and we often use that as the proxy for determining what natural mortality rate to use, and then it's scaled according to some vector that the smaller fish die faster, because there's more predators to eat them, and so that scaling is sort of one of the basic aspects of the life history. In terms of how that gets determined, that's a scientific issue, based on the review process that goes on during SEDAR, to determine -- There is a data workshop, and there is a life history group that then determines what is the best information to be used for natural mortality, for growth, for reproduction, for all of the biological aspects that go into the stock assessment.

Those determinations are made completely independent on their impact on the stock status, because of the clear separation that needs to be made between the best science that goes into an assessment and then the management implications, and so the science leads, and the management then has to follow, because we can't change the biology to suit the management.

Now, in the sense that there is a lot of sensitivities that are run, those are usually requested of the stock assessments, to ask the scenarios of what if this was this, and what if something happened, or to be able to explain, when there's a change in something like the biological assumptions between the previous SEDAR and the next one, here's what changed, and here's why you are likely to get a different result, and those sensitivity runs aren't meant to be the base advice model, because they are exactly that. They're sensitivities to what-if scenarios. In terms of how the decision gets made, in terms of what natural mortality rate, there is, again, the SEDAR process and the SSC review, and then they determine that that's the best information to use. Thanks.

MS. MCCAWLEY: Andy, you had your hand up a minute ago.

MR. STRELCHECK: Yes, and we've gotten a little sidetracked here, but I think this has been a good discussion, and, you know, a couple of points. To, Laurilee, your question, we have best available science, and it went through a rigorous scientific review, and it is robust to different assumptions in the sensitivity runs, in terms of saying it's overfished and undergoing overfishing, and certainly the magnitude could be argued, and you could certainly make different decisions within the modeling approach, and you might come up with a slightly different outcome, but, overall, the assessment is very robust to a lot of the sensitivity runs that have been conducted.

In terms of Dewey's comment, I appreciate the comment, Dewey, and I guess a few points. The Southeast Regional Office has done, I think, two secretarial amendments. It's not a place that we like to go. The Magnuson Act developed the fishery management councils for a reason, and it's a transparent, open process that involves stakeholders, and so, you know, our preference is always to work with the council, through the council, ultimately to reach management decisions.

With Reg Amendment 35, you know, I think you have a tough record here, and I will be faced with a decision, based on legal advice, as to whether I can or can't approve Regulatory Amendment 35. I don't want to be in the position of disapproving actions, but, ultimately, at the end of the day, we have to assess them with regard to their legality, whether they're consistent with all federal laws that we're operating under, and, at the end of the day, we would provide that record, in terms of our decision, and so I just want to acknowledge that, that we are here to work with the council

and not against the council, and, obviously, these are tough decisions before you, but, at the end of the day, we have to make a decision based on the record that you've created, or we've created, because it includes me, and, ultimately, decide whether or not it is consistent with Magnuson and other applicable law.

MS. MCCAWLEY: Thanks, Andy. All right. Mike, I'm going to turn it back to you.

DR. SCHMIDTKE: All right, and so I'll continue taking us through the decision document and the various points for you all to continue your discussions. First of all, the purpose and need statements, and just one very brief addition was made to the need statement, adding a clarification of snapper grouper species, and this is something that I don't know that we necessarily need a vote on, but I will ask if there are any objections to the need, the purpose and need, as modified. Not seeing any, I will go ahead and continue through then, and so we move into Action 1, which will reduce the ABC, the total annual catch limit, and the sector annual catch limits.

As a reminder, the sector annual catch limits would be reduced according to the current allocation strategy, and you all have already discussed and decided not to change the allocation strategy for red snapper, and then this action would also establish an annual optimum yield for South Atlantic red snapper.

We have the alternatives that are considered here. Alternative 1, the no action, are the current limits. Alternative 2 shows the annual catch limits and the annual optimum yield equal to the ABC. As a reminder, when the Scientific and Statistical Committee recommended the acceptable biological catch and the overfishing limit, they recommended that those values be equal to each other, and they did not recommend a buffer in between those values, and so the ABC is equal to the OFL, and Preferred Alternative 2 would set the OY, the optimum yield, as well as the total ACL, equal to the ABC.

You can see how the commercial and recreational annual catch limits would be allocated there, and please note that we are showing these in the units that they're managed in, and so the commercial ACL is in pounds whole weight, while the recreational ACL is shown in numbers of fish, and so that's why you see a difference in the numbers there, but the allocation strategy is explained in the discussion. I won't go through all of that again, because we've already talked about it, but it's included in the discussion, but here and in the amendment document.

Alternative 3 -- Alternative 2 is your current preferred, and you have stated that as your current preferred, and so Alternative 3 would set a zero-fish annual catch limit, and that would close both sectors, and so the ABC is the ABC that remains as the SSC's recommended level, but Alternative 3 would set the ACL equal to zero, and so there would be no permitted harvest of red snapper for the commercial or recreational sectors, and so a lot of this discussion has been talked about already, and I would just highlight this table, Table 1, and this shows the recommendations from the SSC, in terms of ABC and OFL and how that's delineated in pounds whole weight and numbers of fish, both to landings and estimated dead discards in the projected time period. There's a note there of the percentage reduction in the ABC relative to the current annual catch limit.

There is a description included there of the effects summarized here in the decision document, but there is a broader description of the estimated effects, biologically, economically, socially, and

administratively, and that's all included in the draft amendment document, and you can look at Chapter 4 if you want information on that.

As far as the public comments, kind of -- I pointed to this before, and most of the submitted comments did not directly address the alternatives that were included in Action 1. The few that did, they were in favor of maintaining the current harvest levels, which, due to the recent assessment and the SSC's recommendation for ABC being lower than the current level, that's not a viable option for the council to choose, but there was no support expressed for either Preferred Alternative 2 or Alternative 3, and many of the comments that had something to do with the retainment of red snapper wanted to increase retainment of red snapper, due to the stock's high abundance.

The points for the draft council conclusion, and it's kind of in paragraph form within the draft amendment itself, but here are the some of the highlighted bullet points for you all's consideration, and, after I go through these, I will take a moment to pause, so that you all can add to this. This is part of your record and your support for your decided preferred alternative on this action, and so Preferred Alternative 2, again, would set the ACL and OY equal to the ABC recommendations from the SSC.

The sector ACLs would be updated using the current allocation method, and you all have discussed revising that, but, because most of the landings come from Florida, where the recreational landings estimates were not affected by the transition from MRIP Coastal Household Telephone Survey to the mail-based Fishing Effort Survey, because that wasn't affected by that transition, in terms of the landings, you all decided that the allocation wouldn't need to be adjusted.

Then the council determined that the social and economic benefits of allowing a small amount of red snapper harvest, under Preferred Alternative 2, outweighed the potential biological benefits from the Alternative 3 of a full closure of red snapper harvest. Some of the points that were made, along that line, were that a continued allowance of some harvest maintains some limited commercial fishery, and, for the recreational sector, although the shortness of the season is a frustrating part for the snapper grouper fishery for red snapper, effort does, however, increase, even during that short season, indicating that there is desire to target these fish during the small time period where they can be kept.

The Preferred Alternative 2 -- This is just kind of a general statement, kind of summarizing you all's preferred alternative that you all believe that this would best meet the goals and objectives of the Snapper Grouper Fishery Management Plan, and you noted that Goal 2, Objective 3, where this was kind of applicable, and, while complying with the requirements of Magnuson-Stevens Act Section (h)(6), and so that's the information that's included in your rationale at this point. If there is anything that you would like edited, or added, now is the time that that can be done, as well as, right now, we have a preferred alternative of Alternative 2, and I will turn it over to you all, if you want to add language supporting that, if you want to make changes, however you want to go about making your decision.

MS. MCCAWLEY: Thanks, Mike, and so a question for Andy. In this action, and so let's say that we pass Amendment 35 at this council meeting, and then what would the -- Let's say we use this preferred alternative that we have right now, and what would the ACL be for the 2022 season?

You know, would it go back to this, or would it be the previous one that's already on the books, because 35 wouldn't be all the way through the entire process?

MR. STRELCHECK: I mean, it's a timing issue, right, and so we're in March. Most of our rulemaking takes four to six months. You know, at this point, you know, I think it's highly unlikely that Reg 35 would be in place for 2023, and it would really be contingent on how quickly the council turned around and submitted it to the agency and how quickly we could actually do the rulemaking, but the timeline is tight.

MS. MCCAWLEY: So then let's say it does take six months, and it can't be all the way through the process by the time the season is set to open. Then it sounds like it would default to the current ACL that's on the books right now, and I see Monica shaking her head.

MS. SMIT-BRUNELLO: Right. It would be what's on the books right now, what currently exists for the ACL.

MS. MCCAWLEY: Andy.

MR. STRELCHECK: I certainly have a few comments, and I think some of this is contained in the amendment, but I do want to note that, prior to the council taking final action, we do ask for science review from the Science Center, and so, yesterday, we received the review from the center, and this will not come as a surprise, I think, to anyone, but, you know, the bottom line is Action 1 is predicated on achieving a substantial reduction in dead discards, and we're not, obviously, accomplishing that by just reducing the landings alone.

Although Action 2 in the amendment will reduce discards, there is no evidence, at this point, that the removal rate will be significant enough to actually achieve the discard reduction, and so you've been clear in terms of addressing overfishing, right, and we made that change a while back, but it certainly doesn't end the overfishing.

Magnuson is very clear, in terms of, when you're notified by the agency, and we notified you back in July of 2021 that the stock was undergoing overfishing, and it's still rebuilding, or recovering, but that you needed to end overfishing immediately, right, and so there are statements in here that I think we need to probably be careful of, as we review the final document, and they go as far as saying "consistent with the Magnuson Act", because I think there's some things that may be in here that are not consistent with the Magnuson Act, and so I just wanted to make that clear.

Then the other point, and I think this is really the reality of the situation, and why I'm so frustrated, is, even if we're able to achieve the reduction in discards and be on track with what we're proposing here, that would leave us 28,000 fish for landed catch and 202,000 dead discards, and so 230,000 fish will be killed, under this preferred alternative, and only 28,000 landed, and we're not even achieving that, which means that there's more than 202,000 dead discards that are being killed in this fishery, relative to what the Science Center has projected is landed. That, to me, is the take-home for all of us, is that we want to shift that and figure out how to flip-flop that. Thanks.

MS. MCCAWLEY: Thanks, Andy. Trish.

MS. MURPHEY: This is more of a question, and maybe it's just because I'm a little confused, or still kind of new to the whole process, but, you know, we're trying to end overfishing immediately, and we've kind of set up this three-phase approach of the Amendment 35 and the EFPs and the MSE, and so, you know, if you think about it, we are kind of trying to be innovative in trying to end overfishing, but, really, the bottom line, and this is a question, is will we really even know if we've ended overfishing until we have the next stock assessment? I mean, how do we -- Because I think hasn't this happened before, where we ended overfishing, but then we get a stock assessment, and we're still overfishing, and so I just wonder -- You know, won't we not really know until we get the next stock assessment?

MS. MCCAWLEY: John.

DR. WALTER: Well, there are a number of checks that could be done before the next stock assessment, in terms of reductions in discards, and so we've got the numbers of AB1 and B2 that are discards, and we can determine have those reductions been achieved. Granted, there is some uncertainty with -- Discards can be driven by new recruits into the fishery, but, in general, we would expect a substantial reduction in discards, particularly in dead discards, if the management action was having that intended impact, and so I think that's the first check we could see, is does that action achieve that, do you see a noticeable change in that.

Then, in terms of actually evaluating overfishing, there are a number of other things that could be done in the interim, in terms of evaluating status of the stock, such as exploring the indices and trends in the indices, but it would probably require a stock assessment to fully make a determination of the efficacy, but the first check would be do discards actually change. Thanks.

MS. MCCAWLEY: Spud and then Laurilee.

MR. WOODWARD: Well, I certainly don't want to beat the dead horse, but I'm going to beat it a little bit. This whole issue of discard mortality probably troubles me more than anything, because we're hanging our hat on this, and yet it's self-reported, unvalidated data, and nothing is going to change that, but, yet, that's the driving component of fishing mortality, and so it troubles me that how do we go forward, knowing that we aren't changing the way that we measure discards, the magnitude of discards, and, knowing that human behavior being what it is, I firmly believe that people now are going, I'm not going to tell you what I've got, because what they have received is a negative feedback loop.

People were telling you that, oh, I discarded this many fish, trying to make the point that the population is rebounding, and it's abundant, and now they've sort of got a negative feedback loop that, well, now we're being punished, in their viewpoint, for the discards, and so, you know, when you intercept someone, during an APAIS interview, and they say that I discarded zero -- I mean, that becomes a data point, and so I think that's part of this uncertainty in this whole element of red snapper management, and, to some degree, snapper grouper management, that is most troubling and has got us painted into this corner.

I am just -- I don't see that getting any better, and, as a matter of a fact, I think there's going to be more uncertainty, and, you know, I don't expect you, John, to explain it away, because we can't make it anything different than what it is, but, you know, if there's potential for EFPs, going forward, to help us improve that data, then I'm all for it, but that's just -- I think that's part of the

context for this overall decision, is that we're dealing with these uncertainties, and we're looking at the possibility of imposing very draconian, severe socioeconomic consequences on fishermen, based on a situation that has a lot of uncertainty in it, and so I do have one question, not to put you on the spot, Andy.

Let's just assume that we go forward with Amendment 35, in its current form, and we choose a preferred alternative for the gear modification, and, in the service's opinion, that is a failure, and so you don't approve it, and so where does that leave us, in terms of red snapper management? You know, if the agency decides to pursue a secretarial amendment to address this issue, where does that leave us in the meantime? Does that mean the ACL is where it is, and all the regulations that are in place stay that way until such time that a secretarial amendment is approved and implemented? I am trying to understand what happens under certain, you know, choices here.

MS. SMIT-BRUNELLO: I will take this one. The Magnuson Act offers some different options, I guess, for the Fisheries Service. Remember several meetings -- I think it was in September, or maybe even December, where we discussed the possibility of interim rules, and so there are -- There is this creature, in the Magnuson Act, that Congress put in there, and you can use an interim rule to reduce overfishing, and those act like emergency rules, in the sense of the amount of time that they exist, and so you can do that for really six-month periods, and so that's a potential option.

There's also emergency rules, and I know you've dealt with those before, but they have a set of criteria that you have to meet, in terms of what's the emergency, and administrative inaction is not a justification for an emergency, I think is in the Fisheries Service's guidelines for that, and so it does seem like the possibility that an interim rule to reduce overfishing, along with potentially a secretarial amendment -- The Magnuson Act -- If that would occur, I can bring you all that information, because that also involves the council being consulted on what the actions would be in a secretarial amendment, and so there are those kinds of options available, but the interim rule -- Those things are short-term measures.

MR. WOODWARD: Until either an interim rule and/or a secretarial amendment is in place, then whatever is currently in place would remain in place, in terms of ACLs, regulations, and so forth and so on, and is that correct?

MS. SMIT-BRUNELLO: Yes.

MS. MCCAWLEY: All right. We had a number of hands. Go ahead, Andy.

MR. STRELCHECK: Spud, thanks for your comments, and, you know, I think the discard issue is an easy target, and I said, earlier today, that the assessment is robust to different assumptions about discards, and I asked for a projection run that was presented at the December council meeting that showed, if the magnitude was half as many discards as what we're landing now, we're still very much in the same boat, right, and so I think my frustration is I don't look at what we're doing today as draconian.

We're already there, and we've already taken draconian measures to essentially close the fishery, or have a very short season, and so reducing from two to one a day is not -- It may be considered draconian, because it's a 50 percent reduction, but we've already taken those measures, and I think

the frustration is more broadly, as to how do we have longer fishing seasons and how do we get more access back to anglers, right, but, more broadly, right, what are we doing about discards?

We've been working on this amendment for now almost two years, and the only action we now have in it is changing from multi-hook to single-hook rigs, right, and that's not, to me, a very substantive record with regard to looking at lots of different management options that we could have looked at along the way, and ultimately tried to better resolve this problem, and a lot of those ideas were shot down, and a lot of them were bad ideas, and we kicked them out, but, with the Magnuson Act, and with the National Standards, we have best available science requirements, and we're not allowed to delay just due to limitations in the scientific data, and we're not allowed to delay for the potential for future data collection.

With that said, we do have some things that are going to be on the horizon. The MSE, we had a presentation yesterday, and we're going to hear an update about the red snapper count, and John, and the Science Center, is going to talk to you about funding and how we can use that to improve discard estimates going forward, right, and so I think there's some opportunities there, but it doesn't negate our responsibility to act today.

MS. MCCAWLEY: Go ahead, Spud.

MR. WOODWARD: Just to be clear, when I used the term "draconian", I meant the possibility of extensive time and area closures and not what we're doing now, and I don't think anybody would disagree that "draconian" is an applicable term to what we're doing now, but I think what we've talked about previously is bottom fishing closures that would have far-reaching socioeconomic consequences, and with their own problems, and I've brought this up before.

I mean, there are species that exist in the EEZ that aren't managed under the Magnuson-Stevens Act, and people can go legally fish for those fish, when they're there, and so getting hooks out of the water is a difficult proposition, when you can target other species that aren't managed, you know, under the Magnuson Act, and so that's just for clarity.

MS. MCCAWLEY: All right. We have a number of hands. Tim, Chester, and Laurilee.

MR. GRINER: Monica, if this were to go to a secretarial amendment, what is the timing of that? Does that go through the same notices and timing period of any amendment that we would do, or is that an expedited type thing?

MS. SMIT-BRUNELLO: It's not expedited, and the act talks about, in Section 304(c), if you ever want to look at it, and I can cut snippets of that and send it all to you, but it talks about the preparation and review of secretarial plans, and, in the case of a council-managed species, which, obviously, this is, then the Secretary consults with the council, and the Secretary shall conduct public hearings, and they do the rulemaking, just like it would be for your amendments that go through rulemaking.

There's a section of the act that Congress put in for these kinds of -- For a situation in which a secretarial plan puts -- You know, the service puts a secretarial plan forward, and that involves time periods for review and review of the regulations and all those sorts of things, but it does

definitely involve having the council -- Andy then, the service, would bring back that secretarial amendment for you all to look at and comment on.

MR. GRINER: Would you say then that a secretarial amendment would be useful in the event that a council finds itself in a scenario where it just cannot take any action, and it's bogged-down to the point where it just can't move forward, and would that be why the Secretary -- Would that be a reason for going in that direction?

MS. SMIT-BRUNELLO: The act says the Secretary may prepare a fishery management plan, or amendment, if the appropriate council fails to develop and submit to the Secretary, after a reasonable period of time, a fishery management plan, or an amendment to such, if the fishery requires conservation and management.

The act gives the Secretary authority to do a secretarial plan, but I have never been involved with one, although, as Andy mentioned, I believe there were two secretarial amendments that were done over twenty years ago with the Gulf Council, and I think the Gulf Council followed those up with their own amendments, but I can't tell you for certain, and so the act specifies when the Secretary may do one, and the Secretary doesn't have to do one, but so it's that kind of situation.

MR. GRINER: One more follow-up, and so, if the council fails to act, and then the service fails to act with a secretarial amendment, then what happens? They don't have to act, nor does the council have to act, and so what happens after that?

MS. SMIT-BRUNELLO: Probably litigation. Many things. It's like there's failures all over the place, right, under what you're saying, and so, you know, Congress set up the Magnuson Act, and one of the main drivers is to prevent overfishing, and so I would urge that we follow the law, whether it's the council or the Fisheries Service, and so, you know, I can't tell you when, and if, and what kind of circumstances, in terms of facts, would cause the Secretary to do a secretarial amendment, but I can just tell you what the law says, and that does say that, you know, if there's legal requirements that need to be met, essentially, and a council is not meeting those, then, in certain instances, the Secretary can do a secretarial amendment.

MS. MCCAWLEY: All right. I'm going to go back to my list. Chester and then Laurilee and then Mel.

MR. BREWER: This will be a little jumbled, because there are so many moving parts that I kind of have trouble getting my head around all the different pieces and parts and whatnot that are going into this. Let me first say that I have great difficulty with the idea that this specific species is undergoing overfishing. Now, I know I may have a simplistic way of looking at things, but, if you've got a species in which they are exploding, almost exponentially, and, at the same time, you're saying that those fish are being overfished, I just -- That just doesn't -- It goes against every definition I've ever known, and so I have problems with that.

Now I'm going to say some stuff, Number 2, that I kind of hate saying, but we've looked at descending devices, and we spent an awful lot of time on that, and we all had great hopes that that was going to alleviate the problem, and we've now been informed that, no, we're not going to, and we've been told that you can take the ACL for red snapper and you can put it at zero, and that's not going to fix the problem.

The problem, with regard to the dead discards, is not that people are going out and trying to catch red snapper, but it's that they're going out and trying to catch other species, and, as their cohorts, I guess, or the red snapper, if the red snapper haven't eaten the fry of the other fish, is that you're catching red snapper when you're not trying to. It is a huge, at least in my way of thinking, a huge socioeconomic problem, because you've got a lot of dollars' worth of fish that are just getting thrown back into the water dead, and the sharks are eating them, and so here comes, I guess, sort of my last thoughts, or set of thoughts, and let me preface this by saying that I hate to agree with Dewey, but it just seems like, to me, we need to start down the road of something that is very unpalatable, and that is that we look at some sort of rolling closed area for all the species, all the bottom species, that are in whatever we decide the closed area is going to be and how it's going to roll and all of those particulars.

That's going to be a long road, but, to me, that's the only thing I see, given the framework that we are forced to work within, which is a framework that was not designed for recreational fishing, but, given that framework, it's just -- It's the only thing that I see working and that will eventually get us out of the problem. With that, I will rest.

MS. MCCAWLEY: All right. Laurilee and then Mel and then Dewey.

MS. THOMPSON: All right. Well, I'm glad that John brought up recruitment, because I'm going to read something from one of the public comments, and I don't want anybody to think that I am this smart, and so I'm going to read this, and it says that South Atlantic red snapper recruitment rates have been spectacular for many years, but we all know that, and this has been obvious to National Marine Fisheries' stock assessment scientists, who said, in SEDAR 41, and that was back in 2017, that the red snapper recruitment in the South Atlantic is that of a rebuilt stock.

Fishermen from Florida to North Carolina, with their observations on the water, they have observed that, and they've told you guys the same, and "you guys" is us. They have told us the same thing. The South Atlantic Fishery Management Council staff have presented us a Snapper Grouper Amendment 35 option of opening the recreational fishery for just one day in the summer of 2023 and cutting the commercial harvest in half, and so, once again, the commercial fishery suffers from this predicament that we're in.

At the same time, if these red snapper rates continue, the SEDAR 73 SAR indicates that the stock would be rebuilt in five years and overfishing will no longer be occurring. Why did the SSC discount the higher recruitment rate output in the SEDAR 73 red snapper model, when it's obvious that recruitment rates, for many years, are consistently that of a rebuilt stock, and I don't see how we can say we're overfishing when the biomass continues to increase, despite the hundreds of thousands of dead discards that are being taken out of it. Thank you.

MS. MCCAWLEY: Andy.

MR. STRELCHECK: Wow, Laurilee. You're brilliant. That was quite a statement. We haven't discounted it, or dismissed it, and the SSC actually made their recommendations based on the high average recruitment, I believe for the last ten years, and so, you know, getting back to Chester's point, in terms of overfishing, people are seeing this large abundance of fish on the water, and they're seeing some expansion of the sizes and ages of the red snapper population.

The challenge with overfishing is that this is a fifty-plus-year-old species, and we are largely fishing on a population of fish that's about one to five, or one to seven, years old, right, and there's some -- There is certainly a number of fish that are older than that, but we're removing the fish too quickly at those younger age classes, and not allowing them to build out and fill out that age structure in the population, and so that's the conundrum we face, right, is that, from the standpoint of a recreational angler, they're seeing abundance, and they're seeing good catch rates, but, from the standpoint of the Magnuson Act, in terms of ending overfishing, our mandate is to ensure that that rate of mortality will ultimately result in the maximum sustainable yield for the fishery, and, if we remove those fish too early, too fast, we're not going to rebuild the stock to MSY.

MS. THOMPSON: So what's the difference between letting people keep one fish, which might make them happy, and then they would stop fishing, versus the dead discard mortality? I mean, the fish are dead, one way or the other, and I don't understand why they can't keep a fish, and that might actually help reduce the fishing effort, you know, because they might be happy with their snapper and say I don't care if I catch a grouper today, and I've got a snapper, and I'm going home, or I'm going to troll for dolphin or something else, but I don't understand why people can't keep -- If the fish are going to be dead anyway, some of them, a percentage, whatever, why can't people keep them and we turn those dead discards into catch and make their experience better, because I keep hearing that recreational fishermen's experience on the water is really what they're looking for, and why can't we turn those dead discards into catch?

MR. STRELCHECK: I don't think there's anything that prevents us from doing that, as long as we can control the overall mortality of fish that's being removed from the population, whether they're landed or discarded dead, and we have to kind of have a net quantity of fish that is determined to be sustainable and consistent with rebuilding the stock, right, and so what you're suggesting is really getting back to what I talked about earlier with the exempted fishing permit idea, right, is let's go out and test some of those strategies, and see if that works, right, and will recreational anglers, if we allowed them to mandatorily retain a certain number of fish, stop fishing once they retain those fish, right, and will they catch a single red snapper and decide that they want to go fishing for something else?

I mean, those are the types of questions that I think are worth exploring and answering, right, but we haven't gone down that route in Reg Amendment 35 to address that, but I agree that I think it's important to discuss and figure out if some of those are viable management options, going forward.

MS. THOMPSON: So how would we do that? Would we do a -- Because we need to make it go fast, because we all know -- You just said it would take four to eight months to do that, and that's not so. I mean, look at the golden tilefish amendment, and golden tilefish fishermen thought they were going to get more fish two years ago, and it's still sitting on the Secretary's desk. They still haven't gotten the extra fish that they should have, you know, received two years ago, and so I think it's a fantasy that anything that we do is going to get approved in four to eight months, and so do we do a framework, an emergency action, or how can we take, you know, your idea of the EFP and then some different methods to try using the EFP, and how do we make that happen as soon as possible?

MR. STRELCHECK: Well, I agree with you, in terms of council action. That's not going to be four to eight months. Exempted fishing permits is something that, right now, we're on the path to

hopefully implement in 2024, right, and so our goal is to roll out that notice of funding opportunity sometime in the next few months, solicit proposals, ultimately make approval of funding decisions and exempted fishing permits toward the end of the year that would allow for that experimental testing into the next fishing year.

That can happen on a more timely basis, right, and now the question then becomes are there things that the council should be doing, between now and then and into the future, and I would argue yes, right, and that's been my position for quite some time, and we've often talked about not doing that, because we have the MSE, and we have, you know, the red snapper count data and information coming, and there is certainly viable things before us that I think we could be considering now, and working on, and, ultimately, we could learn from the EFPs, and potentially benefit from that process as well, and so I stand ready to work with the council on this, but, ultimately, we working toward moving forward on those EFPs in 2024.

MS. MCCAWLEY: All right. Back to the list. Mel and then Dewey.

MR. BELL: We seem to be sort of a stuck in a rut here, and I just wanted to be clear on something, and so, yes, the -- Yes, we're told that we have to end overfishing immediately, due to, you know, status of the fishery, overfishing and end overfishing immediately, and we've argued, from the beginning, that the council is taking a step immediately towards addressing overfishing, realizing that it will not end overfishing at the snap of a finger, and there's nothing that can do that, short of dealing with the discards across the whole snapper grouper fishery, which is -- That's the sort of draconian thing, and that's everybody out of the pool.

You know, Amendment 35, as it is right now, is our attempt to immediately do something, and one of the things we have to do is accept the new ABC from the stock assessment, and that's in there, and then we have one measure in there to provide some reduction, hopefully, of discards, imposing an inefficiency in the extraction rate in the fishery, in the snapper grouper fishery, and so that's what you've got, and so Amendment 35 is what it is right now, and so it sounds like there is resistance to even moving forward at that level, because it's not the perfect solution, but we've talked about a step-wise approach towards a better solution, which is this, 35, is the immediate thing we do, and then, next year, we deal with EFPs, and we give some consideration to other options, but, right now, 35, in front of us, is what it is.

Now, if there is concern about the one-hook thing, you take that out, and now you have a one-action amendment, which accepts the ABC from the stock assessment, which we should do before the stock assessment gets, you know, too old, and, I mean, I think that's logical, and so, if we do that, how we will move 35 forward right now, if that's deemed insufficient in reducing overfishing, and the Secretary then says, hey, you know, you guys haven't done this to the degree you need to, and the Secretary is going to act, and then what's the Secretary going to do?

The Secretary is going to basically impose a closure of the whole snapper grouper fishery, or some components of it, to achieve -- At some level, to achieve the necessary reduction in the fishery to allow for -- To end overfishing? I mean, I'm just -- I'm kind of trying to play this thing through, and, you know, we're going to either move forward with 35 or we're not, and it sounds like, if we move forward with 35, or we don't, the Secretary may not be happy, because it does not end overfishing immediately. If the Secretary feels that they need to end overfishing immediately,

then there's really no other options to do that, for them, other than these sort of extremely draconian approaches, and so where we are is we've got to do something with 35.

It's in front of us, and so we either move with it, modify it and move with it, and it doesn't sound like we can win either way, is what I'm saying, but I think the council has acted, as quickly as the council can act, to address overfishing, realizing there is nothing, short of these extremely draconian measures, that would end it immediately, and that's not in 35, and it's not an option right now, and so, you know, we just need to move on this, is what I'm saying, and, if we move on it, how do we move on it, and the Secretary is still going to do what the Secretary feels they need to do, and it seems, to me, if they're going to come in and correct the issue of you did not end overfishing immediately, then what's that going to look like in a secretarial amendment?

MS. MCCAWLEY: I am going to go to Dewey. He was in the list, and then I'm going to try to focus us back on this document here. We have a preferred alternative on the table, and we need to make a decision whether we're staying with that preferred or changing it, and you can see some modifications here to that preferred. If people have concerns about those modifications, they need to speak up. We don't necessarily need a motion to accept the modifications, but, if they have some concerns, we need to talk about that. Dewey, and then I saw Spud's hand.

MR. HEMILRIGHT: Over the last two or three years, you've heard, from the public and everybody, that you can walk on water with red snapper, and you've heard all over the place, right, and you've also heard where we go to certain places and that's all we catch, is red snapper, and I don't think -- I think everybody agrees with that, and so why couldn't you have closures in specific areas? Why is it so draconian to think of a closure in a certain area where there's nothing but red snapper?

They have done it for sharks off of Hatteras, closed areas, to protect the young-of-the-year, for them to grow up, and there's still a closure there, but why is it so draconian? If you've got spots where there is nothing but red snapper, and it's clear that people believe it, the public believes it, and they know it, the fishermen, and SERO knows it, where there's areas of strategic -- There's nothing but red snapper there, and why wouldn't you protect that area and not let nothing be taken out of there, when it's only red snapper, for them to grow up, and that might help you, in the next year or two, for something like that, and it's just implausible that the tool in the toolbox to potentially fix it, has shown to fix stuff, closures, strategically, and maybe not to the extent that 17B did, but you have to reduce catch.

You have to reduce catch in this -- For red snapper, and the only way to reduce catch is to reduce effort, and so either you padlock the boat to the dock or you have a closed strategic -- When I say "strategic", I am not asking for what happened in 17B, but you've got to be a realist, and the only way to fix this is to go challenge the science. Go to court, and go get your outside thing and go challenge the science. If you don't believe the science that's best available, and that's what it is, then go challenge it, industry, but the fact of the matter is that the only way you're going to fix this, or attempt to, is doing one of two things, either padlock boats to the dock or have some small area closures, where it's focused on red snapper, period, and so that's -- You know, I think you should pass 35.

Even though the one-hook rig is not enforceable, you can still say you tried, that you did something, and then you'll have to see what the review from the Secretary is, whether he kicks it back, but the

fact of the matter is the council has known about this for over two years, once it got labeled overfishing, and you all know, it's just like changing a flat tire, and there ain't be a couple of ways to change it, and you all know that, but yet, in some way, draconian -- A closed area, a sliver, or a specific closed area, to protect something in that area that's nothing but red snapper -- Nobody wants to look at that, and maybe they think it's going to go further or something, but that's just -- You know, it's interesting, listening to the conversation, and the administrative record is already well built on this Amendment 35 and what's going on there, and so I just think you should pass 35 and send it on, and, even though it's indefensible, with the one-hook rig, and you will have people frustrated, you've got to do what you've got to do and see where the cookie crumbles. Thank you.

MS. MCCAWLEY: Spud.

MR. WOODWARD: Thank you, Madam Chair. **I think we could have an all-day debate about the merits and efficacy of closed area management and then how enforceable it is and how to measure the benefits of it, but I'm not going to do there, but, in the interest of moving us along, I do recommend that we consider accepting the preferred alternative and its revised language.**

MS. MCCAWLEY: All right. That was a motion and a second to retain the current preferred alternative with the revised language. It was seconded by Carolyn. It's under discussion. Andy.

MR. STRELCHECK: Do we need a motion, since it's already preferred? I don't think we do.

MS. MCCAWLEY: Well, staff is suggesting the motion is fine. All right. We have reworded that motion a little bit. Spud, are you okay with that? All right. I see thumbs-up. Carolyn, the seconder, are you good with that?

DR. BELCHER: Yes.

MS. MCCAWLEY: All right. It's under discussion. **Any objection?** All right. **That motion carries.**

DR. SCHMIDTKE: Just before I move off of Action 1, was there any edit, or addition, that you all wanted to your rationale?

MS. MCCAWLEY: I don't see any hands, and I don't see any additional discussion.

DR. SCHMIDTKE: All right. Then I will move us down to Action 2, and that is considering a prohibition of the use of more than one hook per line for the snapper grouper recreational sector, and you have your Alternative 1, which there is no prohibition on that, currently. Alternative 2, there would be the prohibition, and there's some discussion related to that that we've gone over a few times, and one thing to note is that we do have a bit more of the information, I guess, further developed, and staff is still collecting data, as far as like the one-hook versus two-hook catch rate study, but there has been kind of the data that we do have compiled and put into the amendment document, along with what has been provided by Florida Fish and Wildlife Commission, and so those data are included in the draft amendment document relating to the catch rates using different hooks and different gear configurations.

The effects are summarized within the document, in Chapter 4, but, you know, kind of the overall -- The overall point here is that the requirement of one hook per line for the recreational sector is expected to slow catch rates, overall, which would be including rates for individual species, such as red snapper, and we did see, from those hook studies, that there were some species that experienced increased catch rates, and those were such as gag grouper or red grouper, and so there may be some species groups within that that have higher or lower catch rates, based on your hook configurations, but that would also depend on your angler and your fishing behavior, and so I just wanted to make sure that that was noted, that there will be probably some varying local effects of this action, but the overall expectation, the information that we have, is that there would be some level of reduction to the catch rate for red snapper, as that's one of the main topic species here.

Looking at the public comments related to this action, similar to Action 1, the majority of the comments didn't go specifically into this action itself, but those that did -- Many of them expressed opposition to Alternative 2, stating that this action will have little, likely little, if any, biological benefit to red snapper and would hinder fishing efforts for other species.

There was one comment that did state support for Alternative 2, and there are several other comments that talk about different effects, such as the effects specifically on the deep-drop fishery and the use of one hook in the deep-drop fishery and how the catch efficiencies would be affected there, and it was noted, by one comment, that the use of multiple hooks does not typically result in catches of multiple fish, but it does increase the chance of one fish being caught, and that's something that was noted in the hook -- In the catch rate studies that were done, is that, similarly, the two hooks doesn't necessarily translate to two fish, but it does increase the chances of a fish, and so that was noted as well.

There has been some draft rationale that was put together, developed for your consideration, and so Alternative 2 is expected to reduce fishing mortality for South Atlantic red snapper, as well as other species in the snapper grouper fishery management unit, by slowing the catch rates and reducing, overall, the dead discards. Reducing bycatch is consistent with National Standard 9 of the Magnuson-Stevens Act, as well as the goals and objectives for the Snapper Grouper FMP, and that's noted, the relevant sections of that.

This alternative that you all have considered in this -- You have not selected a preferred yet for this action, but Alternative 2 is expected to contribute, along with other ongoing council projects, to cumulatively end overfishing of South Atlantic red snapper, and it's noted that Andy discussed the importance of National Standard 1, and that's something that we would have to look at the language for that as well, and then this alternative is expected to contribute to ending overfishing and quickening the rebuilding for other South Atlantic species that are currently overfished, or experiencing overfishing, by reducing the fishing mortality for those species as well.

The actions that are before you, within this action, are to select a preferred alternative and then to either review what's been drafted here for Alternative 2 or to develop rationale for Alternative 1, if that's your selected preferred, make any modifications, as you need to, and then select your preferred and finalize your rationale, and so I will pause here for questions and turn it over for discussion.

MS. MCCAWLEY: All right. Before we dive into what I suspect will be a lengthy discussion, can we take a ten-minute bathroom break, and then we'll come back and discuss this particular action.

(Whereupon, a recess was taken.)

MS. MCCAWLEY: All right, and so we're on Action 2 of Amendment 35. We do not have a preferred. We would be looking for someone to ultimately make a motion for a preferred. We've had a lot of discussion on this, and, once again, I will reiterate something that we've said at previous committee meetings, and that are laid out in previous committee reports, that the intent of the council is this multi-step plan, and we're not ignoring the issue.

We are trying to act immediately to reduce the ABC, and also take some actions to change angler behavior, which will not happen overnight, and the council has already taken some descending device actions, and I mentioned, earlier this week, that the FWC also put that in place in state waters off of Florida, which is one of the areas where you have high red snapper encounters and discards, but this multistep plan that we're talking about was, you know, step one, to get through Amendment 35 as quickly as possible, and the next step is the exempted fishing permits that's looking at angler behavior and trying to reduce recreational discards, and then the third step is to work on this MSE, and so we talked about the MSE in committee yesterday, where we're looking at this holistic evaluation that we knew would take time.

Ultimately, this discard problem was decades in the making, and I don't think it's going to be solved overnight, and so we have this multistep plan that's been laid out, and so here we are trying to approve Amendment 35 this week, and we're at the second action in this document, and we're trying to figure out if we would like to select a preferred alternative here on this action. Monica.

MS. SMIT-BRUNELLO: I have a question for Mike. Mike, you mentioned something that caught my ear, and so when I looked at the amendment, the draft amendment, Section 4.2.1, there's a statement in here that -- Well, two sentences, and I'm focused on the second sentence about red grouper, but particularly gag. It says: "Preliminary conclusions from the FWRI sampling in the Gulf of Mexico indicate that single-hook rigs caught fewer red snapper than double-hook rigs. Larger hook sizes tended to catch more red snapper, and hook size did not appear to have a significant impact on the size of red snapper caught. The FWRI information also indicated that single-hook rigs caught more red grouper and gag than double-hook rigs."

Knowing that you have, for your consideration today, Amendment 53 that deals with gag overfished and overfishing, I was wondering if you had any additional information on more than what's in here, in terms of the effect of a single-hook rig on gag, and so remember, under gag, it can be rebuilt in under ten years, and you've selected that ten-year timeframe to rebuild, and so I just am a little concerned, a little bit, about what effect this action would have on gag.

DR. SCHMIDTKE: All right, and so I am going to lean on Chip a bit, but I am going to just refer folks within that section, and so Monica pointed out Section 4.2.1, the biological effects for Action 2, and, within that discussion that she referenced, there is a link there that shows all of the preliminary results of the council sampling. As far as the FWRI information, Chip, do we have a link that includes that?

DR. COLLIER: (Dr. Collier's comment is not audible on the recording.)

DR. SCHMIDTKE: Okay, and so I'm going to see if I can pull up -- It would have been in an SSC report, when they previously reviewed this information. I will see if I can pull that up and circulate it out, and we can add that into the document as well, because that's likely linked on our website. As far as the magnitude effects on a species like gag, from something like that, I'm going to need to turn it over to Chip, because he probably has numbers in front of him.

DR. COLLIER: I do have numbers in front of me, and so, for gag, it was not nearly as frequently caught as red snapper. Gag, we're talking twenty to forty fish, whereas, red snapper, we're talking -- We're looking at over 200 fish being caught in each of the gears, and so it's -- Although it was a difference, and it showed up statistically, there are other models that were supported as well, and some of those did not include hook as a factor in it, but the best model did include it.

The other thing to consider is, when the ACL was made, it's a landings-only ABC, or ACL, and so the fishery would close once they -- The effect of it getting there is the fishery would close once they get to the ACL, at least on the commercial side, and the recreational side would be monitored for the landings, to prevent overfishing.

MS. SMIT-BRUNELLO: Just to follow-up, and so, when you say that the number of gag caught was, what, twenty to forty, something like that, and so you're talking about in the survey, when they surveyed, they caught twenty to forty gag, versus over 200, or 200, red snapper? Okay.

DR. COLLIER: Thank you for clarifying.

DR. SCHMIDTKE: Just following-up, you know, that comparison between red snapper, one hook and two hooks and as well as gag, this is about the rate, the frequency, of being caught and not necessarily the overall number of fish that are caught, but how quickly they are caught using one hook configuration versus another, and so, if there is an overall cap, then the catch would still be limited by the limit.

MS. MCCAWLEY: Andy, you had your hand up, and then John. Okay. John and then Andy.

DR. WALTER: Thanks. The link that's in the document goes to some of the results, but they seem to be very low numbers, and I'm wondering if there is updated results for this, and so that link on the council website here, and I am wondering if those results of that study have gone to the SSC, and what I mean by this is that, since a lot of the assumed benefits of this action are based on this preliminary data, it is important that that data get scrutinized and those results at least get some element of review.

DR. COLLIER: It was reviewed by the SSC in October of last year, 2022.

DR. WALTER: Is the one on the website that I am -- Is it the most current one, or is there one updated with more data? Maybe you can just check that, and you can do that offline and get back to us. Thanks.

DR. SCHMIDTKE: The data that are linked there, that's from the council staff study that's being conducted, and we haven't had a trip go out since it was reviewed, and we've only been able to get

that one trip out, due to weather, and so that is the data that we have right now. That is the most current, up-to-date version.

DR. WALTER: Okay. I guess then the other study is the Florida study, and is that also either available or linked?

DR. SCHMIDTKE: It's available. I can circulate it. It was presented to the SSC in I believe October as well.

DR. WALTER: Okay. Thanks.

MS. MCCAWLEY: Andy.

MR. STRELCHECK: Two things related to this. The first is the amendment itself has a very kind of qualitative discussion of the benefits of this, and I noted, with the FWC study, that it would have been good to draw out and at least try to provide some quantitative information, and I recognize that there is potentially some crude assumptions that you would have to make, in terms of the benefits, but at least you could potentially put some bounds around what the benefit could be if everyone is currently using multi-hooks and reduced their activity to single hooks, and that resulted in efficiency, with effort remaining the same. I would encourage just staff to quantitatively build a little bit better of a record, with regard to these studies and information, and try to at least put some bounds around the reduction.

The other thing I will note, which is separate and outside this action, is, working with Chip and the South Atlantic Council team, we have an internal funding competition for temporary funds for the Magnuson-Stevens Act, and one of the proposals that we've put in for, with Chip and team, is for a \$150,000 gear study, and, if funded, we would like to work with tackle manufacturers and others to really be innovative and creative with regard to testing new gear types, and so that's beyond, obviously, the scope of what we're doing here, but I did want to let you know that there is more attention trying to be drawn to how we could use gear to improve some of these discards and discard bycatch.

MS. MCCAWLEY: Thanks, Andy. Just so I understand, that would be something that would complement all the other studies that are happening right now, and then that information could be used, moving forward, in management decisions, thinking about angler behavior, and is that what your intent is? I just wanted to make sure that I understood.

MR. STRELCHECK: Correct, yes, and it's still under the question of whether it will get funding or not, but yes.

MS. MCCAWLEY: Spud.

MR. WOODWARD: Thank you, Madam Chair. I guess I will start us off. You know, after receiving public comment that sort of, I guess, reinforced a lot of my concerns about this, and recognizing that we have some preliminary qualitative data, but we really don't have the kind of quantitative data, I think, to really understand the effectiveness, I question whether this is really necessary at this point.

I know we're trying to have a cumulative beneficial effect on discards, but, you know, gear issues are always difficult, you know, and this would be applied uniformly across the entire range of the South Atlantic Council, from the Keys all the way to the North Carolina-Virginia border, whereas, in the past, when we've considered gear modifications, we've tried to at least consider regional differences in the way fisheries are prosecuted, target species and that kind of thing, and we're not --

That's not really being contemplated here, and so I think the potential to generate some unintended negative consequences, without benefit, is pretty high, and so I'm -- You know, I will go along with the will of the council, but I think perhaps this is premature, that we don't have the kind of information that we need to really understand that this is going to produce, first of all, any benefit, and, secondly, most importantly, a measurable benefit that will translate into determining whether or not we're actually reducing discards. I think that's the challenge with all of these tools, is how are you going to measure whether you actually reduce discards and apply that to making a better stock status determination, and so thank you.

MS. MCCAWLEY: I just wanted to add that we did have a short conversation, at one of our council meetings, and there was an option in the document to not apply it uniformly throughout the entire region, and it even broke down Florida into multiple areas, so Florida wasn't just one region by itself, and that was selected by the committee to be moved to Considered but Rejected, and so we did have that debate.

I agree it is a little strange to apply this uniformly throughout the whole area, and we discussed this with our commissioners, at our commission meeting a couple of weeks ago, and they brought that up as well, you know, some concerns about why is there not a line that is similar to the line that's in place for circle hooks, and, you know, why is this applied uniformly throughout the entire coast of Florida, and so multiple people are asking those same questions, I would say. Mel.

MR. BELL: Given that, you know, as you said earlier, 35 needs -- We need to dispatch 35, one way or the other, and so 35 can go forward with two actions, or it can go forward with one action, but, if Action 2, again, might have unintended negative consequences that, you know, we're not aware of, is ditching Action 2 and just moving forward with one action -- In terms of how it's perceived beyond the council, either way, it's going to be perceived as inadequate, apparently, and so, if whatever we do is going to be perceived as inadequate, then perhaps just moving on Action 1, which, again, is process that we're kind of required to do, you know, maybe we consider not moving on Action 2.

MS. MCCAWLEY: Kerry.

MS. MARHEFKA: I don't have a strong feeling about this one way or the other, and I will also go along with the will of the council. Just a reminder that I believe this started as part of a broader discussion about sort of effectiveness of recreational gear versus commercial gear, and, you know, did we ever intend to have people using -- Which is not double hooks, and I'm not implying that double hooks is commercial gear, but we talked about all kinds of other things, right, like the electric reels and things like that, and so I would be comfortable -- You know, if this stays out of there, that is a little pinpoint I want to go back to yesterday and say let's stick that kind of discussion in the MSE discussion, and that's an appropriate place to talk about what gear is effective and talk about different regional approaches to effective gear.

DR. SCHMIDTKE: So, before you move further in your discussion, I do need to point out that the alternative language that was included in this document -- I will just go ahead and copy it over, but this is the alternative from the draft amendment, and it didn't get updated in the decision document, and so noting that this is the current alternative language, and that -- It's the same concept, but you all asked staff to update the language to reflect a correlation with the current hook regulations, and so that's what that is. That's noting that there are hook regulations that differ north and south of the twenty-eight-degree latitude line, and so that's noting that single hooks would still be required, but it's a single hook -- North of twenty-eight, it's a single circle hook. South of twenty-eight, it's a single hook that doesn't need to be a circle hook.

MS. MCCAWLEY: Just so I understand what just happened, this was in the main document, and it should have been in the decision document, and it just wasn't pulled over into the decision document, and so this is reflective of what we asked staff to do and come back with from the last meeting, and is that right?

DR. SCHMIDTKE: Correct, and I apologize that that didn't make it over into that one.

MS. MCCAWLEY: Spud.

MR. WOODWARD: Just to be clear, is that what we took out for public comment?

DR. SCHMIDTKE: Yes, that's what went out for public comment.

MS. MCCAWLEY: Andy.

MR. STRELCHECK: To Mel's point, I would caution the council about making any decisions based on what you think the service may or may not do with regard to the submission of this action, right, and you are working to build a record with regard to the science and information before you, and efforts to reduce discards is obviously one of the main priorities, as part of this action, and so removing this, or choosing status quo, to me, is very contrary to why we've been working on this action for the last two years, and so I would encourage you to keep this action in the amendment.

MS. MCCAWLEY: I feel the same way as Andy. I feel like we're trying to work on something here that would get to the discard issue, and we know we have a multistep process, but we said that we wanted to start working on this sooner rather than later, to get to these recreational discards, and I feel more comfortable with this particular line matching up with the line for the circle hooks. Other comments here? If this stays in here, then we need a preferred. Spud.

MR. WOODWARD: Again, I don't want to belabor this, but just, again, to follow-up, and so, if we choose a preferred that does limit folks north of that twenty-eight latitude line to one hook, what are we going to do, collectively, as the service, the Science Center, all of us, to measure the efficacy of this?

I mean, that's what just -- That's what perpetually troubles me, is I just -- You know, I want to know, and are we going to have a commensurate effort to verify that there's a benefit accrued from this, and how are we going to do it, and is the resources going to be there, and I know that there's a concern, you know, or there's a possibility of having some funding, but, you know, these are

long-term things, you know, to really determine, across the whole twelve degrees of latitude of the region, is it working or is it not working, and how are we going to translate that into better decision-making, and so I would feel a little more comfortable if there were some assurances that we're going to have the follow-through like we need.

MS. MCCAWLEY: FWRI is working on this, and I can't speak for the other states and what's happening, other than this particular study that the South Atlantic staff have been working on, and so two areas of the four-state region where there is studies actively underway on this. Chip.

DR. COLLIER: I apologize, and I got a little confused on which study I was talking about, and there is the study that was presented by Heather Christiansen from FWRI, and they were looking at the observer program, and, with the observer program, they did see a significant difference between the numbers of red snapper caught on a single-hook versus a double-hook rig. Some of the information that I was referring to was another study that they had done in the Gulf of Mexico, where they looked at a variety of species, and really targeted single-hook versus double-hook rigs, with a scientific study, and that has not been presented to the SSC.

We finalized that paper in December, and that's why I got a little bit confused on it, and I apologize. It was after the SSC, but we can take that to the SSC at the April meeting. That would make a third study indicating that there is a difference between a single-hook versus a double-hook rig and catch rates.

MS. MCCAWLEY: Thanks, Chip. Kerry, did you have your hand up?

MS. MARHEFKA: If we went along with one of these actions with the single-hook rig, whether it's divided by Florida or not, could part of the EFP be allowed -- Two-hook fishing be allowed in areas, so that it can be studied against the one-hook in the EFP?

MR. STRELCHECK: Yes, and, I mean, we're still working on the notice for funding opportunity, but we're not going to be overly prescriptive, in terms of the details, and so one of the things is, obviously, gear modifications, as part of the proposal process, and so I think that would fit under this, and then the separate study that I mentioned that we're trying to seek funding for, with the South Atlantic Council, could also be well aligned with evaluating this very measure.

The comment I will make, since I have the microphone, is it's easy to -- Or easier to quantify the benefit of using a single-hook versus a multi-hook rig. What we then need to know is, well, how many anglers are actually abiding by that regulation, right, and it's kind of like descending device use, right, and you have a descending device on your boat, and be in compliance, but it doesn't necessarily mean that you're using it to reduce discards.

MS. MCCAWLEY: I would just add, to what Andy just said, not only are you using it or are you not, but are you using it properly to descend the fish, which is another thing that we're trying to get to with outreach, but, yes, I think that FWC is intending to look at this more. Yes, we could do something in the EFP, and Chip just talked about the study that FWC had worked on that was in the Gulf, and so, still, you could do that in the Gulf, even though we're talking about the South Atlantic here, and there's lots of different paths forward here. Thoughts? I would like to see this stay in, and I would like to see us select Alternative 2 as the preferred, that draws this line at the same place as the circle hooks. Mike and then Judy.

DR. SCHMIDTKE: I just wanted to point out the qualitative information that we do have. We don't have a study that is looking at the frequency of use of single-hook versus double-hook rigs, but we did at least ask the advisory panel to comment on that information, and their comments were in the October 2022 advisory panel report, and they're summarized within the amendment document, in Section 4.2.1, and they're talked about there, and there's also the AP's feedback in Chapter 5, under Action 2, and so that would be Section 5.2, where you can look under the AP section there, to see the AP's comments related to the frequency of use, but that is the level of information we have, but we don't have a study. We just have that qualitative input from our AP.

MS. MCCAWLEY: Judy.

MS. HELMEY: My question is for Andy, and do we get any advantage for us for using the single-hook circle hook, and is there any advantage for us, as far as the grouper, I mean the snapper, with the discards, because I do know, if we use two hooks, we catch twelve snapper instead of six, on a six-passenger boat, and so do we get any relief? Is it counted for us, if we go with the one-hook rig?

MR. STRELCHECK: In principle, right, if we are making fishermen less efficient, right, which is essentially what we're talking about, catch efficiency, the question would become, you know, are you going to still be able to retain your full bag limit for the six passengers of twelve fish, and you're just going to have to take a little bit longer to actually catch them, because you're having to drop the line more often, right, and so the benefit is, if we do reduce catch efficiency, right, and less fish are caught and/or discarded, then you're working to further address overfishing, which is, obviously, our mandate under MSA.

MS. MCCAWLEY: Go ahead, Judy.

MS. HELMEY: You're right, and so I'm going to have to fish longer to catch the fish, the other fish. To catch my limit of fish, I will have to fish longer, because one hook, using one hook, you know, they get out of bait real quick, and the second hook usually gives us an option for at least one fish, where the one-hook rig is not going to give us that option.

MS. MCCAWLEY: Andy.

MR. STRELCHECK: Right, and, given that red snapper is closed three-hundred-and-sixty-plus days a year right now, if it makes you less efficient, in terms of at least catching red snapper, right, while you're targeting other species, then discards are going to come down. Right now, it's kind of an uncertain amount, but there's some estimates, at least, of the catch efficiency reduction that would occur for the same unit of effort that's applied.

MS. HELMEY: Thank you.

MS. MCCAWLEY: Let me ask a clarifying question here for Mike, and so I might have misspoken here. Alternative 2 is not limiting the single-hook rigs to north of the circle hook line, and it's saying single-hook rigs are throughout the entire area, and is that right?

DR. SCHMIDTKE: Correct. It's single hooks are throughout the entire area. That's what you all directed at the last meeting. You just also directed -- Because we already have a hook requirement on the books, you know, and that's already been talked about, enforcement and enforceability of that and such, to just tie it in like it's just one other part of the hook requirement is that it's single hook, as opposed to multiple hooks.

MS. MCCAWLEY: All right. Thanks for that clarification, and so then I would support either Alternative 2, as written, or a new alternative that stopped the single hooks at the same place that it stopped the circle hooks, and I'm up for either one. I see confused faces around the table, and do we need to go over that again? Chester.

MR. BREWER: I just wanted to get a little history as to why we had the dividing line and why we said that certain -- You know, below a certain line you could use -- Essentially, what they're using is called triple hooks, and that's because the headboats, and some of the regular recreational folks, will use those hooks, and they will take a sardine, and they will put three hooks in the same bait, and that's the way they have traditionally fished, and that's the way they, you know, wanted to continue to fish, and so we took that into account and put that dividing line there, and I think it's important, certainly, to keep the dividing line, and I also think, from the standpoint of simplicity, that we keep the same dividing line for these two hook arrangements.

MS. MCCAWLEY: Okay, and so let me try to restate what you just said. I think that you're also making a case that, if we're going to move forward with this, there needs to be an alternative that would make a break here at the line, the twenty-eight degrees north latitude, and that would be where these single-hook rigs stop. Okay, and so then we would need to add an alternative to stop that at that line. Mike.

DR. SCHMIDTKE: I just want to check-in with Monica and clarify that, if this is the direction that the council decides to go, of adding an alternative that would essentially be just this first sentence of Alternative 2 -- Is that within the range of the alternatives that went out for public comment already?

MS. SMIT-BRUNELLO: So, essentially, what Jessica is thinking about is Alternative 2 would be the first sentence of the current Alternative 2, and Alternative 3 would be the second sentence of Alternative 2?

DR. SCHMIDTKE: She's saying that, and sorry for speaking for you, Jessica, but she's saying that Alternative 2 would remain as-is. Alternative 3, the new alternative that they would be adding, would be just the first sentence, just that, where circle hooks are required that in the fishery, that also a one-hook requirement is in place.

MS. SMIT-BRUNELLO: Yes, I think it is within the range. My concern, or question, I guess, is whether your analysis -- Whether you have enough analysis to support the rationale for why, you know, you would be just choosing a portion of the current action, Alternative 2, and then I know a lot of the analysis is pretty qualitative, and we talked about that, and is there enough to tease out anything special about the twenty-eight-degree latitude line or, you know, just kind of build the record as to why, apart from -- I understand what Chester just said, and I understand what you're trying to do, and so is there any additional benefit that you're foregoing, in a way, by not having the current action just stay as it is?

MS. MCCAWLEY: That's a great question, and this was actually something that our commissioners discussed with us at the commission meeting and with staff off to the side, kind of asking these exact same questions. If we already have this existing line, they're suggesting that, at least at this time, you don't have a significant number of red snapper caught south of this area, and so why would you need to, at this point -- I mean, hopefully, one day, it will be rebuilt, and there will be tons of red snapper in this area, but, at this point, why would you need the single-hook rig to reduce efficiency, because there aren't really a lot of red snapper caught there, was what our commission was indicating.

MS. SMIT-BRUNELLO: Then, to follow-up, so there's information in the document, or that could be put in there, of where red snapper are predominantly harvested, and I'm sure that's in there, and so you could, you know, discuss just what you said and link it to the information that's already in the record, as to the predominant area for harvest of red snapper, and, therefore, you wouldn't want to consider it throughout the range, or throughout the South Atlantic area.

MS. MCCAWLEY: Thanks, Monica. Chester.

MR. BREWER: I just wanted to add a point, and the purpose of these triple rigs is not to catch, you know, multiple fish on one line, and it is to catch one fish on the same line, because it's just - - You know, you've got certain fish that are short strikers, and, when you're on a drift boat, and you're drifting slowly, they're going to, you know, bite you off short, and so that was really the main reason, and, also, the dividing line -- We had some -- Back then, we had some public comment about, hey, above that line is where your red snapper are, and, also, you're not seeing, you know, the headboats fishing in the same way that you do see them fishing in south Florida, and so there was a good rationale for that line.

DR. SCHMIDTKE: I just wanted to note, you know, the regulation, and the setting of the line, and some of the discussion, as far as circle hooks north and south, and red snapper abundance north and south, we can refer to Regulatory Amendment 29 for that information, and we can pull in some of the references from that.

MS. MCCAWLEY: All right. I am asking Mike if he could make a draft Alternative 3, and someone would have to make that motion to add it, but to type it up there, so we can see what we're talking about here. Andy.

MR. STRELCHECK: I mean, it makes sense, in terms of how you're approaching it, and I'm just curious if you want to also recommend that this be preferred, if we're adding it to the document.

MS. MCCAWLEY: I would love that, but, as the Chair, I can't really make those motions, and I'll be counting on you guys. Tom.

MR. ROLLER: So a little point of clarification here. This is going to be for all grouper snapper species, and that includes deepwater species as well, correct, tilefish and snowy grouper, right, and so, essentially, you know, draft Alternative 3 would allow multi-hooks rigs in Florida for deep-drop species, but not allow them in other states, like North Carolina, correct? I mean, that's why, when we have this discussion, I am supportive of keeping this all in the amendment, and I've also

been generally more supportive of Alternative 2, and I thought it was a good compromise, given the removal of electric reels from our previous draft, right, and so --

MS. MCCAWLEY: So what's the pleasure of the committee here? Andy.

MR. STRELCHECK: I will make a motion to add draft Alternative 3 to the Reg Amendment 35 and select it as preferred, if I can get a second.

MS. MCCAWLEY: All right. It's seconded by Carolyn.

MR. STRELCHECK: In terms of discussion, as I mentioned earlier, I think this shows that you're trying to make an effort to reduce discards in the fishery. Although the overall benefit is unknown, and it is difficult to enforce, there is at least some indication that this could help with reducing discards and that, by this modification to the alternative, applying it to twenty-eight degrees north, it not only aligns with existing regulations for circle hooks, but also consistent with kind of the geographic extent of red snapper distribution.

MS. MCCAWLEY: Thanks, Andy. Any more discussion on this before we take a vote? A reminder that this will also come back in Full Council. All right. Any more discussion? Tom.

MR. ROLLER: Yes, and so, back to my previous comment, and, you know, I viewed this as a way to reduce discards, not just among red snapper, but also the entire complex, and so, while I'm supportive of the Alternative 3 in here, I'm not supportive of it being our preferred alternative, prior to my last comments, given the fact that it won't apply to deepwater species through the entire range, and so --

MS. MCCAWLEY: Thanks, Tom. Any more discussion? Dewey.

MR. HEMILRIGHT: Does this motion, and I wasn't paying attention, but does it go from the whole range of the South Atlantic Council, even in deepwater species?

MS. MCCAWLEY: That's what Tom is saying. Yes, and so not the whole range, because it draws a line here, but almost the whole range, and, yes, it would apply to the entire snapper grouper complex.

MR. HEMILRIGHT: What line is exempt?

MS. MCCAWLEY: A line in south Florida.

MR. HEMILRIGHT: So, below twenty-eight, you can use multiple-hook rigs in deep water?

MS. MCCAWLEY: And you don't have to use circle hooks.

MR. HEMILRIGHT: Well, that kind of defeats the purpose, because, if you look at deepwater survey and cooccurring species, you've got it -- It's throughout the South Atlantic, below Cape Hatteras, and so, if you've got one area that's allowed to use multiple hooks for deepwater species, then you're not protecting -- You know, the reason for using the circle hooks, or the reason for using the single hooks, is further protection of other things than snapper grouper, and, also, red

snapper, and so how does that area below twenty-eight get carved out, when everybody else has to use a single hook and for deepwater species? Why isn't it just throughout the range of the South Atlantic, if it's going to do that?

MS. MCCAWLEY: Because there's not really a lot of red snapper south of that line, and so we're focusing on areas where there are a number of red snapper, in order to reduce discards of red snapper.

MR. HEMILRIGHT: Okay, and so, therefore, in furthering this amendment, you've got to take out any language that says -- In draft, I think I've seen where it said that you're also looking to protect the snapper grouper species, by using the single-hook rig, and so it's either one or the other, and I don't understand how you can carve out one section of it, and, I mean, that's what we've seen in the document, and is that not right, Mike, that the reason for this is also -- It's red snapper, but it's also snapper grouper species.

DR. SCHMIDTKE: Yes, and so it's been highlighted, throughout the process, that actions such as this, for prohibiting multiple hooks, that it would have ramifications for multiple species in the snapper grouper complex, and it has also been pointed out that red snapper, while they are probably the most extreme of the discard problem, they are not the only species that are affected by the discarding that happens within the snapper grouper fishery and that there are annual catch limits that are reduced, really throughout the complex, because of dead discards, and some, you know, to a larger extent than others, and so that was talked about. Now, in the proposed -- You know, in the draft alternative that's been proposed, there would still be similar ramifications for all the species that exist in that area, north of twenty-eight, but those effects would not -- Obviously, they would not carry down south of twenty-eight, in that case.

MR. HEMILRIGHT: A follow-up. You also have -- North of 35/30, you have data that showed that you only catch blueline tilefish, and nothing else, nothing else, north of a certain area, and so, if we're going to start exempting out areas, why not -- Let's start looking at the data and exempt out the other areas, where there's things that are not red snapper.

You don't catch red snapper north of -- To my knowledge, documented, north of Cape Hatteras. You know, Hatteras, the shoals and south, is where that documentation is, and so I just hope we look at it being across-the-board of fairness and equitable, if this is what you're choosing to do, to look at something, and, I mean, definitely the snowy grouper needs protection, not just because there might be a two-month season, but you have co-occurring species, and that definitely needs protection, because I see, the next two or three years, there's going to be a rude awakening with some species, and it's not going to be very good, and so why not get protection throughout the range of all this stuff, if you're doing this amendment, instead of carving out sections for certain areas.

MS. MCCAWLEY: Thank you, Dewey. Mel.

MR. BELL: I think I could live with leaving in the original version, and, I mean, I trust Monica, but I kind of question if some of what we're trying to do here falls outside of what we've already sort of taken to the public and discussed with them. If we start drawing lines now, that we didn't really discuss with them, that might be an issue, and the other thing is that, if we're -- I mean, I believe that, by including this, you can deal with a reduction of some discards across the snapper

grouper complex, including red snapper, but, if the focus is red snapper, I mean, if I'm looking at this correctly -- So twenty-eight degrees is like sixty miles south of Daytona, or something like that, and so, if you were really focused on red snapper reduction, I mean, you could draw another line at thirty, which is about Jacksonville, and you could work between thirty and twenty-eight, and, even though we have a lot of red snapper north of thirty, we don't have as many, perhaps.

This is where it gets -- If we start drawing lines and all now, that we haven't really taken to the public, I'm a little concerned with that, and so, I mean, I think I could live with leaving Action 2 in like it was, but I don't know that we've really discussed this thoroughly with the public, and we're just kind of making some assumptions here and trying to come up with something that, you know, maybe works a little better, but I just feel kind of uncomfortable about that.

MS. MCCAWLEY: All right. I have some ideas of a path forward here, and I kind of agree with some of these statements. Back to Andy.

MR. STRELCHECK: **Great comments by Dewey and Mel, and I appreciate the thought on this, and, you know, I guess I'm willing to withdraw my motion, if I can get a second from Carolyn. Okay, and so the motion is withdrawn.** I do feel strongly that I think we need to select a preferred and let the public be able to respond to that during our public comment period.

MS. MCCAWLEY: I agree. Would you like to make another motion?

MR. STRELCHECK: Since I did so well on the last one, I'm going to suggest someone else.

MS. MCCAWLEY: Tom.

MR. ROLLER: **I move that we make Alternative 2 the preferred.**

MS. MCCAWLEY: All right. Motion to make Alternative 2 the preferred, and it's seconded by Carolyn. Dewey.

MR. HEMILRIGHT: Can you put Alternative 2 up there, so I can read it, or everybody else can read it? This takes the single-hook rig from Key West to the North Carolina-Virginia line, and is that correct? Thank you.

MS. MCCAWLEY: Any more questions or discussion? All right. Do we want to take a vote? Are we ready to take a vote? Let's take a vote. **All those in favor, raise your hand, eleven in favor; those opposed; abstentions, one abstention. Two abstentions. The motion passes.** Chester.

MR. BREWER: Alternative 2, you've got a single-hook everywhere. Okay. Then why do we even have a dividing line? Is it because of the stainless steel?

MS. MCCAWLEY: This is because -- The reason that this circle hook piece is in there is just kind of stating the current situation, which is what we told staff to do at the last council meeting, was to state where the circle hook requirement is located. Mike, do you want to add to that?

DR. SCHMIDTKE: So there was discussion about the enforceability of a hook-related regulation, and one of the things that was pointed out is that the council already has a hook-related regulation, and it has a requirement that hooks be non-stainless steel everywhere, and that, north of twenty-eight, that they be circle hooks, and so the council, for just kind of tie that record in of we already have hook requirements in place, to tie that into this is another piece of that hook requirement -- All of this portion, and I can -- I will underline. The only thing that's new in this is this underlined portion right here.

MR. BREWER: Right.

DR. SCHMIDTKE: Everything else is already on the books, is already part of your regulations, and so this underlined portion is the only thing that's new out of all of this, but the reason why it was presented in this way is to tie it in, such that it addresses at least some of the enforceability discussion, because, if you're able to enforce -- You know, however well you are, if you're able to enforce a hook-related requirement on having a non-stainless-steel hook, then you can also check a hook to see if there's one versus two.

MR. BREWER: Right. I will just go on the record as saying that, from Sebastian south, that's going to be -- For the drift boats, that's going to be really, really unpopular.

MS. MCCAWLEY: Thanks, Chester.

DR. SCHMIDTKE: I will just note the draft motion for approval that will go to Full Council, and so, in that case, the committee is done with Regulatory Amendment 35, since you've selected your preferreds and checked your -- I guess we do want to have one last check on rationale, anything additional for rationale.

MS. MCCAWLEY: I don't know that we have anything else at this time, but people can try to think about that and maybe bring it back when we get to Full Council, to see if they want to add anything to that, and then the next item is to have Christina come up and talk to us about the best fishing practices outreach update.

MS. WIEGAND: All right. Good morning, and so I just wanted to briefly give you guys an update on the best fishing practices appendix that was included as part of Regulatory Amendment 35. If you will remember back to December, as a part of sort of the large best fishing practices expansion, we were going to hire a best fishing practices outreach specialist, and I am really excited to let you guys know that we have hired Ashley Oliver to be our best fishing practices outreach specialist. You all should be -- She's back there waving, and you all should be familiar with her, and she was working for Sea Grant, as part of their fellowship, and I will say the incredible amount of outreach work that's been done over the last year would not have been possible without having Ashley on staff, as well as Meg Withers, our Citizen Science Project Coordinator, and so we are very, very excited to have Ashley on staff, officially.

That does mean that the fellowship position is now vacant, and we have posted the job ad for that, and we will hopefully be hiring for that position within the next few months, and so I'm optimistic that we'll have a new person onboard in that for you guys to meet in June, and so there is sort of going to be a little bit of a change in what Ashley is focusing on, versus the fellow, and the fellow is going to really focus on a lot of that boots-on-the-ground in-person tackle shop outreach,

whereas, now that Ashley is officially with the council, she'll transition more to focus on working on, you know, seminars, as well as the sort of train-the-trainer program that was proposed within the best fishing practices appendix that we talked about in December, the best fishing practices master volunteer program.

We'll keep giving you guys these updates as we move forward, and I'm happy to answer any questions, but I just wanted to let you guys know that we had sort of completed the hiring process and were moving forward with actively doing the stuff that was proposed in that appendix.

MS. MCCAWLEY: Monica.

MS. SMIT-BRUNELLO: So this was -- Thank you, Christina, and so this outreach campaign I know you all considered to be a big part of moving forward to end overfishing for red snapper, as well as I'm sure it does a number of other things, and so it's an appendix. It's part of this draft amendment, and so the appendix that contains the best fishing practices outreach campaign, or whatever we're going to call it, program, is the -- So you would say that the program, and the ideas behind it, and what it's intended to do, or maybe what it's already done, that's all outlined in the appendix for the council to see and consider when they're deciding whether to take final action?

MS. WIEGAND: Correct. All of that information is included, not sort of just what we propose to expand best fishing practices outreach, but what's already been sort of completed, to-date, through the Sea Grant fellowship, as well as other sort of smaller council outreach efforts.

MS. MCCAWLEY: Any additional questions? Mike.

DR. SCHMIDTKE: Just for efficiency of being able to find things in the Reg Amendment 35 draft document that's in your briefing book, that's Appendix H, is the one that you will look at for the best fishing practices information.

MS. MCCAWLEY: Thank you, Mike. Thank you, Christina. Any more questions or discussion on that piece? If not, I will ask Myra to come up here and talk to us about the South Atlantic Red Snapper Project Update.

MS. BROUWER: Thank you, Jessica. I have my notes from the update that was given to the steering committee on January 26, and this was given by Dr. Will Patterson, who is the PI, but there's a whole very large team of folks working on this project. Just to be complete and remind everybody what we're talking about, this is a study that would estimate the distribution and density of red snapper in unknown, or unconsolidated, habitats, using ROV, and it would also develop a model for two-plus fish, a Bayesian model, and it would use close-kin mark-recapture methodologies and then reconcile all those results with the SEDAR model, and so it's very complete and very extensive sort of work.

Currently, the timeline has that project being completed in August of 2025, with two rounds of funding, and highlights for you is there's been a number of interviews that have been conducted, and this is being done in North Carolina, and the aim of this portion of the project is to aim at increasing knowledge of hardbottom habitat from North Carolina to Florida, and, to-date, there's been twenty-two out of sixty-plus fishermen that have been contacted and have completed the questionnaires.

For the hierarchical integrated modeling, they are looking at additional information to inform the effective sample area for the camera data. As far as the camera, trap, and ROV sampling, this is being done cooperatively with charter boat captains, because they can control the position of the boat much better and without having to anchor, and so they have seventeen vessels from North Carolina to the Florida Keys, and, so far, they've done 483 ROV surveys.

They are going to exceed the goal of 2,500 fish for the genetic studies per year, thanks to various agency collaboration and team effort, and so the PIs are confident they will be able to sample enough fish, even if there is, you know, a limited season in 2023, because that was a concern and something that was discussed about for a little bit, and additional funding is expected, and that would be used to look at the magnitude and disposition of red snapper recreational discards, and so, overall, the project is proceeding as scheduled, and they are slightly behind on some of the genetic work, and the sequencing is very fast, and so they anticipate catching up pretty quickly.

Then, currently, Sea Grant is requesting a written plan from the PI, and the steering committee will meet and decide if that is acceptable or get clarification and what have you, and so that's pretty much where we are. They're also doing some work on the Sea Grant website, and I don't have any more updates, and so that's what I have for you. I guess I will just also say that, moving forward -- I have been the representative on the steering committee, and I'm passing that to Mike Schmidtke, and so he's going to be the one giving you updates from here forward. Thank you.

MS. MCCAWLEY: Monica.

MS. SMIT-BRUNELLO: Myra, my apologies, because I haven't delved into all the things that this project is doing, and does it -- I have two questions. Does it cover recreational and commercial?

MS. BROUWER: No, I believe it's mainly recreational, and I am going to look to John Walter, because he sits on the steering committee too, and he understands a whole lot of these things much better than I do.

MS. MCCAWLEY: John.

DR. WALTER: The tagging component should be able to get both recreational and commercial, from the stance that any fish that is reported, out of each one of the sectors, ought to be able to be used to estimate that total discard rate, and so it's actually a key study, and a key need, I think, to do that, and they're going to look at exploring either using conventional tags or straight gene tagging, and so a tissue sample is taken, and the fish is released, and then it's recaptured, and, actually, that might prove to be the most valuable way of doing it, because of the tag -- The need to estimate tag reporting rate for the conventional tagging and to deal with tag shedding and tag loss, and so the gene tagging might fit in well with the existing close-kin genetic work and the rather novel method for this.

MS. MCCAWLEY: Monica.

MS. SMIT-BRUNELLO: Then my second question -- Thank you, John and Myra, and is this program tied to the open time periods to harvest red snapper?

MS. BROUWER: Part of it is, but, like I said, there is many other portions of the project that are not, and so it's very comprehensive, and the PIs are getting information from various multiple sources throughout the region.

MS. SMIT-BRUNELLO: Thank you.

MS. MCCAWLEY: Are there additional questions here on this topic? John.

DR. WALTER: Thanks, Chair. This is not necessarily a question on this topic, but it is a fortuitous opportunity, in that there is Fiscal Year 2023 funding, in addition to this, and I will read the language from the omnibus, because it specifically asks for council input on this, and I think people need to be aware of this, if you don't mind me reading it.

South Atlantic Reef Fish, NMFS shall follow prior-year direction adopted by Public Law 117.03 regarding South Atlantic reef fish, and the agreement provides \$1.8 million for the purpose. NOAA is directed to follow the guidance of the South Atlantic Fishery Management Council in identifying the best research and data collection necessary to better understand discard rates and mortality in this fishery. Further, the agreement supports full integration of the South Atlantic Great Red Snapper Count data into the next stock assessment, so that the South Atlantic Fishery Management Council can appropriately use this new abundance data when making management decisions regarding red snapper.

This is an excellent opportunity, by the sponsors of this, and it's an additional year of funding, and I think what we need to come up with is a plan that will best meet the needs here to use this funding to address these, and I think we've talked about a number of things that could be valuable, in terms of like some of the exploring different fishing strategies, or management strategies, and some of the concepts that I've heard done in other regions are like a study fleet, which essentially has a fleet that could be used to develop new technologies, or new methods of fishing, and I think we've got a real opportunity here, and I would like for us to work together to find a good spend plan for this, to address it, as well as to ensure that we incorporate the count data into the next assessment in the best way possible, and I think we'll need to ensure that we put the architecture in place so that it can get through the SSC and get through and come to the council, where you'll have the best science available to consider. Thanks.

MS. MCCAWLEY: A couple of things, and so I might need to follow back up, when we talk about this issue in Full Council, and I was looking at the language myself, and it did not seem to match the language that you were reading, and so I'm trying to ensure that the language that I have from the bill is the same as the language that you read, and so more to come on that, but I saw some hands go up. Laurilee.

MS. THOMPSON: Thanks for that, John, and so, you know, we've kind of kicked around some ideas, you know, to look at, and are we going to have input on what you're going to consider submitting for the EFP, and, you know, would there be room in what you just talked about to include staff looking at some potential closed areas, locations, impacts, et cetera, or would we need something separate, some separate funding, if we chose to instruct staff to look at closed areas, and would we need a different funding stream for that?

MS. MCCAWLEY: Andy.

MR. STRELCHECK: Since the agency is providing funding support for the exempted fishing permit process, we would not be eligible applicants for that process, and we could collaborate, or coordinate, as kind of technical reviewers on those projects, but, in terms of what John is talking about, this is funding research that would be done directed by the Science Center, and so kind of aligned with a lot of the goals and objectives that we've been talking about today, and, you know, he's seeking feedback input on, you know, how that best could be used, and so your suggestion of whether it's spatial closures, or hotspots, or whatever you want to call it, and it sounds like that's an area of interest, at least for you, that you would want the council to pursue.

John was suggesting study fleets, which I like the concept of, you know, how can we get support buy-in, working with industry members on both the commercial and recreational side, to help us get to a better way of estimating and evaluating discard estimates, and so that's really the approach we're trying to take, is what are kind of some of the research goals and objectives that you would want to help direct the Science Center in focusing in on.

MS. MCCAWLEY: I would like to continue this discussion further at Full Council, and Myra are talking about what the council discussed last June, about some of the money, but, also, I am verifying what was actually in the bill, and the language that I see from the committee does not match what John Walter read, and so, instead of trying to figure that out on the fly here, I would like to continue this discussion in Full Council, if we can. Laurilee.

MS. THOMPSON: So would that be emailed to us, so we have a chance to look at it before we talk about it in Full Council? I would like to see it.

MS. MCCAWLEY: Yes, we can work on that. All right, and so we are done with all the items, right now, for Amendment 35, and so I believe -- I'm going to pass it to Carolyn, so she can tell us what to do here, but I believe we're going to try to take an early lunch, but I'm going to pass it over to the Chair.

DR. BELCHER: So we're right at 11:30. 46 is the next item on there, and so, rather than us kind of, you know, end up in a hangry state, I would rather us keep our discussions going, and so I'm going to opt for us to go from 11:30 until 1:00, and we'll come back and get into 46 directly.

(Whereupon, a recess was taken.)

MS. MCCAWLEY: All right. We're going to start in Amendment 46, and I'm going to turn it over to John Hadley, and I believe we're going to start with the scoping comments.

MR. HADLEY: All right. Thank you. We'll start off with going over the scoping comments, and then we'll jump into the decision document. I am going to go over the scoping comments summary, which is Attachment 4a, and so, as you recall, at the December meeting, you approved this amendment for scoping, and scoping was held from mid-January into early February.

Within that scoping period, there were two webinars held, one on January 30 and another on February 6. Overall, there were seven comments submitted on the webinars and nine submitted online. All of those comments are contained in the latter half of this summary, if you do want to

read them word-for-word, but I will go over just some of the basic summary statistics of the input that you received on this amendment. Most of the comments were from Florida and North Carolina, and most of the commenters were -- Excuse me for just a second. We just have to restart the webinar. Sorry about that. The webinar was paused, but we should be underway now.

Getting back into the summary of the comments, most of the comments received were from private recreational anglers, and we did have some comments from the for-hire sector, the commercial sector, and representatives from NGOs, or non-governmental organizations. I will briefly go over some of the high-level comments, and they're split up between comments on the permit itself and then comments on the potential education component.

Overall, there were nine comments in favor of developing the permit, six in opposition, and commenters in favor generally were -- They noted that a permit is important to identify the number of anglers that are fishing for snapper grouper species, that a permit should be implemented immediately, to improve recreational data, and there was mention of considering a fee for a permit, and it was noted that a permit could help gather better information on the prevalence and use of different gear types, and so, in addition to helping with some of the catch and effort statistics, you could get a general census on how many anglers are using gear, such as manual reels, electric reels, spearfishing gear, et cetera. Then, also, it was noted that creating a permit is a recommendation, a standing recommendation, of the Snapper Grouper Advisory Panel in the past.

Getting into some of the specifics, regarding a federal versus state permit, there were comments received sort of across-the-board with this. Some were in favor a federal-only permit, some were in favor of a federal permit where states could opt out, if they were to create their own sort of permit, and then there were comments received endorsing a state-only-based permit, with no federal component, and, within that, it was noted that the National Saltwater Angler Registry could provide a framework where states could potentially opt out, if they were to create their own state-based permit, and the comment in favor -- The commenter in favor of the state-only-based permit noted that funds raised by such a permit could be more effectively directed to support fisheries management programs than say a federal permit.

Looking at the species that could be covered, the commenters felt that a permit should cover potentially all snapper grouper species, and so cover the whole complex. However, there were also comments in favor of narrowing down that scope and focusing on just the species that currently fall under the Florida State Reef Fish Angler Designation, looking at vessel-based versus angler-based permits, and several comments were in favor an angler-based permit, and it was noted that this angler-based permit would provide a head count as well as be consistent with the Florida State Reef Fish angler Designation.

Those comments that were opposed to moving forward with Amendment 46 and developing a permit noted that there are other ways to collect data, and a permit is an inappropriate response to poor data. A permit would be an additional tax on anglers, and some commenters did not want to grant more authority to federal fisheries managers and felt that it would be an overreach, and it was noted that a federal permit could marginalize fishing communities and deter anglers from fishing, particularly if a fee is charged, and so that's an overview of the comments received on the permit itself.

I am going to switch gears and go over some of the general comments received on the education component. Overall, there were eight comments in favor and one opposed. Generally speaking, there was support for developing an education component. A commenter expressed support for developing a course on safe handling and release of fish prior to purchasing potentially a state fishing license, and it was also noted that, if a course is developed, it should be quick and simple to complete, and so something that anglers could readily access and take the course. Then it was noted that the Outreach and Communications Advisory Panel should be involved in developing the materials for the education component.

Looking at the timing of implementation, generally, there was support for immediate implementation, rather than a delayed implementation, and it was noted that the -- It was suggested that the council consider starting development of the education component as soon as possible, noting that this education component would take a while to develop, and it could potentially be -- That way, it could be implemented with a potential permit, and it was noted that FWC has had discussions on an education component, and so that may be an opportunity to collaborate or pilot a study on a state basis, focusing on Florida.

The comment in opposition noted that an education component would be an additional tax on anglers, and then there were a few other comments received. Most notably, several commenters were disappointed to hear that reporting was no longer being considered in Amendment 46, and there were also several comments noting frustration with red snapper management, generally speaking. With that, that was sort of a high-level overview, and we're going to get into the details of those two topics, but are there any questions on the summary of public comments or the scoping period?

MS. MCCAWLEY: Questions anybody? All right. I am going to turn it back to you.

MR. HADLEY: All right, and so I'm going to switch over to your decision document, and this is Attachment 4b in the snapper grouper portion of the briefing book, and, just to bring everybody up to speed, as mentioned at the December meeting, this amendment was approved for scoping, and, as a reminder, the scope of the amendment was narrowed down to focus on development of a permit and the development of a potential education component, and so those two items -- Most notably, private recreational reporting was removed from further consideration in the amendment at the December meeting, and so just kind of bringing everyone up-to-speed on where that amendment stood a few months ago.

Really, the objectives for this meeting -- We reviewed the scoping comments, and the idea here is to try to get guidance on the options for further development in the amendment, and so really trying to start to set the bookends of the options that you want to consider in the amendment. This will help the IPT with providing additional input and also developing the amendment document itself.

Looking at the timing, the amendment is to be developed through the rest of the year, with a potential final vote a year from now, at the March 2024 meeting, and so, to stay on schedule with that, what we're really looking to do at this meeting, and then at the June meeting, is to try to come up, there again, with those solid bookends of the options that you want to consider in the amendment, and, that way, we can have a pretty well-put-together amendment document for you to approve for public hearings at the September meeting. Any questions on the timeline or kind of where the amendment stands, as of the previous guidance, before I get into the purpose and need and the actions, or options?

MS. MCCAWLEY: Laurilee.

MS. THOMPSON: While we're talking about public comment, I would like to change my vote on not including surveys with this, because, when you think about it, all we're doing is just adding an additional permit, but it's not going to collect any kind of data along with it, and so it seems kind of pointless, and, once again, the public expressed frustration with our inability to move forward on anything that's going to help.

I know that the reason that we took the survey out was to expedite the process of getting the permit in place, but, basically, all we're going to accomplish is X amount of people bought a permit, and it seems kind of pointless to do that without having the survey tools available, even if it takes us a little bit longer to include the survey function, you know, with the permit, and I think that would be the best -- In my opinion, that would be the best way to go. I don't think that just issuing a permit is going to accomplish anything, other than verifying that so many people bought a permit, and so I would like to revisit why we took the reporting component out of this amendment. Thank you.

MS. MCCAWLEY: I thought I saw another hand up over here. Go ahead, Chester.

MR. BREWER: I was just going to respond to Laurilee's question, and, Laurilee, it does provide some pretty valuable information, and that information is how many people are actually going offshore to fish, okay, because, right now, we don't have a clue what that universe is, and we've said it over and over again, and we need to get a better handle on that universe.

If I remember the discussions correctly, while the reporting requirement is something that I think is down the -- I think we were talking about it being down the road, and we wanted to get this in place as quickly as possible, because it might be something that would help, from the standpoint of knowing and getting a better handle on discards, so that we know how many people are actually out there fishing for whatever and, thereby, get better information on a number of regulatory discards, and that was the reason that it was taken out, so that we could get this in place quicker, with then the idea that we would come back and revisit it, from the standpoint of a reporting, at a later time.

MS. MCCAWLEY: I agree with what Chester said, and that's my recollection as well, that the permit alone would still help, because it helps get that universe and narrow down the universe. Laurilee.

MS. THOMPSON: But, I mean, part of our responsibility as council members is to represent the public, and the public clearly thinks that a reporting component is going to be included in this permit, and, also, your private recreational reporting working group -- There are multiple references to a permit giving us the ability to collect additional information.

You know, I think that we're letting the public, and the fishermen, down if we don't include the reporting component with this permit, because we know they're going out there, and we know that they're discarding a lot of fish, but we don't know what they're discarding, and all the permit is going to tell us is, yes, this person is going fishing, and they probably are going to do discards, and I think that -- It's going to take a long time to get this through, and then we're going to turn around

and spend another couple of years, after we pass this, trying to now do something, another amendment, to get the reporting in, and, in the meantime, the public is just going to get more and more frustrated, and it's kind of like Regulatory Amendment 35. It's a feel-good thing, but it's not really going to give us what we need, and that is reporting on what fish were caught and what was discarded, and this is not going to get us there, and I just think we're wasting our time, and that's my opinion.

MS. MCCAWLEY: Thanks, Laurilee. Trish.

MS. MURPHEY: You all can correct me if I'm wrong on this, and so, yes, we decided not to include reporting, but this would be a first step to get our universe, but does this -- It does not preclude surveys of that universe, does it?

MR. HADLEY: No, it would not, but, if you wanted to specify that that survey would take place, then that's something that may need to be incorporated, if it involves reporting of catch. With that said, the technical AP, and so the Permitting and Reporting Advisory Panel, noted that the permit could help identify the universe, but, within that, it could be integrated into existing programs, such as MRIP, or the Florida state sampling that's being done that would help with that sampling framework, and, ideally, it would result in improved precision of the existing recreational estimates, and so, with that, I mean, that technically is a survey, and so a survey is a broad -- The point being a survey is a broad topic, but it could help with existing sampling and survey work that's currently underway, just tightening up the sampling frame of that.

MS. MURPHEY: So that would tighten up our sampling universe even, and so I think, in that -- You know, I think this is a good thing, to go ahead and move forward with the permit, even if we have to put, you know, reporting down the road, but it sounds like it can help with the precision now.

MS. MCCAWLEY: Other thoughts? Spud.

MR. WOODWARD: John pretty much covered what I was going to say, is that you need to think of a permit as a means to an end, the end being better, accurate, and more precise and timely data, and what we've asked our technical advisors to do is to guide us on how best to use a permitting process as a means to that end and to -- You know, I have used the phrase "reverse engineer", and, in other words, we know what we need to make better decisions, and how do we reverse engineer the data collection process to generate the best that it can, and so I think the issue was more about mandatory reporting for private recreational, either at the vessel level or individual level, and that's probably premature, I mean, and it may be unrealistic, you know, ultimately, in the long run, to think that you can require mandatory, you know, surveys of millions, potentially millions, of people, but all that is to be worked out. I think we need to make it clear that there's always going to be some sort of data collection process for the private recreational sector, but it's just how do we do it better than what we're doing now.

MS. MCCAWLEY: Dewey.

MR. HEMILRIGHT: I agree somewhat with Spud's comments of how you all had technical folks look at this, and, you know, why don't you take -- You're looking at something to make it better, and so why don't you take species that have got 50 percent, or over, PSEs and make it mandatory

reporting there, to start out something like that, because, even if you were to start a system, or a program, out, it's going to take years, as we've experienced with the under 2,500 SEFHIER of compliance.

You've had something in for two years and two months, or three months, and you only have, in December, 37 percent compliance, and so you know, even if you say three or four years, it's going to take seven or five or six years, and I spent about an hour-and-a-half on the phone, a few weeks ago, with VESL Bluefin Data Reporting, because I wanted to hear what they supply to states, to dealers, other folks, and if they had stuff in process that could do the job.

They assured me, and not that I'm -- I'm not advocating for them, but the job is there, and the data is -- The stuff is there already, because they've already built the system. It's having the want to use the system, and so that's not the issue there. Now, phasing it up, I didn't ask about a million, or two million, anglers, but you might start with your deepwater species that are in crucial need, cooccurring, over 50 percent PSEs, but the data -- The systems are there in place, because I wanted to make sure that I knew the systems were in place, or possible, but it's the will of doing it that is lacking in a timely fashion.

I just think that it's going to take years, given just the compliance assistance and stuff like that, but you've got to start somewhere, and I think that, you know, the crucialness of this -- There's going to be a reckoning day in the near future, years down the road, where we're going to have some real problems with our species, and it's just beginning, because there is too much effort, and you don't know how much effort there is, and there ain't but so much of a pie, and that pie ain't going to be divvied up so many ways, and so I think you need to really look to your technical advisors and how to speed something up of achievement, and look at what's out there to be used. Somehow, you have to do something, and not in a seven-year timeframe. Thank you.

MS. MCCAWLEY: Thank you. Andy.

MR. STRELCHECK: I think a lot of the struggle we're having right now is I think a lot of us have different thoughts, in terms of what the purpose and need of this action is, and so I think we're going to be getting to the purpose and need here shortly, but I do want to say, from the get-go, that, you know, requiring a permit for the sake of requiring a permit is not the path I want to go down, right, and defining the universe of anglers -- We need to actually understand what do we mean by that. Are we really trying to improve our effort estimates? Is that supposed to be integrated with the MRIP program? Are we trying to figure out how to better survey and sample our anglers?

There's a ton of questions here, with regard to kind of the standing-up of a program like this, and my frustration, with the last council meeting, is I felt like we took some broader ideas and kind of narrowed the scope of this action very quickly, and now we're really kind of limiting ourselves, in terms of the discussion, in terms of what we think might be done quickly, or more quickly, but should we be thinking about this more holistically and trying to -- Even if it's not required, putting thought into the building blocks for how this could be used, how a permit could be set up, what the permit requirements might be in the future that could be required, and it doesn't mean that they have to be implemented, but, you know, to me, I think all of that needs to go into our thought process and not just rush into implementing a permit for the sake of having a permit.

MS. MCCAWLEY: Thanks, Andy. With that, we put the draft purpose and need, which Andy is right, is more limiting, and we limited it down the last time, and so, as you're making comments, please look at the purpose and need statement. If we need to, I guess, back up and broaden it, then that's the conversation we need to have here.

MR. CARMICHAEL: Andy makes a good point about not doing a permit for a permit, and I think, when we look back at the council working group that worked on this, and now the technical advisory panel, they made it clear that that was really not the interest. The idea of the permit is to improve data collection, and, throughout those groups, and particularly with the technical group, with representation from MRIP, and looking back at things like the rare-event species, the issues that we know that came to our SSC ten years ago, and NMFS had a working group working on this, and one of the things that was provided to our SSC, way back when, as a way of improving estimates, was defining the universe of snapper anglers so that they could --

So MRIP could do targeted estimation on that group and, you know, tease out all the other effort that's going on, and so there was a lot of discussion by this from the MRIP experts, you know, their staff at the working group, and I think it led us, at least on eth working group, to believe that, if we identify the universe, there's a lot that MRIP can begin to do to improve those estimates without going into fully-mandatory reporting for everything.

I feel like, at the last meeting, one of the concerns of mandatory reporting was crossed, and everything that would be involved, because nobody has any idea how many anglers would really want to go out and get this permit on a coastwide basis. Florida, thankfully, has a pretty good idea of the people that would do this, but, you know, that was a concern, and so, when the working group reviewed things after that meeting, the idea was, well, okay, if there is this concern, we think that MRIP can do a lot with the universe, and it's not just a permit for a permit, but it's a permit to identify a targeted group of people who fish different than the guy fishing, you know, four miles off the beach for mackerel or forty miles off the beach and dragging in blue water, that we could identify those, and MRIP has made it clear that they can sample those people, and they can come up with targeted estimates. They have promised this for a number of years, and so we felt like we could do this and see how that goes.

I think, overall, the HMS model that is out there of how they handle reporting is a pretty good way to look at it. You know, if they can't get very far in MRIP, in terms of just using that universe, well, the next step, to me, we'll do something like the LPS, where you target sample those group of people and do a dedicated survey on those group of people. If you have stocks that still come up short after that, then you look at those as candidates for directed reporting, and, again, HMS does that for some species, but not for all species, and another thing they bring up, which Mel pointed out, when he talked about this before, was the education component.

That gives you another opportunity, and, if you have to have a permit, you have a way to say that I need you to watch this video on descending devices, and all that is easy to do, but we don't have any way to really make people do it, and so I think there's a lot more that's in this permit, and it's been discussed, and it's part of the record and the documentation, than just a permit for a permit.

We originally talked about doing this with having a permit and reporting and have it all in one package, and that became complicated and time-consuming and cause for an issue, and so the working group has fallen back on, well, we feel confident that we can get a lot through MRIP by

identifying the universe, and that's really where we are. I've never seen this as like a permit for a permit, at least where it stands now.

MS. MCCAWLEY: Andy.

MR. STRELCHECK: To that point, I know we have MRIP staff that serve on the technical working group, right, but, if that's our intent, we need to make that very clear, and we need to have them at the table, working side-by-side, to make sure that we're designing this in a way that it best integrates with the MRIP program, if that's our goal. If our goal is to set up something independent of the MRIP program, we need to be clear about that as well, right, and so I agree, and I think this really should come along with data collection, or at least, you know -- I don't know, Monica, if you agree with this, but, you know, the building blocks for getting to data collection, in potentially different ways, even if we don't immediately implement it -- You know, we've spent the time kind of working through, conceptually, how this could be more broadly implemented and then, when the time is right, be able to implement those, you know, pieces at a later date.

MS. MCCAWLEY: Tom and then Tim.

MR. ROLLER: I have heard from a couple of our Snapper Grouper AP members on this who were pretty adamant that their discussion and support from this was that the permit had to be part of a better data collection or reporting thing, and is that the recollection? Can anybody touch on that?

MR. HADLEY: If I recall correctly, some of the Snapper Grouper AP members definitely felt that way. They felt like the two should be combined, I guess, go hand-in-hand, so to speak.

MS. MCCAWLEY: Tim.

MR. GRINER: Thank you. Andy, you touched on something there that, you know, I thought was very important to go down this path, is to have some kind of parallel, or some kind of alternative, to MRIP for data collection, and I didn't really see this as just could MRIP go survey more people, and I thought -- In my mind, I thought the beauty of it, or the value in it, is to have some other path other than MRIP to gather this data, and do you not see, or do you think that's going to be prohibitive, that that's not really going to ever -- Or we couldn't go in that direction?

MS. MCCAWLEY: I was trying to figure out who that question was directed to. Andy.

MR. STRELCHECK: Sure. I'll take it. I mean, it really depends on, you know, what you're trying to accomplish here, and, you know, the states have come up with, obviously, things that are independently of MRIP, but have ultimately been certified by MRIP, right, and so it's kind of under the broader umbrella of recreational data collection, and so certainly I think there's analogous avenues that have already been pursued, and this would be, you know, kind of similar to more of like what we were doing with the logbook program, right, trying to improve data collection for especially the private recreational sector, but I think that does dramatically complicate this action, and we need to give a lot of thought as to how that would be implemented, and there's the obvious costs that come along with that.

MS. MCCAWLEY: Carolyn and then Spud.

DR. BELCHER: So, I'm directing this to Monica, just because I remember, back a few meetings, we had the conversations about cit-sci programs and the Paperwork Reduction Act and us coming at it with a new survey, and don't we have to be concerned about that, because it's a different -- We're coming at it with the potential of hitting people again with another additional survey, which puts an undue burden and all of that, and is that part of what we need to consider in this too?

MS. SMIT-BRUNELLO: I think, if you're going to ask the public questions, then, yes, it implicates the Paperwork Reduction Act and then those sorts of things, but, frequently -- Not frequently, but you often have amendments in which it adds to the public burden under the terms of the Paperwork Reduction Act, and then those are analyzed and assessed during the development, hopefully during the development, of the amendment, and that's followed-up in the rulemaking, to get permission to do the kinds of things that you want.

DR. BELCHER: So, just kind of where we've been talking about whether it be a stand-alone or an add-on, it seems like, to me then, the better approach would be to find a way to get the permit universe identified and piggyback into something that MRIP may or may not have, because they've already gone through that. If the questions are already being asked, and it's an issue of just getting a better marriage of the effort to the catch, it seems like that's where we would get the most amount of easy streamline, as opposed to having to go through an get an evaluation done on a brand-new survey. That's just my opinion.

MS. MCCAWLEY: It's like the State Reef Fish Survey in Florida all over again. I'm telling you. We've been down this path. Spud and then Chester.

MR. WOODWARD: To get back to what you were talking about, Tim, we stood up this advisory panel, I think, for them to give us an objective idea of how best to get us to what we need, and it may -- John alluded to the rare-event working group, and it may be that the MRIP methodology can't be improved with the simple addition of a sampling frame, that you may have to develop specialized surveys, or other ways of generating reliable catch and effort estimates, but the danger of that is if you start creating all these one-offs.

You know, you're then trying to synthesize those back together, and it all -- I mean, there's pros and cons to all of it, but this is going to be an evolving process, and I think the question is how do you start the process of improvement in the best way, and is that -- If a permit gives you a smaller sample frame, so that you can use existing methodologies to sample, then it gives you at least something that you can react to, because, right now, if you remember, you've got the FES generates effort, a big universe of effort, and the APAIS does a dockside survey, and those two things have to be merged together to produce an outcome, and, right now, that's highly efficient for rare-event species, and so how do we make that better?

The advisory panel's job is going to be to advise us on what's the best tools for making it better, and those tools are going to have to be implemented, and then you see what the results are, and it will be an evolving process, and it may be that MRIP is not the best model for generating some of these things.

MS. MCCAWLEY: Thanks, Spud. Chester.

MR. BREWER: What Spud said.

MS. MCCAWLEY: Okay, and so how can we change, or do we want to change, this purpose and need statement, and so the need statement talks about improving education on best fishing practices and the quality of harvest and discard information, and so can you guys look at the purpose and need statement and think about how this would need to be modified? Laurilee.

MS. THOMPSON: Well, if I was a member of the public, and I read this draft purpose, I would think that this thing is going to collect data. I mean, it does talk about identifying, better identifying, the universe of private anglers, but the very first phrase is the purpose is to facilitate the collection and analysis of recreational harvest and discard data, and that's not what we're going to be doing. If we could add another action, maybe, that says, once the permit is in place, a small group of people will be selected to do an online survey, and not have a paper thing mailed to them, but they would participate in an online survey to collect additional data, or something, and I think we need something in this.

We've been talking about this since 2018. For five years, we've been kicking this can down the road, and we have an opportunity now to do something meaningful, and I think that, if we're going to talk about collecting and analyzing recreational harvest and discard data, through this amendment, it needs to do that.

MS. MCCAWLEY: Thanks, Laurilee. Trish.

MS. MURPHEY: Okay. I'm kind of thinking off the fly here, and so bear with me, and other folks can jump in. I was looking at the purpose statement, and so I was wondering, if we kind of reworded it that the purpose is to -- I am not sure which verb, implement or develop, and probably develop. The purpose is to develop a recreational permitting system that will better identify the universe of private anglers or vessels to facilitate the collection -- Maybe to facilitate the education, collection, and analysis of recreational harvesters, and I don't know if anybody can jump in and make that better, but I was just trying to kind of get at the first step that Spud was talking about, as far as reverse engineer, and the first step is to know our universe, and so, anyway, that was kind of a start, but, I don't know, and I will end with that, and I don't know if somebody can make that better, but I was just kind of trying to flip it a little bit.

MS. MCCAWLEY: John Hadley is trying to get that on the board there. Trish, maybe you can help him, and then we can kind of react to that. All right. While that's going up there, Spud.

MR. WOODWARD: Maybe it would be useful for us to go back to the vision statement of this amendment, because I think that really captures what we're trying to do here, and some of that language was carried over into the purpose and need, but I think that it's good for us to look at that, and maybe help us have context for what we're discussing here, in terms of the specifics of the purpose and need statement.

MS. MCCAWLEY: Thanks, Spud. There it is. There's the vision statement on the screen. Andy.

MR. STRELCHECK: Based on the suggested change by Trish, what I was going to comment on is that if -- I am thinking of this in terms of MRIP, and so, if we're better identifying the universe of anglers, to then use that to better estimate harvest and discards, really what we're doing is not

better estimating harvest and discards, because that's done with the dockside survey, but we're better estimating effort that is then used to expand those catch estimates from the dockside survey, right, but I'm thinking of it narrowly right now, in terms of how it improves or helps MRIP, and I don't know if, based on earlier comments, that it might be broader than that, and so knowing the universe helps us to better define the universe we're sampling to quantify and expand effort estimates.

MS. MCCAWLEY: Is there a way that, in that purpose statement, you could get "effort estimates" in there, if you look at that, Andy? While you're looking at that, someone over here had their hand up. Laurilee.

MS. THOMPSON: See how this sounds. The purpose is to better identify the universe of private anglers or vessels targeting South Atlantic snapper grouper species, in order to facilitate the collection and analysis of recreational harvest and discard data through a recreational permitting system that could also work to promote best recreational fishing practices, through education.

MR. CARMICHAEL: In December, there was a report from the working group that was presented, and they addressed how to integrate this data into the estimation from MRIP and the State Reef Fish Survey. It was pretty detailed, but the discussion mentions both effort and catch, and my understanding is that, once you've got this permit, and they can identify this person, they can tag that when they go down to the dock and intercept someone, and so they can separate the catch from the guy who trolled for dolphin from the guy who had a snapper grouper permit and snapper grouper fished, and they can at least identify that strata throughout the entire program.

It was all discussed in there, you know, and that was the question that they asked, and so the issue of like why are you just looking at permitting now was addressed there in December, in the response to that, but it was also a permit that still did the first thing, which was a permit that would allow improvements in the estimation of recreational harvests and discards, and so I would hope that that would stay in there, because that gets to the whole reason you were doing a permitting, and you may want to look back at the report from that AP, from December, and see that, because, based on that, the council seemed to support the contention of the AP that is permit could lead to better estimates, and that's when you discussed, well, then let's just proceed with the permit now, and let's see how that works out, and we can bring all this other stuff in as it goes, as Andy mentioned, and, as I said, it seems to me how the HMS program evolved.

MS. MCCAWLEY: Trish and then Kerry and then Tim.

MS. MURPHEY: Okay. I came up with this before you spoke, and so I'm not sure if this will -- How about will enhance MRIP's ability to collect effort -- Maybe trying to add, to you, John, maybe, but to enhance MRIP's ability to collect effort data -- Effort and catch, because I was actually thinking effort, harvest, and discard, but effort, harvest, and discard or catch? Okay. How is that?

MS. MCCAWLEY: All right I have Kerry, Andy, and then Laurilee.

MS. MARHEFKA: I have no problem with that change in wording. John, you really like struck a chord with me, and I say that as someone who, to speak to Tom's point and to Laurilee's point, I was on the advisory panel for a long time when we discussed this, and you're absolutely right.

If the advisory panel, and myself included, could be, you know, the creator of all things, there would be, you know, 100 percent reporting. There would be all the things, but I have also sat around here long enough to know that, you know, let's not sacrifice the good for the sake of the perfect.

When we first implemented the commercial permit, it was just a permit, and we didn't do the logbook reporting or anything else that came along until later, and I did listen in to some of the technical workgroups. If you look back on what they said, I trust these people implicitly, and, if they think this is an improvement, then I feel like let's listen to them, and that's why we have them, and this is an improvement, and, later down the road, if we need to be more prescriptive, and we need to break off deepwater species and report for them, I'm comfortable with letting it evolve, but let's not get bogged-down here so that we can create this perfect system that I don't think we're capable of doing right now.

MS. MCCAWLEY: Thanks, Kerry. Andy.

MR. STRELCHECK: I think I would change "will" to "would", and then Monica just asked me if we should remove "MRIP", and I'm thinking, for instance, Jessica, with the State Reef Fish Survey, right, and so this would be duplicative with the State Reef Fish Survey, at least some of the things you've implemented, and so I'm wondering if we just generalize that, for purposes of the purpose and need. I think that's good.

MS. MCCAWLEY: Thanks for that. Laurilee and then Tom and then Spud.

MS. THOMPSON: John, I just emailed you what I said, and I object to tying this thing to any one particular program, to tying it to the reef survey, to tying it to MRIP, and I think -- I agree with Andy that it needs to be more general, because, you know, once we pass these amendments, they become law, and then we've got to stick to what it says in the amendment, and I think that -- You know, I agree that we want to identify the universe of private anglers and then use that identification of the universe in order to facilitate collection of more data, but I don't think that we have to identify the particular program in this amendment, because I think we're just tying our hands. Thank you.

MS. MCCAWLEY: Tom.

MR. ROLLER: I think -- I've been kind of trying to reword my comment here, because what Kerry said really resonated with me, the idea of we should not be sacrificing the good to try to find the perfect, which we may not be in a place to do today, and that really means something, and, when I look at this, I'm much more comfortable with the direction we're going in the purpose and need, but I want to offer, for discussion, should we say, in there, that maybe the goal is to work towards reporting, eventually, even if we're not ready to do it now, and should that not be at least stated, or at least discussed, here?

MS. MCCAWLEY: All right. More hands going up. Spud and then Andy and then Mel.

MR. WOODWARD: This already got covered, but, yes, I don't think we should link this to any specific data collection program, and I guess I will be a little less polite than Andy, but MRIP, to

a lot of people, is not a good word, and, you know, you don't need to poison something because people perceive something as being woefully inadequate, and so I would certainly not do that.

You know, we're -- Again, we need to remember what's the end result here, and it's better catch and effort data from private recreational fishermen, and, you know, we're suffering from what we suffer from a lot of times, and that's wordsmithing by committee is a dangerous enterprise, and, oftentimes, it just ties up a lot of time, and we come back to where we started, but I think this can be very simply stated, without us bogging ourselves down in a lot of extraneous words here.

MS. MCCAWLEY: Andy and then Mel.

MR. STRELCHECK: I think we're honing-in on a better purpose and need, which is good, but I guess I'm thinking what we're going to go through next, in terms of actions and alternatives, and so we've had this technical working group that is meeting, and are they essentially done meeting, unless we choose to reconvene them?

MR. HADLEY: Yes, and so they're meeting as needed, and so they've had their first two meetings and provided a series of recommendations. If you have targeted questions for them, or there are topics you would like for them to discuss, we can certainly convene them as needed.

MR. STRELCHECK: So I will speak for myself, and I think many of you would agree, that you guys are not the experts, when it comes to data collection, and some of you are better experts than others, when it comes to data collection, but I feel like we need a lot of help from the technical working group to even develop our actions and alternatives within the amendment, and, you know, I'm trying to think of a process that we could use that would help us, before getting into, you know, lengthy discussions within the council meeting, and the technical working group, meeting with council members, kind of coming up with those actions and alternatives, if they have a clear purpose and need from us, seems to be a desirable approach that could maybe get us to the place where we want to go a lot faster, because they're going to be able to tell us how to shape those actions and alternatives in a way that's going to be most meaningful for data collection, and so I'm just throwing that out there as a broader suggestion of maybe how we want to approach this, going forward.

MS. MCCAWLEY: Mel.

MR. BELL: I was -- I think the wording that Andy has kind of helped with there, and I was happy with that. I would avoid being specific, at this point, and I think "enhance the ability to collect recreational effort and catch data", and that could include existing program, like Florida reef or MRIP, or it could include new programs, and we're not saying. Again, in wordsmithing, you could say existing or new, but you don't need to say that, perhaps, and so I was kind of happy with that wording.

I would agree with Andy that -- I mean, I think, if we start getting down into the weeds on some of the, you know, options and actions and things there, we may be just kind of confusing things now, before we get some additional technical advice to maybe help us with that, but I think, in terms of the purpose that I was looking at there, I was happy with just "enhance the ability to collect recreational effort and catch data", and I feel we could go with that.

MS. MCCAWLEY: All right. What's the pleasure of the committee here? Are we okay for now with the purpose and need, or are we suggesting that this technical committee needs to come back together? Do we just need to review what the technical committee came up with that we looked at in December? What is the best path forward here? Andy.

MR. STRELCHECK: I think we're going to probably still want to massage the purpose and need as we move this action forward, but I'm more comfortable with how it's worded now than I was earlier on. I would suggest, in the need section, that we change "harvest and discard" to "effort and catch".

MS. MCCAWLEY: All right. Is this good enough for now? If we're saying, yes, it's good enough for now, then we would be diving into the options for potential action, and so we can always come back to this, whether it's at this meeting or another meeting, and are we good to go to move to these options for actions? I am looking around the table here. Okay. Back to John Hadley.

MR. HADLEY: All right. Thank you. We will jump into the first option, and this one focuses on essentially creating the permit itself. As a reminder, as far as the options that were sent out for scoping, you wanted to send out an option to create a vessel-based permit, or potentially an angler-based permit, and, within that angler-based, there were some sort of sub-options, if you will, that look at potentially all anglers fishing from a private vessel would need to get that angler-based permit, at least one angler onboard a vessel would need to get the permit, or a situation where all anglers, regardless of what platform they were fishing from, would need to get the permit, and so that would essentially cover anglers onboard vessels as well as say bridges or fishing piers or the shore.

Then the other major topic within that was sent out for scoping was which species -- Specifying which species would be covered by the permit, and so, within that, you wanted to look at all snapper grouper species, and so all species within the complex, and then potentially look at narrowing it down, either to assessed species within the complex or matching the species that currently fall under Florida's State Reef Fish Angler Designation.

The intent here is not really to get into the -- Unless you want to, but the intent here really is to just start to get an idea of what this action may end up looking like, and so, generally speaking, there is five different options, and so Options 2 through -- The major options, and so 2 through 5, cover whether it's a vessel permit or an angler permit, and so Option 2 would establish a vessel permit, and Option 3 looks at an angler-based permit for all anglers fishing onboard a vessel, and Option 4 would specify a permit, or a situation, where at least one angler onboard a vessel would need a permit, and Option 5 is, again, that more all-encompassing, where all snapper grouper anglers would need to have an angler permit, regardless of where the fishing takes place.

Within this, there are three sub-options under each category, and they cover -- These sub-options kind of drill-down on what species will be covered, and so, there again, either all species within the complex, all assessed species within the complex, or matching the species currently covered by the Florida State Reef Fish Angler Designation.

Within this, within the document, there's a table of all of the species that would be covered, potentially, under these various options and sub-options, and so Table 1 here has all of your species within the snapper grouper complex, and then there's sort of tick marks off to the side that show

whether or not the species is open to harvest and has a peer-reviewed assessment, and then also whether that species falls under the Florida Reef Fish Angler Designation, and so you can see the different species there, and I won't go through all of them, but, if you want to look through Table 1, that's potentially all of your species that could fall under the permit.

I won't go over the AP recommendations in too much detail, but I did pull a few excerpts from the technical AP's previous reports, and, of note, they did have a recommendation to focus on a vessel permit, rather than individual permit, to help reduce the universe of how many permits would need to be issued, and then they also had a subsequent discussion on some of the benefits and uses of that permit and how it may be integrated into existing programs, such as MRIP or the Florida state reef fish sampling.

I won't go over scoping comments, and we can certainly come back to them, but I went over those at the beginning, and they're there for reference, if you do want to take a look at them again, and the IPT did get a chance to meet and go over the initial range of options that were sent out for scoping, and just a few items to bring up on that. Regarding the option that would cover essentially all anglers participating in the snapper grouper fishery, regardless of where the fishing takes place, and so specifically including shore and manmade modes, as well as private vessels, the feedback from the IPT was this state that -- The council and NMFS does have the authority to cover fisheries taking place for federally-managed species in state waters, but, if you did want to go this route, you certainly would need to build a very strong record and good rationale for including this state-waters-based fishing activity.

Then, regarding the sub-species, and so the sub-options, it was noted that a recreational permit that does not encompass all species may be difficult to enforce, and, as far as the option to look at the assessed species, it was noted that that could be a moving target, and so, essentially, we would need to specify what happens as a new species is assessed, and so an example is the scamp and yellowmouth grouper assessment coming up, and that would be a species that would presumably be added. If there are any complications with an assessment, where an assessment gets rejected indefinitely, is that species still -- Does that species still fall under the permit?

If there is a new harvest prohibition on a species, and, for example, it was discussed briefly in Regulatory Amendment 35, the option to close red snapper harvest, and, if that sort of situation were to arise, would the species still be listed under the permit, and so there was sort of that idea of that moving target for the assessed species option, and then, regarding the Florida State Reef Fish Angler Designation, it was noted that this list may work well for the Gulf of Mexico, but it does leave out some noteworthy species for the South Atlantic, including the deepwater species, and so particularly snowy grouper, blueline tilefish, and golden tilefish, and then also black sea bass, and so those are just some of the IPT comments.

With that, I will turn it over, and, again, we're looking for guidance on do you feel comfortable with sort of the bookends of the options that you've put together, there again looking at a vessel-based permit and an angler-based permit, and then the options in regard to the species that may be covered, and so all snapper grouper species, the assessed species, and then the species that fall under the Florida State Reef Fish Angler Designation. I will turn it over to the committee.

MS. MCCAWLEY: All right. Thank you, John. All right. Kerry and then Laurilee and then Tom.

MS. MARHEFKA: Thank you, and, recognizing that we're not here to narrow it down and get specific on preferreds or anything like that, I would like to have a little bit of discussion about sort of the all snapper grouper species versus the other two options, in that, if we are -- "Divorcing" isn't the right word, but, if we are looking at this as an identification of the universe platform, rather than a reporting platform, it seems, to me, that there's not much benefit in narrowing the scope. It seems, to me, the broader the scope -- If it's just getting a permit because you catch them, then that allows it to be broad enough, and I would -- I am asking, because I would like you, as my colleagues, to tell me if I'm not thinking about this in the right way, because it doesn't make a lot of sense to narrow it down for a permit, to me, but maybe I'm not thinking clearly.

MS. MCCAWLEY: Okay. Laurilee and then Tom and then Judy.

MS. THOMPSON: I agree with Kerry, and I think that we're putting -- We could spend all afternoon trying to figure out what fish we want to include, and, at this point in time, I like Option 5, to require a permit for every angler participating in the snapper grouper fishery, regardless of where the fishery takes place. I think that's simple enough. I mean, if we were going to get into discussion of fish, I think including all of our species is way over the top, but, if we were going to include only assessed species, there is some major fish missing out of that, and so we could do the assessed plus the addition of these six fish, but I think that just requiring the permit, at this point in time, is adequate.

MS. MCCAWLEY: Okay. Tom and then Judy.

MR. ROLLER: I completely agree with Kerry, and I think she is, for the record, thinking completely straight. I mean, if we're having this permit, it's my opinion that we should include all the species here that are listed, right, and not just assessed species, and not just those on the Florida reef fish survey.

You know, what's interesting is this is -- This amendment has really spurred a lot of conversation, and I've probably heard from more people on this one than any of the other ones, including red snapper. Specifically, the debate is angler or vessel-based, and I have heard some really good arguments on both sides, but what I keep coming back to, personally, is, when I think about the for-hire surveys I've been involved in, one of the big criticisms is, well, we've got your vessel permitted, but we still really don't know who is on your vessel, right, and are they licensed, because we have blanket license in our state, and what state are they from, and so I always keep coming back to the fact that an angler-based permit would probably gather us the most data.

I think one comment was do it all the way right, and not half right, and so I would like to hear some more conversation on that, just simply because I think, if we do angler-based, that's what we're going to get the most amount of data, but, also, at the same time, this is probably one of the subjects that we do need a lot of technical expertise on.

MS. MCCAWLEY: Okay. Judy and then Gary.

MS. HELMEY: I agree with Tom that it should be an angler-based permit, because we would be able to get more data, and I have a question. This permit, we have this permit and then we have

the state permit, or the saltwater permit, and is this a federal permit? This will be a federal permit, and you still have to have your regular state permit to fish?

MS. MCCAWLEY: That's right.

MS. HELMEY: Okay.

MS. MCCAWLEY: Gary.

MR. BORLAND: I agree with parts of it and I disagree with parts. I think that it should be all species, and I do believe, from my perspective, that a vessel permit would be more effective, and, you know, I challenge that, if a fisherman goes with a buddy out fishing tomorrow, to have to purchase a permit, and I think the reporting could take care of understanding the universe, if it's a vessel permit, and I steer towards vessel and all species.

MS. MCCAWLEY: All right. Next up is Tim.

MR. GRINER: Thank you. Maybe a point of clarification, for me, is, when MRIP does its survey, are they asking questions like were you on a vessel, and how many people were with you, or are they just surveying an individual, as if they were an individual, regardless of whether they were on a vessel with five other people, because, to me, it seems like we're trying to -- We're trying to identify individuals that may or may not help collect data down the road, either through MRIP or something else, but it seems, to me, the way to go would be an individual, but I was curious as to how MRIP handles that, when they collect data.

DR. COLLIER: Kathy, you're more of an expert on this than I am, as far as MRIP and the sampling, and so, I speak wrong, throw something at me. MRIP can do a couple of different ways on the survey. What they generally do is they try to do an individual-based survey and the catch associated with that individual. Sometimes the catch is aggregated, and they have a hard time doing it, and so all the catch might be attributed to one angler on the vessel, but they still count the number of anglers that were on the vessel, and so it can vary, and it's just -- Sometimes it depends on how quickly the fisherman wants to get out and not -- They can't always get a full survey.

MS. MCCAWLEY: Tim, did you have another question, a follow-up question? I can come back to you.

MR. GRINER: Yes.

MS. MCCAWLEY: Okay. Andy, Dewey, Gary, and then we'll go back to Tim.

MR. STRELCHECK: I just wanted to go back to my earlier comment, and I feel like the discussion around the table is kind of honing-in on our preferreds, right, rather than deciding is this is a reasonable range of alternatives, and is there anything that either is missing or we want to take off the table, and, to be honest with you, I don't know if it's better to have a vessel permit or an individual permit, and, you know, I do agree with a lot of the comments about the species to be included, but I have other thoughts, based on sitting across the table from Dewey for all these years, right, and there's a universe of fishermen that deep drop that is very different than a universe of fishermen that just go snapper grouper fishing, right, and so, if we require a snapper grouper

permit, that's great, but, if the real issue is we want better effort estimates for deepwater species, then maybe we need to be looking at a deepwater species permit as well, right, and so those are kind of the nuances of this that I think we really need to think through, because it's not a one-size-fits-all, but I would discourage us from trying to kind of focus in on what's our preferred and really kind of focus in on if there's anything missing or we really are strongly thinking should be eliminated.

MS. MCCAWLEY: Okay. A couple of things, and I see more hands going up, and so what we're trying to do here, and so back to what Andy is suggesting, and so we're trying to figure out do we have everything we need to craft the actions here in this document, just like Andy is saying, and is there something missing, or is the full range listed here, and so, for example, what you see on the board here is the permit type, vessel-based or angler-based, and it seems like we're wanting to keep both of those in there, and then species covered by the permit, and it seems like we have two or three options that are on there that people seem to be good with.

Those are the types of things we're going to look at, and then, in addition, I'm sure that John Hadley can scroll down, and we'll make sure that we're getting all these questions answered, and so it's something to keep in mind as you're providing your comments, and is there something missing here, or do we need to narrow this down even more, because we're trying to start crafting the actions and the alternatives underneath the actions, and so I'm going to go back to the list here. All right. Dewey, Gary, Tim, Carolyn, Laurilee, Trish, and Tom.

MR. HEMILRIGHT: Given that we had a revision of what we're looking at doing here, I agree that you have the necessary permit types and species covered here, and I am for a vessel-based, because I think you're going to have a lot of futility in tracking a vessel, and that captain of that ship is going to know what anglers are catching, and, if you have a lot of -- If you have six people onboard the vessel, that intercept person is going to be there a long time, when they could be --

I just think it's better utility of covering the vessel, and you can get, also, a lot of extra information, like the size of the vessel, and there might be something with modeling in the future that, if the weather blows over twenty-five knots, you know this vessel, that is sixteen-foot long, didn't go forty miles offshore, and so there might be ways of modeling and looking at stuff in the future, given that we're all modeling today, and everything is about modeling, and so I think you've got the necessary things here.

One thing I would add is that, in the future, in looking at this amendment, that you would have somebody from the technical committee online, and maybe also an MRIP person online, to help with any questions, or just to be a follow-up to go back to that technical group, and I think that would be a really good thing, because we're talking about a lot of things here that we have ideas of that the technical committee has that expertise that I think could bring to fruition a little bit better than just some of our opinions that we throw out there. Thank you.

MS. MCCAWLEY: Sounds good. Thanks, Dewey. Gary.

MR. BORLAND: I think we have everything covered. I think that, you know, scenario-wise, as a recreational fisherman, you know, you decide on a Friday afternoon to go fishing with your buddies, and you're going to go trolling for dolphin, but then the trip switches, right, and you get offshore and there's no conditions, and you want to go bottom fishing, and so I think the only way

to track it and be fair and equitable across would be a vessel permit that then reports back to, obviously, the amount of effort that was put in that boat that afternoon, or that day, or whatever.

MS. MCCAWLEY: All right. Thanks, Gary. Tim.

MR. GRINER: I am good. Thank you.

MS. MCCAWLEY: Carolyn.

DR. BELCHER: Just a clarifying question. Why would species be a sub-option to the permit type, because I'm just thinking like different choices, and so, if I have a vessel, my species potentially could be different than if it was an angler, and I'm just thinking, and, to me, they seem like they would be separate options, and so let's consider species, and which ones are in there, and what are the alternatives, and then permit type, to me, is kind of an independent thing, and I don't think of my species being dictated by the permit type.

MR. HADLEY: Yes, that's a good point, and one thing to keep in mind is those are -- It was kind of a first attempt to start to draft up the actions and alternatives, and so those very well -- Well, likely will be split out, and so you'll have say Action 1, permit or no permit, what type of permit, and Action 2, and here's the species, and so it will probably be further divided out, but that's a good point, and point taken, certainly, for the IPT.

MS. MCCAWLEY: All right. Laurilee.

MS. THOMPSON: I don't think -- We don't have an option in there that would reduce -- I don't think it's necessary to have a list for people to check-off things that include coney and whitebone pogies and stuff like that, and you've got fifteen assessed species, and you could add maybe ten more really important ones, like yellowedge grouper and, you know, scamp, yellowmouth grouper, and we could pick ten more, you know, good fish out of this list, but I don't think it's necessary to include the whole entire list of species that we manage, and you would probably want to include Nassau grouper, because you would want to know if somebody caught one, but you could pick some strategic fish that are meaningful and not burden the fishermen.

I don't think the Florida reef survey is enough, and I think that -- I don't think the assessed species is enough, and I think that -- I think that our technical working group could identify the other important species that, right now, at this point aren't assessed, and we could come up with a more reasonable, manageable list than all of these fish that are here, and so I think we need another option, and I agree, and I think I like your idea of let's have options for what the permit is going to do, but not tie it to the species that are going to be covered, and I think they should be separated. Thank you.

MS. MCCAWLEY: All right. We're getting that additional option for species added there on the board. Trish.

MS. MURPHEY: I was actually going to suggest, as an additional option, would be a combination of the Florida reef fish angler and the assessed, because there's quite a bit of overlap, but there are some species out hanging, and so it kind of captures both.

MS. MCCAWLEY: Okay. We've got both of those on there. Next up is Tom and then Spud.

MR. ROLLER: Not to, you know, get in the weeds on any of these, and I like the full range of options that we have here, regarding the vessel and angler permits, and the only one that I'm uncomfortable with is Option 4, that at least one angler on a vessel would need a permit, and the reason I bring that up is that seems to not give us any of the benefits that we've discussed on a vessel permit or an individual permit.

MS. MCCAWLEY: All right, and so, Tom, it sounded like you were suggesting removing the one that says at least one angler on a vessel would need a permit.

MR. ROLLER: Yes.

MS. MCCAWLEY: All right. Got it. Thank you. Next up is Spud.

MR. WOODWARD: Thank you. Maybe we would also benefit -- I mean, we've got sort of actions that's titled as options and then options underneath, and so maybe this thing could be restructured, and I would recommend that we use action and we have a what, vessel or individual, and then a who, which is what fish are going to be covered, and I do think that we need to have an option in there that's the deepwater grouper complex, because we may want to do that, and then the where part of it, and is it going to be only in the EEZ, or is it going to cover snapper grouper species and start parsing these things out into sort of logical pieces that you can then have a range within those categories.

MS. MCCAWLEY: Okay. We've got that. Other hands? We've been through our list of hands. Laurilee.

MS. THOMPSON: On Action 4, what if somebody comes down and they rent a boat to go fishing, and none of them have a permit, and so now you've got a boat that's out there fishing, and you've got four anglers that came from somewhere, that came from Ohio, and I don't know, but they're out there fishing without permits, and so I think we do need to keep the option for at least one angler on the boat to have a permit.

MS. MCCAWLEY: Tom.

MR. ROLLER: I understand your point there, and you bring up a good one, and I think -- But I think that's more of an argument of why this permit would probably be better for each individual person, as opposed to, you know, being an individual -- I mean, I think of all the licenses that I buy already, right, and like I have my freshwater fishing license in North Carolina, my saltwater, and I've got a trout license, and I've got a stock trout license, and I have all these big game and small game licenses, and migratory birds, and so, you know, the idea of potentially another individual license just doesn't bother me at all.

MS. MCCAWLEY: I don't know that it actually helps us count. Are we good with deleting that option? I see heads nodding yes. Andy.

MR. STRELCHECK: Well, I mean, I will go back to my comment about the technical workgroup. Unless they've advised that this is not a reasonable alternative, I wouldn't delete it at this point.

MS. MCCAWLEY: Spud.

MR. WOODWARD: I don't -- I am not going to say that we need to delete something already, but the advice we've gotten from our advisory panel is a vessel-based. That's what they've already advised us, and, you know, that could change, I suppose, depending on some of the other specifics of this, but that's what they've already told us.

MS. MCCAWLEY: All right. I think we've got a bunch of good comments on this one, and we're going to move into the next options, set of actions, sub-options, and I will turn it to John. This is about the education requirement.

MR. HADLEY: All right. Thank you. One of the goals of this discussion is just to -- It's not to come up with a preferred, or a single vision, but just to sort of start to put bookends on what you think, or what you would like, an education component to look like and how that may or may not integrate into a permit. The council guidance for sending this out to scoping was to include options that would create, or implement, an education component that could be either mandatory or voluntary and could be implemented either immediately or have a delayed implementation, and so it would essentially specify that this education requirement was to be implemented at a later date.

Here again is just kind of a draft idea, to start to get a picture of what this may look like in sort of eventually an action and alternatives, or sub-alternatives, and the Option 2 looks at essentially establishing the education component, and then the various sub-options are specifying whether it be mandatory or voluntary and whether it would be implemented immediately or have a delayed implementation.

I won't go into -- I pulled a little bit of your AP's feedback, and so your technical AP's feedback that is, and I won't go over all of it, but there were a few recommendations. As a reminder, there was a recommendation that an education requirement, or certification, may not be necessary or required on an annual basis. Thus, such a requirement would not be an adequate substitute for a permit. However, the AP also noted that an education requirement would pair with a permit, potentially in the initial issuance or in the renewal process.

We went over the scoping comments earlier, and we can certainly go back to them, but I won't go over them in detail, but some of the IPT comments, when initially taking a look at this and discussing it, was really feedback that it would be helpful to specify whether the education component is going to be part of the process to obtain a permit or if it something that you envision happening outside of the permitting process, sort of the council making its own voluntary education certification, because the council is free to pursue its own voluntary education certificate at any time, similar to how it has already developed in the Angler Outreach and Education Program.

One of the reasons that this is being brought up, and was brought up by the IPT, is, if it's required as part of the permitting process, and so it's going to be mandatory, or part of the permitting process, then we do need to keep it in this amendment and have it fully analyzed. If it's something that you envision as being totally voluntary and falling outside of the permitting process, then it doesn't necessarily need to be included in the amendment, and so that's really the crux of that

comment there, to get some guidance and feedback on whether or not this is in fact going to be -- If it's envisioned to be part of the permit itself.

Just a few points there, asking for guidance on whether you feel comfortable with the range of options that have been put together, there again sort of the bookends idea of implementing an education component, specifying that it could be mandatory or voluntary, and then the timing of implementation, and then there's the question, at the very bottom there, of is the council considering an education component that would fall outside of the permitting process and be voluntary. With that, I will turn it over to the committee.

MS. MCCAWLEY: All right. Carolyn and then Laurilee and then Tom.

DR. BELCHER: I am going to put this out there, only because -- Trish can attest to this too, and we do recreational sports that my ability to compete in the sport is dependent on mandatory training, and, I mean, honest to god, this is something that I am paying money to go out to do, just to go out and put a coat on and look cute on a horse for five minutes, and I have to go through a mandatory four hours of training about safe sport. If I don't do it, I don't show. They pull my ability to show.

For the importance of what this is, I don't see -- We're not asking for anything onerous, and this could be as simple as an educational video on making sure you understand your choices for descending devices, venting tools, whatever ad nauseum, and it could be species ID, and I don't think it's that overburdensome to ask them for that, for their ability to have that privilege.

MS. MCCAWLEY: Laurilee and then Tom and then John.

MS. THOMPSON: I think that the educational component should be mandatory, and it could be set up -- You know, I assume that these permits are going to be bought online, the way that commercial permits are, and so, as you're going through the process of applying for your permit, you're not going to be able to click "pay now" until you've gone through the educational thing, and so you make the educational thing first, and then you get all their information, and they can't get a permit online until they have actually at least pushed a button for the educational thing, and they may go and cook dinner or something, but they have at least acknowledged, on their computer, that they have pushed a button that says, "educational training", and I don't think that education needs to be every year, you know, and I think that's too much, but I think they do need to have an educational component before they can get a permit. Thank you.

MS. MCCAWLEY: All right. Tom and then John and then Judy.

MR. ROLLER: First of all, I just want to comment on the range of options here. I think they're great, and I fully support the bookends here, and I don't really see any need to reword them. Now, more specifically, I completely agree with Carolyn. This is -- There are so many other things that we require basic education for, and I do not think it's onerous, in any way, to have some sort of short, mandatory education component here, and how we do that -- This gives us a whole lot of options, and it's, you know, necessary for the analyzing and going forward.

You know, I think back to, you know, the HMS permit that I get every year, and the shark videos that I watch every year, and how effective that short video is for a very specific fishery, and I really

could see us doing something, you know, again, like Carolyn said, with descending devices, with how to best figure out how to ID fish with apps, and I think there's a lot. I think there's a big opportunity for us to do this.

DR. BELCHER: Okay. John was next on the list.

DR. WALTER: I think there is a precedent for this. If you've gotten a federal HMS permit for sharks, you have to take a video on safe release of sharks and shark identification, before you get that federal permit, and so many of us have problem taken that, if you have an HMS permit, and so it's really not that onerous. Thanks.

MS. MCCAWLEY: Judy.

MS. HELMEY: I agree with John. We do have to take that test, and I believe it's every year that we have to take it, to get our permit. Also, it's very helpful, and I fish all the time, but just that little video really does help a lot, and I just think -- You can make a test out of it, like they do with us, and just give them a little test, and then they'll really listen to it, because they think they're not going to get their permit if they don't pass the test, and so you might want to try it that way.

MS. MCCAWLEY: Mel.

MR. BELL: I think the range of options is fine. I think you've got everything in there you need, and I think it does need to be mandatory, however you make that happen physically, before or after or whatever, but it needs to be mandatory and tied to this, and I see it as beneficial.

MS. MCCAWLEY: All right, and so, looking at the range of questions there, it sounds like we're good with that range of options there. You've got education component, mandatory or voluntary, annual, I think, and I don't see that one on there. Maintain the option to implement the education component in the future, if not done initially. Carolyn.

DR. BELCHER: Again, similar to where Spud was going, with the pullouts, would it be better to have that frequency implementation as separate actions? I mean, I guess I'm just -- I don't remember, procedurally, and you can take multiple sub-options, or are you only allowed to -- I am just trying to think what's a little bit cleaner.

MR. HADLEY: We can certainly split it out into actions that specify the mandatory and voluntary and then the other -- As far as the implementation, whether it's immediate or delayed. The IPT will discuss that, and will probably come back to you in June, asking for additional information, and we don't need to get into it now, because we don't really have much information for you to go over, but, you know, what sort of delayed implementation would you be thinking about, and those sort of questions would be asked in June, but, yes, I agree that it would certainly be a little cleaner to split it out that way, and we can task the IPT with that and come back with, you know, more detailed options.

MS. MCCAWLEY: Kerry.

MS. MARHEFKA: Not to that point, but just, as we're wrapping up, I had a suggestion, and so, if we're done with all of that, then I will speak.

MS. MCCAWLEY: Is it on 46? Okay. Go ahead.

MS. MARHEFKA: I am still trying to figure out -- Like Andy asked, earlier, about sort of where the technical workgroup falls in the flow of everything, but, once we figure that out, I would like to make a possible suggestion. If you listen to this, there's a method for the madness that they recommend, even if it's not how we would do it, and I think that, you know, why ask them to come up with all of this if we're then going to turn around and go, no, we want it done this way, and so I wonder if a solution to that might be, after they meet, the council meeting after they meet, whenever that may be, whoever their chair is, much in the way that Jeff comes and talks to us about very technical SSC matters, that most of us don't understand, their head, their chair, comes and sits in while we discuss this, so that we can direct questions to them, because this really, really -- There's a lot of nitty-gritty that is so beyond what most of us understand in this data reporting stuff, and I personally would like to ask for their guidance, listen to their guidance, and make the most of their guidance.

MS. MCCAWLEY: I like that. I like having a person here that people can direct their questions to. Also, I'm hoping, at some point, if we're going to move forward with this education component, and that the Outreach and Education AP can look at this and make suggestions for how this would work, and so I would put that out there, too. Spud.

MR. WOODWARD: I've got something else, and I brought this up in our earlier discussions, and directed it to Monica, and that is using the National Saltwater Angler Registry model, and this was brought up in public comment, and do we need to include language in the amendment that allows a state to create a mechanism that would meet the requirements of this permit and get an exemption from their anglers for a resident in their state, and is that something that -- I know that was created in the act, and the language I guess was in the revision of the act, but how would we handle accommodating that in this process, if we wanted a state to have the option of opting out, by creating its own mechanism?

MS. SMIT-BRUNELLO: When I was reviewing the minutes of the last meeting, I said that Spud asked me this question, and I haven't had an opportunity to figure that out, but I would just assume that -- So I can bring that back to you at your next -- I promise. At the next council meeting. If you are -- So you're talking about creating a permit, right, just like what you did in Action 1, right, but allowing some sort of state process to be the equivalent of that, and so I would think that, if you wanted that, that that should be within the amendment itself, an action, or maybe under an action, and I don't know if you want to address that now, but it's something that I could bring back to you at the next meeting, because I think, otherwise, people would be subject to what you're saying in this amendment, and so, if there is some alternate route that they could take, you should specify that in the amendment.

MS. MCCAWLEY: Spud, we're trying to capture that on the screen, to make sure this captures it. Does that look right, Spud?

MR. WOODWARD: Yes, I think that captures the spirit of it. I just wanted to bring it up and make sure that, if we need to include it in future amendment development, that we go ahead and start thinking about that, you know, and, I mean, this really would be a simple either you can or you can't, you know, to some degree, and I have got one other thing that I want to follow-up on,

if you will give me a few minutes, but I will defer to Mel, and he can talk first, and then you can come back to me.

MS. MCCAWLEY: Okay. Mel.

MR. BELL: I was just going to follow up on that, and I see where you're going with this, because we did it with the National Registry, and that makes sense, but were you thinking the option for a state to basically provide some, you know, equivalent of a permit and the associated educational component that goes with the permit as well?

MR. WOODWARD: Yes, and I think whatever the permit requirements are would have to be mimicked by a state, just like, you know, we submitted our proposals for exemption on the National Saltwater Angler Registry, and we had to meet certain criteria, and so, whatever those criteria are, you would have to meet it and then be granted an exemption or not, depending on whether you met those criteria.

MS. MCCAWLEY: All right. Did you see that there were more bullets added there on the screen? Just making sure. All right. Before we leave Amendment 46, anything else?

MR. WOODWARD: I just wanted to bring this up, and this is something that came up in public comment, and I didn't want to bog us down in it, and I don't want to bog us down in it now, but I think there's a concern, out there in the fishing community, that a private recreational permit administered by the service could, at some point, be limited in number, and I think it's important, at this juncture, that we address that, and maybe just review for folks the process by which fishery permits are constrained and limited.

You know, it is my understanding that, you know, that's a council action, that, if there was ever a desire to limit a permit that was established through council action and approved by the service, that it would ultimately be the responsibility of the council to limit that, through a defined process of control dates and all, and subsequent amendments, that it's not something that NOAA Fisheries would do of its own volition, to say, well, we're going to go from unlimited issuance of permits to a defined number, and I just think it would be important to deal with that now, as we get into Amendment 46, so people understand what are the rules and processes here, and so, Monica, I guess I will -- I hate to do it to you, but --'

MS. SMIT-BRUNELLO: That's fine. Section 303(b) of the Magnuson Act provides discretionary provisions for a council to consider in its, you know, conservation and management measures, and one of those is a limited -- Establishing -- What you're talking about I think is a limited access system of some nature, and that is done in order to achieve optimum yield. In developing it, the council, and the Secretary, take into account present participation, historical fishing practices, the economics, the capability of these vessels to engage in other fisheries, it's fair and equitable, cultural and social framework, and, I mean, those kinds of things are all geared toward the commercial sector, because I think -- I mean, initially, that's probably what Congress intended, when they did the act and put this provision in. However, I think it would apply to this as well.

I can't speak for the service, but I really doubt that they would come in and say, you know, we're going to establish some sort of limited system, and that's for you all to deal with. It's a council prerogative, and it's a discretionary measure. We have the requirements under Magnuson Act

Section 303(A), limited access privilege programs, and that's another discretionary provision for really the council to consider in the snapper grouper fishery, if you ever wanted to. Obviously, the Secretary does that in HMS, and they've got those kinds of things, but they don't deal with the council, and so, since this is a council-managed FMP, I feel very confident in saying that that's your prerogative, and only your prerogative, to deal with.

MS. MCCAWLEY: Any more discussion? Andy.

MR. STRELCHECK: Two points. I am not clear where we landed in terms of the technical working group, but I would really like to, at least virtually, have them convene and review and refine the actions and alternatives that could then be presented to us at the June meeting, or whenever we think we could convene that technical working group, and so I don't know, timing-wise, if that would work between now and June, or if it would be between June and September, but I feel like we should get something on the books, and I think they could really help us, in terms of clear direction, like Kerry said, and then having, you know, the chair and other experts come to the council and talk to us directly about their recommendations.

MS. MCCAWLEY: Sounds good. It looks like we're capturing there. Ultimately, it would be in timing and tasks, and maybe, by the time we get to Full Council, staff can suggest when would be appropriate, before June or between June and September.

MR. STRELCHECK: Right, and then the second point, and, Monica, you can possibly add or correct me on this, but, at the last meeting, I talked about, you know, this imposes a cost on the government, and we aren't able to collect fees, if we're the ones that are going to be issuing the permit, and we can only cover the cost for administering the permit, but then that goes to the General Treasury, right, and so the Antideficiency Act, under the United States Government, prevents us from essentially obligating expenses, or, you know, ultimately expending money on something that we don't have appropriation for, right, and so I think there needs to be some discussion, in the amendment, as it progresses, regarding that issue, because we won't necessarily be able to immediately implement it, until we have funding to do so.

MS. MCCAWLEY: John is trying to capture it, and so just check what's going on the screen and make sure that captures it. Are you good with that?

MR. STRELCHECK: Yes, and, I mean, we can discuss it further as it's developed, but it's more than just the providing the costs and estimates, and it's essentially the fact that you're imposing costs on the government that we wouldn't be able to implement it unless we have appropriations for implementation.

MS. MCCAWLEY: All right. Anything else for Amendment 46? Go ahead.

MR. HADLEY: Just one question, for clarification, and, Kerry, I believe it was your point, or request, to have the AP chair available during the committee discussion of the amendment, is that -- Just to help with timing and planning for future discussions, is that meant for each time the committee discusses this or just for the next meeting? I think it's possible, or hopefully possible, to at least -- If not the chair, someone on the committee, or on the AP, rather, be available for the committee's discussion, but just a point of clarification, for future discussions.

MR. MARHEFKA: That's a good question, and I don't want to waste anyone's time, and, you know, it would depend on what specific, how specific, we're getting in that meeting, right, and, today, technically, we were just supposed to say, yes, we have a good range of options and move on, and, obviously, we got deeper than that, and so, if we're doing that, I don't know that they need to be here, but, I mean, there is utility in hearing what they have to say, and so, if cost is an issue, I would say I trust you all's judgement as to when you think they would be most necessary. If cost is not an issue, then, yes, I think it helps them hear our discussion, and the back-and-forth is really useful.

MR. HADLEY: That sounds great. Thank you. I was just looking for clarification on that, and I think -- Just noting some of the AP members, there are several that would probably be very willing to help out with the council's and the committee's discussion on this, and so absolutely. Thank you.

MS. MCCAWLEY: All right. Thank you. Anything else on 46? Spud.

MR. WOODWARD: Well, I think we really need to be very specific in what we want this AP to tell us at our next meeting. I mean, it's -- You know, they've already given us a report that addresses a lot of these ideas, and, you know, what, beyond that, do we want? You know, maybe this is something we can think about between now and Full Council, but a specific ask of what do we want to talk about deeper into, to give us more detailed information. Otherwise, they're kind of like, so what do you not know that you want us to tell you, and, you know, we're not psychic, and we can't figure that out unless you tell us, and so that would help, I think.

MS. MCCAWLEY: Thanks, Spud. Andy.

MR. STRELCHECK: What I am thinking of, Spud, is we refined the purpose and need today, and we've kind of honed-in on enhancing and improving the effort estimation, and as well as, you know, then how that improves catch estimates, right, and so, based on the purpose and need, you know, to me, what's most helpful to us, or would be most helpful to us, is taking what John and team are going to do, in terms of revamping the actions and alternatives, and saying do we have a complete list of actions and alternatives, and what are we missing, and is there anything that needs to be added? Are there things that you would recommend that we subtract from the list, right, and so giving us that direct feedback.

Then, I think, to Kerry's point, just they're the experts, right, and so they might have some preferred recommendations, and I don't necessarily want them to select the preferreds for us, but I would love to, obviously, get some feedback, in terms of a preferred program, based on the purpose and need we've outlined.

MR. WOODWARD: Yes, I think that's helpful, but, also, you know, let's keep our thinking caps on. If there's something more specific, as we move towards, you know, the Full Council session, that would be helpful.

MS. MCCAWLEY: Thank you, Spud. All right. Anything else on 46? All right. Good discussion. Let's take a ten-minute break.

(Whereupon, a recess was taken.)

MS. MCCAWLEY: We're going to get going again, and I'm going to turn it over to Chip.

DR. COLLIER: All right, and so Kyle Shertzer is the lead analyst for the SEDAR 68 operational assessment for South Atlantic scamp and yellowmouth grouper. Kyle, if you want to go ahead and give the presentation.

DR. SHERTZER: Thanks, Chip. For those of you that I haven't met before, I'm a stock assessment scientist with the Southeast Fisheries Science Center, and, although I was the lead for the SEDAR 68 operational assessment, I do want to acknowledge that, throughout the process, like every SEDAR assessment, there are literally scores of scientists and stakeholders who contributed to this process, from federal and state agencies as well as academic institutions, and so a lot of work went into this, and, also, as Chip said, this is the South Atlantic scamp and yellowmouth grouper, and, often, for shorthand, we've just been calling it the scamp assessment, but, if I say "scamp", it's just short for South Atlantic scamp and yellowmouth grouper complex, and the reason that these two species were pooled together for this assessment is that they're very difficult to distinguish, even for the biologists who are trained in what features to look for.

They're difficult to tell apart, and so a decision was made, early on in the process, to pool the data for the two species, all of the data, and so the landings, the discards, the indices of abundance, the age compositions, and the length compositions are all pooled for both species, and the assessment treats it as a complex, and it does not try to distinguish one species from the other, and so just keep that in the back of your mind as you're thinking about this, that it's the two species together.

This is a little bit of background information about the timeline of how we got to where we are now, and this is -- It was actually the first stock assessment, for the South Atlantic, that took this process of having a research track assessment and then an operational assessment, and the research track started in 2019, with a stock ID workshop that was completed in March of 2020, and the time primary recommendations coming out of that stock ID workshop were, one, to assess the Gulf of Mexico and the South Atlantic stocks separately, but, also, that's where this recommendation came from to treat scamp and yellowmouth grouper as a complex.

Then, after that, the data workshop was held, by webinars, from April through September of 2020, and then, following that process, the assessment workshop was held, again by webinars, and that went from December of 2020 through May of 2021, and then the CIE review, the SEDAR review, with independent experts, happened in September of 2021, and then the model assessment went to the SSC, who reviewed it in October of 2021.

As a reminder, the goal of the research track assessment was really to just develop the data sources and the modeling methods and not to provide management advice, and that is starting with after the SSC review, is when the operational started, and pretty much right on the heels of the research track, and so, immediately, the TORs and the schedule were developed, and then approved, in December of 2021, and the data were developed and finalized and submitted by August, and then that's when the assessment modeling and report writing happened, between August and December of 2022, and then, in January of this year, the SSC reviewed the operational assessment, and now, with the operational assessment, the goal is to provide management advice.

I want to show you some of the data that are going into the assessment. These are the indices of abundance that give the assessment model information on trends in how many fish are in the water, and, in this case, we have three different indices of abundance. The blue is the headboat, is developed from the headboat fleet, and the red is developed from the commercial fleet, and then the green is the SERFS fishery-independent survey, and so I think there's a couple of things to note here.

One is that, at least for the years where we have overlap, that the ups and downs tend to track each other from the three different indices of abundance, which is a good thing, that we've had general agreement among the different indices, and then the other obvious thing is this decline that we see at the end of the time series, and we see it in all three, but, of course, the SERFS extends quite a bit longer than the others, and it continues this decline, until we see the lowest relative abundance at the end of the time series for the entire time.

There was a paper written about this, using the SERFS data, and the title of it, here, is "The Decadal-Scale Decline of Scamp Abundance Along the Southeast United States Atlantic Coast", and so I guess this is just a precursor to that I'm about to tell you some bad news about the status of the stock, as we get into the assessment results.

This is just sort of brief information about the methods that were used. The operational assessment applied the Beaufort Assessment Model, which was what was developed for the research track assessment, and the timeframe was 1969 with a terminal year of 2021. The one issue that we did run into was that we typically want to provide MSY-based reference points, but, in this assessment, they were not estimable, and so we provided a proxy for FMSY, and, here, the proxy is one based on spawning potential ratio, or SPR, which sort of is defined by the fishing rate that would provide some percentage of reproductive output compared to an unfished condition, and so, here, we're suggesting that F 40 percent, which would provide 40 percent of the reproductive output, be a reasonable proxy for FMSY, and I wanted to give a little more background on this, because it is a decision that needs to be made about which proxy to use.

I am just providing this as background material, but the scientific recommendation, really, on which proxy to use would come from the SSC for the council, and, just to put it into context here, these are a couple of statements, from National Standard 1, that, when data are insufficient to MSY directly, which is the case here, the council should adopt other measures of reproductive potential that can serve as reasonable proxies for MSY, FMSY, and BMSY, and the second one states that, in specifying the status determination criteria, a council must provide an analysis of how those criteria were chosen and how they relate to reproductive potential of stocks of fish within the fishery, and so, if alternative types of SDCs are used, the council should explain how the approach will promote sustainability of the stock, or stock complex, on a long-term basis.

The reason that, within the assessment, we recommended F 40 percent -- A few reasons. One is that it's a common proxy in the United States, and I have tried to provide some citations here, in the scientific literature, if somebody wants to go back and read those papers, but, one, it's a common proxy, and this is not an uncommon problem, that we can't estimate MSY, and so it is common that proxies are used, and, often, F 40 is used.

F 30 percent is sometimes used, but it's really only appropriate for the very resilient stocks, and so that, as you might remember, is the proxy used for red snapper, and that's a stock that is highly

productive. We can't say that scamp is a stock that's highly productive, and, given its life history, in particular that it's a protogynous hermaphrodite, it has this life history that might be susceptible to overfishing, and, for these types of stocks, even F 40 percent might be too aggressive, in some cases, and some papers suggest even F 50 percent for protogynous stocks, but we thought that F 40 percent would be a reasonable proxy, in this case.

To give a little more information about what this means, the plot, here on the right-hand side, shows the fishing mortality rate, along the X-axis, and what we would expect, on the Y-axis, to be the equilibrium level of landings that the fishery could provide, and so that's what the curve shows, and so, as F increases, the removals increase, and, now, what we would see, if FMSY were estimable, would be that the curve increases at first, as F increases, and then it starts to come back down. For higher rates of fishing, the equilibrium removals actually decreases, and so there's a peak in the curve, and that peak is what would define MSY, but, in this case, that doesn't happen, and so this is why FMSY is undefined, in this case, and, in this plot, there's a curve for F 40 percent, and the dashed line is where F 40 percent would fall.

You can see here that, where it intersects the curve, that would be what the MSY value would be that corresponds to F 40 percent, and you can see that, where -- The maximum in the curve isn't much higher than the landings, equilibrium landings, associated with F 40 percent, and so there's not much of a tradeoff, in terms of an F rate that is conservative, that you're not getting as much landings as you might otherwise get.

Then this is going to get into some of the assessment results. For this plot, and for some other plots that are upcoming, what we're looking at is the -- Along the X-axis is time, and then the Y-axis shows -- In this case, it's the abundance, and gray is our sort of uncertainty level from the assessment and the abundance here, and you can see here that we think that abundance, or the assessment shows that abundance, increased in the mid-1980s, and had this peak throughout the 1980s and 1990s, and then this decline since the early 2000s, and is currently at near its lowest values that we've seen in the time series.

Again, the gray is the uncertainty from the assessment, and this is showing the spawners and recruits in the top panel, and this is the spawning biomass, which, for this assessment, was the total mature biomass of females and males added together. Because of it being a protogynous hermaphrodite, we included males in the spawning biomass, but, here again, we have an initial decrease, but then an increase in spawning biomass, and then a decrease, at the end of the time series, to reaching its lowest levels for the full time series.

The bottom panel shows estimates of recruitment, which fluctuates quite a lot, but you can see that it seems to be that recruitment is what is driving the trends that we're seeing in abundance and spawning biomass, where you have these lower levels at first and then some increases, driving those increases in abundance and spawning biomass, and then decreases in the recruitment, and, again, at the end of the time series, recruitment is at its lowest levels.

Then this plot in the top-level shows the fishing rate, which increased, and really just fluctuated throughout most of the time period, and, if you were to overlay the F 40 percent, you can see that most of this fluctuation is right around that level of F 40 percent, but that, at the end of the time series, the last couple of values, and even if we take the average of the last three, they're generally

not exceeding F 40 percent. The F at the end of the time series is lower than F 40 percent, and so that would indicate that we're not experiencing overfishing.

The bottom-right plot shows, if we break this down by -- If we break F down by fleet here, by sector, and we have the recreational commercial sectors. In this assessment, it was just those two, and the recreational was -- It was all of the recreational fleets together, and so that included headboat, for-hire, and private rec. The commercial is mostly handline, or hook-and-line, but any commercial gears were pooled together, and so you can see that both of the sectors contributed to the fishing mortality rate, but, generally speaking, the commercial was the dominant source of F for this stock.

I also wanted to mention here that the commercial and recreational fleets were modeled as having the landings time series that incorporated dead discards into the landings time series, and so those landings and dead discards were not modeled separately, like they are for a lot of stocks, and they were pooled together.

Then this plot that's showing now -- If you haven't seen this one, it might take a little bit to digest it, and so let me try to describe it slowly. We have -- On the X-axis is the current fishing mortality rate, which is the pooled -- Or an average over the last three years, relative to this proposed threshold of F 40 percent, and so, if that ratio is greater than one, it suggests overfishing, and, if it's less than one, it suggests that it's not overfishing.

On the Y-axis, we have the spawning biomass in the terminal year of the assessment relative to its threshold, the MSST, and so, if that value is below, if that ratio is below one, then that suggests that the stock is overfished, and, if it's above one, then the stock is not overfished, and all of these little points that are plotted here are individual runs of the assessment model, and so we develop a base assessment model, but we also try to characterize uncertainty in the results of that model, and so each of these runs would differ, in the sense of we use different levels of natural mortality rate, and we use different levels of discard mortality rate, based on information from the data workshop and some different assumptions about data weighting, and then, also, the data themselves are bootstrapped, and so we incorporate any uncertainty in the data, including the CVs that we would have in say the MRIP landings.

All of that uncertainty would be incorporated into these individual runs, and so you can see the wide spread in the results from all of these little points, which is each an assessment model run, and the crosshairs intersect at the results of the base run, and the width of them spans 95 percent of all of the points, and so you could think of those as sort of a confidence interval, and then the percentages are showing what proportion, or what percentage, of each of all of the runs fall into that particular quadrant, and so, looking at the top two quadrants, the zero and the zero, that says that none of these model runs ended in a status where the stock is not overfished. 100 percent of the model runs landed in this area where the stock is overfished.

This bottom-left quadrant, where it says 69.5 percent, that suggests that, of all of the runs, 69.5 percent of them said that the stock is not experiencing overfishing, and then the 30.5 percent says that that's the percentage that were experiencing overfishing, and so we have, from this assessment, really good confidence that the stock is overfished, and most of the runs would suggest we think -- You know, if you turn this into a probabilistic statement, it's probably not experiencing

overfishing, but we don't have as much certainty about that statement as we do about the overfished status.

Then this table, or the estimated management quantities, and I won't walk through this entire table, but I wanted to highlight the values that are in yellow, and this top set of yellow estimates -- These are the landings, and the LF 40 would be -- If we use F 40 as a proxy, then LF 40 is the MSY value, and I just wanted to point out that these values include dead discards, and so these are not just landings, and they include dead discards, and then this bottom set, that's highlighted in yellow, just reiterates what we just talked about in the last slide, about the estimates of the stock not experiencing overfishing, but it does appear to be overfished.

Just to summarize that, the stock complex -- It does seem like it's overfished, from these assessment results, and that is a very robust result from the assessment. Overfishing does not appear to be occurring in the terminal years, but we have a little bit less certainty in that statement, and 30 percent of the MCBE, and those are uncertainty runs, resulted in overfishing. The stock status appears to be driven primarily by poor recruitment, and we did look into this pattern of low recruitment and whether it was indicative of a regime shift, and, right now, there is insufficient evidence to conclude that there is. We can't say that it's not a regime shift, but we just really can't conclude that it is a regime shift at this point.

I just wanted to comment on the forecasts, and so, for now, the ones that were in the assessment report are preliminary, but they're potentially informative. We ran four different fishing rate scenarios, and this first one is an F current, and so continuing with the current rate of fishing, which, again, was not overfishing, with the long-term average recruitment, and then, also, F current, where we continued with the recent average, and so that low recruitment, and then two runs with F equals zero, and there is a typo here in the slide, but one of these runs was with long-term average, and the other was with the recent average recruitment, and so both say "long-term", but one of those should say "recent average".

The assessment report has three of those, and one additional one was added during the SSC review, to sort of complete this two-by-two experimental design of fishing rates and recruitment rates, and so we can look at the results from those in the next slide, and these are just the deterministic projections, but, if you look at this, this top one, F zero at the long-term recruitment, this one recovers very quickly, and so that's due, in part, largely to the higher recruitment that is the long-term average, but, also, there is no fishing in that hypothetical scenario.

The next one down recovers a little less quickly, and that's also F current, and that's F current, but also with the long-term recruitment, and then the one that is sort of the orange-ish one, the third one down, is F zero with recent recruitment, and then the F current with recent recruitment, and the one above that is the long-term recruitment. I think the take-home here is that, with the projections, the fishing rate does have an effect, but it's really the recruitment that's the driver, the primary driver, in the stock rebuilding to what its long-term potential was.

Just to summarize those recruitments, if recruitment were to return to the long-term average, the stock would be expected to rebuild quickly, even if fishing rates were kept at their current levels. The low recruitment is suppressing the stock, it seems, and not overfishing. That does not appear to be suppressing the stock, in this case, and the forecasts that I showed are not the final versions that the SSC would use for catch advice, and we're in the process of working with Chip, and with

the SSC, to develop the forecasts that the SSC could review in April and then provide catch advice to the council.

I just want to comment that the SERFS index, going forward, is something that we could use to monitor the rebuilding trajectory and to monitor whether recruitment is increasing, and we hope returning to something that's a long-term average, and I think this is my last -- I have one more slide, but it's going to take a bit of left turn, and so I think, if we go back, this might be a good place to pause for any questions about the stock assessment.

MS. MCCAWLEY: Thanks for that presentation. Are there questions? Judy.

MS. HELMEY: Thank you very much. Did I hear you say that, at the current rate of fishing, that the stock will recover on its own?

DR. SHERTZER: If you go back up one more slide, it could recover on its own, and so it depends on what recruitment does, which, honestly, is something we don't know at this point. We don't know whether recruitment is going to return to its long-term average or whether it's going to stay low. You know, we do think that a predictor of short -- What's going to happen in the short-term is what's happening now, and so we would most likely expect recruitment to stay low in the short-term, but, as far as rebuilding to where it was, to this long-term average, I mean, that could happen, but we just don't know when in the future it would happen, but what this shows is that, if that does happen, if recruitment returns to its long-term average, that the stock could rebuild, even at F current, and that's sort of that purple-ish second curve down.

MS. HELMEY: Thank you.

MS. MCCAWLEY: More questions? Andy.

MR. STRELCHECK: Thanks, Kyle, for the presentation. I want to dig-in and go back to the projections slide there for a minute, and I know these are preliminary, and so I think the conundrum we're facing is, under the recent recruitment levels, right, even if you reduce F, you're never going to rebuild, or at least it doesn't appear that it will be rebuilt, unless you carry that out to an extended period of time, and so, you know, it kind of begs the question of the reference point, and if there's been any sort of regime shift, and so I'm curious, Kyle, from your perspective, you know, kind of thoughts on that, in terms of how do you tease that apart and kind of better understand whether this is truly kind of a longer-term regime shift that's depressing recruitment, and reducing productivity of the stock, versus potential for the stock to rebuild and recover to that kind of longer-term, you know, reference point.

DR. SHERTZER: Thanks for that question. The SSC recommended examining this issue, in one of their recent reports, and so this assessment followed their advice, which was -- Basically, it was a paper written on regime shift that outlines sort of a rubric, or some criteria, that could be used to gauge whether we think that a regime shift has happened.

Going through that rubric for scamp, or for this complex, we just, at this point, couldn't conclude that a regime shift has occurred, and so one of the big pieces of information that we're missing is, if there is a regime shift, what is the mechanism, and what's the driver, and we just simply don't know that, but we do recognize that we've been seeing this pattern in other species as well, not all

of the species that we've been assessing, but enough of them that we're concerned about it, and we do have a project, going on in the Southeast Science Center right now, that's trying to identify what might be driving these patterns of low recruitment, and, hopefully, going forward, we'll be able to get more information on and make a determination, or some type of scientific statement, on whether we think it is a regime shift, and, if it is, whether -- What type of regime shift is it, and is it something that is oscillatory, so that we would expect recruitment to return to the long-term average, and it's just sort of in a low point of a cycle, or is it something that's flipped in the system that is going to keep recruitment at low levels indefinitely, and, if that's the case, then I take your point that we would want to re-estimate benchmarks and have a different benchmark for comparing stock status than the long-term average.

MS. MCCAWLEY: Any more questions? Dewey.

MR. HEMILRIGHT: Thank you for the presentation. When you say "regime shift", does that mean that stock is going somewhere else? I just -- I don't understand what that means.

DR. SHERTZER: Just a change in the expectation of the system itself, and so, in this case, we're talking about primarily the recruitment, and is there something in the environment, for example, that drives recruitment and has changed in this system, and so -- This is just purely an example, but say recruitment is really tightly linked to temperature in the water, water temperature, and, if water temperature has gone above say some threshold, then that might be a regime shift, where recruitment would stay low, because temperature is high. I don't have any information to suggest that that's any linkage at all, and I'm just mentioning it as an example, but the regime shift itself is just a change in the expectation of the system, in this case recruitment.

If you look at the recruitment -- Chip, if you go back to the recruitment picture, if there is a regime shift, we would expect recruitment to stay at this low level, going into the future. If there's not a regime shift, we would expect it, at some point, to return to that long-term average, which is a bit higher.

MS. MCCAWLEY: Other questions? John.

DR. WALTER: Thanks, Kyle, for this really comprehensive presentation, and I think that the idea, and the concept, of regime shifts, or what we sometimes call non-stationarity in the productivity of the system, is going to be one of those key challenges that we face going into the future, where, previously, we assumed that things were constant in the system for the time series of the assessment, but it's likely that we're going to face environmental changes that we're going to have to account for, and they are, oftentimes, outside of the control of this council, and out of control of society, and that's one of the key things that we may face with climate change and that the management strategy evaluations, in some cases, have the ability to test management procedures that would be robust to that.

One of the things to consider, as a decision-making body, is whether you want to explore those things and develop management procedures that are specifically tested to those kinds of changes, and I would recommend that be one of the considerations, because I would want to adopt a management procedure that I knew had at least some robustness to these changes.

It's going to be really hard for science to determine whether a regime shift has happened in a system, because you only have one system, and you don't have a control to be able to test that, and the danger is that calling it a regime shift could say that we're basically never going to recover a stock, and it could be convenient to do that, because our benchmarks will be low, but then it kind of dooms the stock to not recovering, and, in many of the stocks that we have recovered, had we did that too early, we wouldn't have been on a recovery pattern, and we've shown that we can recover, in most cases, when we reduce fishing mortality.

However, it's going to be that the environment may change, such that, even when we keep fishing mortality low, in terms of doing the thing that we can control, the environment may not respond, and that's the challenge that we face, moving into trying to develop what is called climate-informed reference points, and I think that's what a lot of the agency is trying to be able to do, and the management strategy evaluation allows you to test those things explicitly. Thanks.

MS. MCCAWLEY: Thanks, John. Mel.

MR. BELL: I just had a question about the whole regime shift thing. As I listened to the SSC meeting, and, you know, they were -- They scored it, and it was based on a paper or something, and there were so many points, and they were like a point short or something, but just an academic discussion here, and let's just say it would have been -- That they would have declared it a regime shift somehow, and how would that then inform what we need to do next? Do you see what I'm saying? Like if it had come up with one extra point, or whatever it was, on that scoring sheet, and they said a regime shift was actually supported somehow, what does that then mean to us, in terms of taking action on an assessment? What would that look like?

DR. WALTER: I am happy to defer to the SSC chair, if he wants to take that on, or to Kyle too, and so --

DR. BUCKEL: I will take a stab, and then Kyle can jump in, but, yes, at that point, right, the long-term average recruitment would not be used in the projections, and you would say we've moved into this new regime with low recruitment, and then you would use the low recruitment in those projections. Now, John had mentioned another -- A second thing there, which would be -- Kyle, I think, mentioned it too, and I will let them speak to that, in terms of I guess redoing an assessment with changing the stock status indicators, right, because you've changed the productivity of the system, and so those proxies may not be appropriate anymore, but, in terms of projections, you would not do the long-term average recruitment.

MS. MCCAWLEY: Any more questions? Andy.

MR. STRELCHECK: Well, just to put a finer point on that, and, Kyle, jump in here, but I guess the way I would think of the regime shift is, if it in fact occurred -- If you're looking at this graphic, your reference point potentially would be lowered, in terms of what that 40 percent SPR value is, because it's reliant on less recruitment and less productivity that's helping to inform the status and health of the population, right, and so your benchmarks change and not just, you know, what you're trying to rebuild to, and so you're -- I will say lowering the bar, but you're not really lowering the bar, and you're managing then to kind of the current population, as you estimate that it exists under this new regime.

MS. MCCAWLEY: Any more questions?

DR. COLLIER: Well, since there's no more questions, did you want to go to that other slide, Kyle?

DR. SHERTZER: Yes, the last slide, and I think John was going to present this one.

DR. WALTER: Thanks. In the other councils, where we also serve, generally speaking, the SSC chair presents the stock assessment, as well as the advice coming from the SSC relative to the assessment. However, this council has requested one of the analysts to do that. From our perspective, we feel that it provides a cleaner approach to have the SSC chair give the stock assessment, and then the SSC advice, so that there isn't either a mixed message or too much messaging that takes up too much time.

We think that we would like this council to consider having the SSC chair present both the assessment, which we would provide curated material for, and work with the SSC chair to do that, to streamline the messaging and avoid duplication, and this places the role of science generation, which is largely the Science Center and the SEDAR process, the science interpretation in the hands of the SSC, and then the management decision-making in the hands of the council, and it puts each role and responsibility in its right place. We would like the council to consider an option which would have the SSC chair give both the presentation, such as what Kyle made, as well as the interpretation of the SSC, and have this council consider that. Thanks.

MS. MCCAWLEY: Thanks. Thoughts? Mel and then Carolyn.

MR. BELL: Just a question about that, and so, the way I was kind of under the assumption that this worked is there's the SEDAR, and there's the assessment, and then there's another part of the process, which is peer review, and I thought the SSC was kind of serving as the peer review for the assessment, and so they're two different groups, two different things, going on, and so, if you're going to have, effectively, what I'm assuming is the peer review, the chair of the peer review group, present both, it just seems like it's two different things, and am I not understanding that correctly, because, I mean, it could be that you have an assessment and the SSC, in terms of serving in the peer review role, has some issues or something, or am I not getting that right?

DR. WALTER: That's correct that the SSC reviews it, and the SSC could have a -- They have the task of reviewing it and then providing the advice on the ABC and ACL to this body, and so we think it would streamline it to get that message. The facts of the stock assessment are pretty straightforward to convey, and then the interpretation of it would be the peer review, and so we think it would be a streamlined process to do that, and, in fact, it is the process that the Gulf Council and the Caribbean Council follow.

MS. MCCAWLEY: Carolyn and then Trish.

DR. BELCHER: I am going to speak from the experience of having been an SSC member that's been put in this position before, and I don't support it at all. Back in the early years, we actually had been dividing and conquering on a lot of things, and it fell to a couple of SSC members to look over documents and provide a synopsis and present it back, and we couldn't always answer every question that was in there. We did the best we could, with doing that.

As Mel was kind of hinting, I think the hard part too is that we're trying to review it, and we can talk about -- You know, when Jeff comes now and gives us the report on what the SSC is saying, you know, that's basically the SSC's discussion, moving forward, and so, if there's questions that come up, Jeff can't always speak to what the analyst intended to do or didn't do or did do, and he's just got the information that was given to him.

I just know, like I said, in my time in that role, I would not have felt comfortable with that being my responsibility, just given the fact that it's not something that I've generated, and the SSC didn't generate, and so I think it really should fall to the Science Center, or the analyst, to bring it forward for questions and fielding that information.

MS. MCCAWLEY: Trish.

MS. MURPHEY: Actually, Carolyn said the same thing that I was actually thinking too, and I know -- I'm just sort of thinking, if I was the SSC chair, I would be freaked out right now to have to present a stock assessment, and I think -- I'm with Carolyn, and I think I don't like that idea at all. I like to be able to talk to the main analyst, because I can kind of ask all these little questions that, you know, the SSC chair may not be able to answer, because that analyst has been intimately involved with this assessment for what, at this -- With the research, at least two years, and so I -- Not that I don't doubt that Jeff could do a great job presenting, but I think he has stated that he himself is not an assessment scientist. He's a scientist, but not an assessment scientist, and, you know, that's so quantitative, and it's just beyond my comprehension, should I be an SSC chair and then asked to present an assessment, and it would just be beyond my ability, and I think that may frighten off -- I mean, there's the chance that it may frighten off future chairs, if they're having that burden, and so that's just my two-cents' worth.

MS. MCCAWLEY: I agree with Trish and Carolyn. Dewey.

MR. HEMILRIGHT: I agree, also. Too many times, I've been somewhere where the report has been read, and the person that wrote the report wasn't there to -- Not to justify, but to, you know, answer the questions, and I think it's important you keep it separate, and the analyst needs to present it, and the SSC has its role in this stuff, but I think you need to keep it separate.

MS. MCCAWLEY: Carolyn.

DR. BELCHER: The other part of that too, which I've found myself in that seat before, is you're presenting the information, and you get asked a question directly, and it's a question that has not come up through the SSC, and so you're kind of put in the spot as that person answering that question, and you're not answering for the committee either, and that's an extremely uncomfortable place to be, because it's like do you want Carolyn's opinion or do you want the SSC's opinion, because we didn't discuss that in detail, and that can be really frustrating, too.

MS. MCCAWLEY: John.

DR. WALTER: I am hearing what people are saying here. We would always have one of the Science Center staff, if not the analyst, on to take those questions, and, right now, we've always got remote capability to do that, and usually we've had that person available, particularly in the

Gulf and the Caribbean, and we have the analyst there available for those questions, and so you would be welcome to defer to the analyst.

I guess my other concern, and I hear around the table voices against this, but the other concern is that a lot of the questions that come up are questions that are addressing scientific things that either didn't come up in the review process, in which case this is not the science body, and this is a deliberative body, and so, if you want to bring up and address science questions, that would be at the SSC, and so I would then strongly urge that, for those people who would like to address questions of science, then the right forum would be at the SSC, where there are opportunities for people to do that, and there's also opportunities for public comment, and so I think we need to keep the particular right places for those discussions to be had at the right place and right time, and so, with that, thank you.

MS. MCCAWLEY: Thank you. Carolyn.

DR. BELCHER: I mean, with our chair sitting there, we can defer and ask that question, if the SSC had addressed that question or not, and we've had that happen many times, where it doesn't necessarily show up at the SSC level, and it shows up here, and we ask the question, and that doesn't mean that it can't go back to the SSC for a second review from them, because, yes, we may come up with something that maybe wasn't discussed, but we can ask them to look at it. I mean, we do that quite a bit, and so I don't see where that circumvents that ability for that to be done.

MS. MCCAWLEY: Dewey.

MR. HEMILRIGHT: I know, in reading the meeting minutes of the SSC, sometimes I get frustrated, because there is folks asking questions that's on the SSC, and there is no answers for their questions, and they're talking amongst themselves, and, had somebody with some knowledge been there, they could have got the questions answered, and I don't have a specific point of which question it was, but I know, in my reading of it, I saw there were different points of it, at times, where the SSC was questioning amongst themselves something, and, you know, it was part of the comments, or their discussion, but it didn't get answered, and I thought it was important that, had that been answered, that might have helped them with some of their decision-making, or something like that, and so that's another thing.

I think, given the tools of the SSC, anything that, during their deliberation on something, somebody -- There may be somebody from the Science Center available, when they're having their discussions, because, particularly, you know, it has to do with what the data said, or how was it collected, and, I mean, just questions from reading the meeting minutes, and so that's, for me, as somebody that reads that, to get how the sausage is made, and it's very informative, and it's kind of troubling that, you know, SSC members don't -- They ask a question amongst themselves, and it never gets answered, and it just gets moved on.

Maybe it hasn't reached the plateau of the importance of that question that is asked, and maybe it was just in a general discussion, but that's just some of the things that I see when I read over the meeting minutes, and I would encourage everybody else to read the meeting minutes of the SSC, and also the Snapper Grouper Committee, out in the public, if you're not able to attend, because

the meeting minutes really tells the flow of the meeting and exactly what is discussed, and it would help you to understand, if you didn't. Thank you.

MS. MCCAWLEY: All right. Thank you for that discussion. I think we're going to turn it over to Jeff to give us the SSC's recommendations.

DR. BUCKEL: Thanks, Jessica, and good afternoon, everyone. The first part of the presentation is for the Snapper Grouper Committee, for scamp. Kyle just gave an excellent presentation to you, and we also got an excellent presentation from him during our January SSC meeting that I am going to report-out on, and so, again, just to reiterate, this is the SEDAR 68 OA, the scamp complex, and so scamp and yellowmouth.

The SSC reviewed this, and we agreed that the assessment appropriately addresses the terms of reference, is consistent with BSIA, is an adequate basis for determining stock status and supporting fishing level recommendations, and it used methods of addressing uncertainty that are consistent with expectations and available information, and I will go into a little bit of detail on some of these in the next slides.

All right, and so addressing the question of does the assessment provide a reliable quantitative estimate of current stock status, we agreed that it does. With regard to SSB over SSB MSY, the results were robust. As Kyle pointed out, 100 percent of the Monte Carlo Bootstrap Ensemble runs indicated an overfished status, and so very little uncertainty about that status. However, for the overfishing status, the F over FMSY, there was greater uncertainty. The base run indicates overfishing is not occurring in the recent three-year average, but approximately 30 percent of the MCBE runs estimated that overfishing was occurring, and, again, to reiterate that FMSY -- It assumes F 40 percent as the proxy for MSY.

Does the assessment reliably capture past trends in the fishery and population? The SSC agreed that it does. However, we did want to point out to you that the assessment results are strongly dependent on the fishery-independent index, and so that's pointed out on these two graphs at the bottom of the slide. The one on the left is F over F 40, plotted against year, and the one on the right is SSB over SSB F 40, plotted against year, and the black line, with the circles, is the base model, and so that's showing just what Kyle just showed before, that, you know, when you look at the F over F 40, overfishing is not occurring at the end, but you see the overfished status, with the black line.

When the SERFS index was removed, which is the red-dashed line, you get much different results, right, and so you get this underfishing, and so the F over F 40 drops very low, and, with that low fishing mortality, the model assumes that, you know, the biomass is going up, to where it's not overfished, and so it just points out how much the fishery-dependent trends drop out around 2010, and it's just the SERFS index is important to this, and so that's not necessarily a weakness, as the SERFS index is fishery-independent, and we have no reason to believe the index is not representative of trends in stock abundance.

MS. MCCAWLEY: Jeff, are you willing to take questions right now?

DR. BUCKEL: Yes, that's fine.

MR. STRELCHECK: I'm not sure if this is for you or Kyle, and I meant to ask Kyle when he was presenting, but the indices for commercial and headboat were truncated and ended, I don't know, a decade or more before the end of the time series, and so I'm just curious about why they ended, you know, when they did, and I assume there was reasons for that, and we don't have anything as a reliable index, at least in the more recent years.

DR. BUCKEL: That's correct. They ended around 2010, and that was because of regulations that came into place in both of those, and so, you know, I think another way to look at this is the folks that are here, that were involved with getting the SERFS index up and going, knowing that these fishery-dependent indices were going to be dropping out, because of regulations having improvements in that SERFS index, it shows how helpful it is here, right, and, without it, you're getting what we know, from other sources of information, are likely not a good indication of what's happening on the water.

The stock condition has worsened, and so low recruitment, declines in abundance, and declines in biomass, and those are just -- I pulled three slides out of the stock assessment report to show that, and so the top graph is showing recruitment on the Y-axis, versus year, and you can see those high recruitments, and then dropping around 2005, and then, when you get to 2010, you have this long string of low recruitment.

On the bottom-left is the trap video index of abundance, and so not estimates out of the model, or the circles are not estimates out of the model. This is empirical data, and then you see the model fit, the curved line to it, and so you can again see these higher levels of catch per unit effort and then, starting around 2005, the drop, and then lower levels after 2010, and the catch per unit effort in the trap video data. Then the bottom-right is estimates of biomass, by age, and so biomass on the Y-axis against year, and you can see the biomass dropping, starting around 2005, until the terminal year of the assessment.

Okay, and so what are factors that affect the reliability of the fishing level recommendations? The conclusion of the SSC was that the assessment provides a good basis to predict future conditions and support fishing level recommendations. However, the consistently low recruitment during the recent period, that 2010 to 2019, relative to mean recruitment for the full time series, results in substantial uncertainty and predictions of future recruitment and stock biomass.

The next three slides are addressing -- We were asked to address assessment uncertainties, and so I'm going to have three slides, one on high uncertainties, and then medium, and then low. For the uncertainties in the assessment that the SSC felt were high, those include MRIP discard estimates that have high CVs, and so there were quite a few of those, particularly in the recent decade or decade-and-a-half, and that required the assessment analyst to use a regression approach to get estimates of MRIP discards for those recent years and prior years, where the CVs were greater than 0.5.

As Kyle mentioned, this is not just scamp, and it's a complex of two species, and those two species may have different population trends and differences in key life history traits, and that could lead to biased assessment results. The last high assessment uncertainty is that recruitment in the two terminal years, and so 2020 and 2021, was not estimable by the model, and consistently low recruitment in the recent period raises questions about regime shift, that we talked about during

Kyle's presentation, and, as Kyle mentioned, that was not scored as such, based on a Klaer et al. paper that Kyle and the analysts went through.

Okay, and so the assessment uncertainties that we scored as a medium, those include MRIP landing estimates that had high CVs, where the CV was greater than 0.5, and there weren't as many of those years as for the discards, and these were replaced with the mean from the nearest two years. That's how that was handled. There were no commercial discard estimates in 2021, and that was approximated from 2019 and 2020, and then the assessment results are heavily reliant on the SERFS index. As I mentioned before, there is no additional information to support the rate of decline, and it's really that SERFS index.

The low-ranking uncertainties are natural mortality. Although the overfished status was robust to a broad range of M values, the overfishing status was sensitive to changes in natural mortality, and then the last bullet there is the overfishing status was determined by a predefined biological reference point, that 40 percent SPR, instead of a stock-recruitment curve used to estimate FMSY. The analysts provided justification for using this proxy, and that was based on a detailed review of scientific literature and considered the biology of scamp and yellowmouth grouper.

During the January meeting, I failed to get the SSC to go through our ABC Control Rule, but Chip was nice enough to do that, after our meeting, and then I sent that around to the SSC members, to get their thumbs-up or thumbs-down, and everyone gave it the thumbs-up, and so I will work through that on this slide.

First, one thing we did discuss, at the January webinar, was that we did agree that the OFL be based on the F equal F 40 percent SPR, and we felt that Kyle, and the analysts, provided good justification for the F 40 percent SPR. Then the ABC Control Rule, working through the tiers, Tier 1, it was 2.5 percent, because the MSY proxy was used. Tier 2, it was 2.5 percent, because uncertainty was carried forward in the projections, but environmental conditions were not explicitly included. For Tier 3, that got a 5 percent score, because the stock is overfished, but not undergoing overfishing, and then Tier 4 was a 10 percent, given the productivity vulnerability of the scamp complex. That ends up with a total adjustment to the OFL of 20 percent and a P* equal to 30 percent, and, subtracting that from one, you have a recommended P rebuild of 70 percent.

In terms of catch level recommendations, catch level recommendations associated with that P rebuild will be provided once a rebuilding schedule is selected. The SSC had a catch levels workgroup that worked through several papers, and, because we had this issue of what recruitment to use, either long-term average or recent recruitment in prior assessments, we based the recommendations for projections on that catch levels workgroup recommendation, which are that the rebuilding schedule should be based on long-term recruitment patterns, but near-term ABC should be determined using recent recruitment estimates, but there was a lot of discussion about this, given, you know, with the scamp complex, the long-term low recruitment that we see.

I know the Science Center is looking at some other recruitment scenarios, and so stay tuned on that, and we'll get a presentation of projections that Kyle mentioned, and potentially some other recruitment scenarios, and so those will be presented to the SSC in April, and then we'll report those to you in June.

Kyle spent quite a bit of time of this, but, just to reiterate, this is the projections that were presented to us, and three of these were presented at the January webinar, and then one of these was asked for by an SSC member, and Kyle was quick, and was able to provide that during the January webinar for us, and so these are the projected spawning stock biomass, on the Y-axis, versus year, and the horizontal line shows the SSB at F 40 percent, and so those two top lines, the blue and the purple, show the projected spawning stock biomass under long-term recruitment. The difference there, as Kyle mentioned, is one is the F current and one is F zero, but both of those with long-term recruitment that would rebuild the stock relatively quickly, but there is the effect of the fishing.

Then Kyle presented the green projection, which would be the F current and recent recruitment, but, as I mentioned, one of the members wanted to see, well, what if we drop -- If we use that recent recruitment, but drop fishing to F zero, and just to see if there's any -- Under that low-recruitment situation, if you projected that forward, the recent recruitment, if there was no fishing, would there be a response, and there is. You do see some rebuilding, and it doesn't reach SSB F 40, but it does show that there is potential for the stock to increase its reproductive potential, under that F equals zero scenario, mainly through expansion of the age structure, despite that low recent recruitment. That would speed the -- It would increase the speed of recovery.

We don't know where we're going to go with recruitment with the scamp complex, and so it's important that we have some kind of interim analysis, or other method, like the trap video index, for checking on this stock complex's health, and that's going to be important to determine if recruitment returns to the long-term average and if the rebuilding schedule is on track, as well as to further evaluate the potential that a regime shift has occurred, and a nice thing that Kyle, and the analyst team, provided was this graph on the bottom, which is showing the survey predictions, and so the trap video survey predictions.

The black is the past estimates of catch per unit effort, and then the blue is what you would expect to get from the CVID, or the trap video, catch per unit effort, under one of the projections that Kyle ran, and so the nice thing about this is you can take these predictions of the trap video and compare them to what the true catch per unit effort in the future, from the trap video, and see if we're on track or not, and so that's a really nice thing that the analysts provided and will be useful moving forward.

The SSC was also asked to review the research recommendations in the stock assessment report and indicate those most likely to reduce risk and uncertainty in the next assessment. We reviewed those, and we didn't find any need to prioritize, you know, that one was going to help over the other, and so our conclusion was that all research recommendations appear likely to reduce risk and uncertainty in the next assessment.

We were also asked to provide additional research recommendations to improve future assessments, and we provide two here. Investigate methods to increase precision, and so lower the CV, of the MRIP discard estimates, and some of your earlier discussion about the permits would potentially help with this, and then the second bullet there is explore additional means of estimating recruitment, instead of mean recruitment or a stock-recruit curve.

We were also asked to provide guidance on the next assessment of scamp and yellowmouth, and those include incorporating findings from the trap video selectivity study, and so there's a study

happening now to estimate size selectivity with that gear, and so that would be useful for this assessment. South Carolina DNR is doing reproductive work on scamp, and so the results from that reproductive study for females could potentially be used in the next assessment.

In terms of timing, the SSC didn't see any need to rush, in three years, to get the next assessment, and so a minimum of five years, but, even then, the recommendation was to examine the trap video index, landings, or discards, to determine if substantial changes have occurred to inform if a new assessment is warranted, and then the recommendation was for an operational assessment, and I think that's the last slide for snapper grouper. Thanks, Chip. I would be happy to answer any questions.

MS. MCCAWLEY: All right. Hands are already up. Thanks for the presentation. Laurilee.

MS. THOMPSON: So you kept referring to the trap video study, and, in the public comment for this, one of the commenters brought up the concept of divers with GoPros being able to collect video for use in the assessments, and would that -- I mean, that could be pretty easily done, I would think. They can collect video and email it to you, and would that help? You know, I know you've got your trap survey in one place, but the divers are moving around, and they could certainly cover a lot more bottom, and areas, than trying to move traps and video cameras around, and what do you think about that concept? I don't know if that's a John question or --

DR. BUCKEL: Go ahead, John.

DR. WALTER: We do have a diver-based survey, our reef visual survey, that is focused on the Florida Keys. However, it's depth limited, in the depths that divers can usually cover, and so most of our South Atlantic reef fish that are outside of the Keys are in deeper waters, or waters that make a diver-based survey challenging, and so I would say, yes, it's possible, but it's not going to cover a lot of the depth that the current trap video survey covers, and I think the trap video survey is pretty comprehensive in being able to cover a lot of the depth, and then, what it doesn't get now, we have a longline survey for the deeper-reef-associated species, and so it seems like that's the portfolio of fishery-independent surveys that we're converging on that we've got long time series for or are beginning to build long time series for. Thanks.

MS. BYRD: Just to that point, Laurilee, we have a citizen science project that's just getting underway called SMILE, and that's doing exactly that. It's working with a non-profit organization called REEF, which has been doing -- Working with recreational divers to collect citizen science data, and so the SMILE project is working with them and SECOORA to develop kind of a handheld stereo camera, so that can record video and get lengths of fish and some of the species, and so this kind of initial pilot project is developing a handheld stereo camera and then pilot testing it down in the Florida Keys.

MS. THOMPSON: So the GoPro would not be efficient at estimating sizes, and it could just estimate abundance then?

MS. BYRD: So what they're trying to do is the stereo camera will have -- They are working on the technology now, but lasers, to help kind of get the size of the fish, and then the REEF divers also collect relative abundance data, and so they're be able to pair that relative abundance data

with the length data, and so a GoPro, without anything else in it, won't be able to give you that kind of size, and so that's what they're working on for this project.

MS. MCCAWLEY: All right. Other questions? Judy.

MS. HELMEY: Thank you very much for the presentation. Would you mind explaining to me again what a biased assessment is? Did you say something about a biased assessment?

DR. BUCKEL: I think that was in one of the early slides, Chip, in reference to that this was a -- The high uncertainty, and so it's a two-species complex, right, because of not being able to separate scamp and yellowmouth, and so, if one of those was say trending upward, and the other was trending down, and you saw that things are stable, because, right, they're heading in opposite directions, then that would be a biased assessment for those two species, because it's not stable. One is going up and one is going down, and so that's what I meant by that. Does that --

MS. HELMEY: Thank you.

DR. BUCKEL: You're welcome.

MS. MCCAWLEY: Tim.

MR. GRINER: Thank you. Jeff, could you go back, or maybe just help me, because I wasn't around then, to understand why in -- What happened in 2010 that we stopped using fishery-dependent data, and so, if I'm understanding right, there is no fishery-dependent data in the assessment at all, and is that correct?

DR. BUCKEL: No, that's not correct. There were three indices of abundance, headboat, recreational, and the SERFS, and it's just that the headboat and the recreational drop out. If you look at the plot that Chip just pulled up, and I can't see the year, and I think it's 2009 for one and 2010 for the other, if I remember --

DR. COLLIER: 2010 for both.

DR. BUCKEL: 2010 for both. Okay. Thanks, Chip. That's because of regulations that went into place that then you can't -- You know, the catch per unit effort would be impacted by the regulations, and so then you have to only look at the catch per unit effort from those fishery-dependent indices when the regulations were consistent, and Chip can chime-in if he knows the exact regulations that went into place.

DR. COLLIER: So there were a couple of things that were going on right then. One is the ACLs were going into place, and so closed seasons could go into effect, but, also, that was when it shifted from a two-month grouper closure, for some species, to a four-month shallow-water grouper closure, and that includes scamp.

MR. GRINER: Thank you.

MS. MCCAWLEY: Spud.

MR. WOODWARD: Just a curiosity question, and do we know if these two species interbreed with each other? I guess that would be a no.

DR. COLLIER: Kyle might be able to answer this, but I felt like that, when they talked about it in the very beginning of the stock assessment, there was indication that there was not mixing among the two stocks, and they were definitely independent species.

MR. WOODWARD: I had to ask.

DR. SHERTZER: I think that was discussed at the stock ID workshop, and I think Chip is correct that that was the conclusion at the time, but, if there's any writeup of that, it would be in the stock ID work.

MS. MCCAWLEY: Any more questions? Trish.

MS. MURPHEY: So, in combining both species, was there a breakout of what percentage were scamp and what percentage were yellowmouth? I was just kind of wondering if one species or the other may have driven the results.

DR. BUCKEL: Kyle can give you the exact number, but, in my recollection, it was a very, very small percentage was yellowmouth, when they have the identification, but, Kyle, please feel free to jump in.

DR. SHERTZER: Yes, that's correct. It's a high proportion of scamp, but keep in mind that that includes the potential for misidentification in those estimates, but it is believed that it's predominantly scamp.

MS. MCCAWLEY: Any other questions? All right. I'm going to turn it over to Chip. Judy.

MS. HELMEY: I wanted to say that -- We were talking about -- I just wanted to go on the record that, in 2010, for me, red snapper closed, and Loran was cut off. That was when it all happened.

DR. COLLIER: All right. Unfortunately, I can't get the slideshow to come up like I wanted to, and so we'll just go with it in this view. Continuing on from what was just talked about from the SSC, as well as from the analysts, we do have current information that has been approved and is in the FMP for this species, or for these two species, and so the MSA requirements are required, as part of the SFA back in 1996, and so some of these are very old proxies.

The current proxy that is for scamp and yellowmouth is a 30 percent SPR proxy, and so I will talk about what's going to be needed in order to change that, but, if you look at a lot of the information that's currently included in the FMP, MSY is unknown, BMSY is unknown, maximum fishing mortality threshold is unknown, and so it's great that we're getting the stock assessment, and it's just going to take some changes, in order for the council to get this incorporated into management.

Some of the information that we do have is the optimum yield is set equal to ABC/ACL for this species, and the OFL is unknown. The acceptable biological catch, the ABC, we have one for scamp by itself. For yellowmouth grouper, the current estimates of catch for that species is

included with the shallow-water groupers, and so that total is provided there for you, as well as the ACL for that species, and it's included in the complex.

What is the council going to have to do, following this operational assessment, and it is a little bit different, and so we wanted to, as staff, provide you some guidance on what we're seeing that has to be done, and the first one is to consider the aggregation of scamp and yellowmouth grouper catch. The current ABCs and ACLs are not combined with each other, and they are mixed actually with other species, and, also, the resulting catch levels provide landings and discards combined, and, currently, what we have for scamp and yellowmouth grouper are ABCs and ACLs set on landings only, and, like Jeff said, there is some highly uncertain landings in there, and PSEs are greater than 50 percent in some years, and so they used the mean of the surrounding years, or the average of the surrounding years. If there were not surrounding years, it was the two nearest years.

Then, also, there were some -- The discards are highly uncertain, and in most years the discards were highly uncertain, and so they had to use a regression analysis, in order to estimate the discards, and it's not an annual point estimate, like you guys usually get from the MRIP data.

Some of the related actions to incorporate catch level recommendations that will be needed is we'll need to develop a new scamp/yellowmouth grouper complex, and, in order to do that, you're also going to have to remove yellowmouth from the shallow-water grouper complex. Next, you all will need to consider the SPR proxy included in the assessment and recommended by the SSC. This will need to be considered -- In order to incorporate this into management, you will have to change your current SPR proxy to this new one, if that is what is wanted by the council, and then, finally, you're going to have to develop a list of items here, and so we have the MSY, the MFMT, the SSB MSY, MSST, as well as the OY for the complex, and then, finally, create the OFL, ABC, and the ACLs recommended by the SSC.

It's going to be a lot of work in this assessment, and it's a little bit different than most, and then I have the start of filling out the information that could be included in the next amendment for this, based on the results of SEDAR 68, and so you can see here that we have the SPR at 30 percent, but will need the SPR at 30 percent, in order to do a comparison of the alternatives, because that is your current one, and that is currently in the FMP.

This is a busy slide for you guys, and, unfortunately, I did have it animated, and so there's two different ways to deal with the landings and discards for this one. Our typical approach, or the council's typical approach, is to have the ABC split into landings and discards, and then, if you look at the slide below, or the pie below, it's this one all the way on the left. You will have your landings and discards in some proportion, and that will provide you an ABC. The pie down below is not representative of what's going on in scamp, and this is just for example, and I wanted to make it larger enough where you could see the difference between these two.

The next step, the total ACL is reduced or equal to the landings ABC, and so what you're looking at next is you're just looking at a landings ACL, and then the typical approach is to allocate from there, and landings and the ACL are allocated into the sectors, and then you can see I have, in blue, the commercial allocation, and in gray is the recreational allocation,

Now, taking the other approach to this, you could actually do the allocation before the discards are split out, and so what we have here is the total ABC that includes landings and discards, and then

you do your allocation into commercial and recreational, represented here, and that would include all the landings and discards for that sector, and you would split, amongst the two different sectors, the landings and discards, to get what the landings ACL would be, and so I'm not saying that the council has to do this right now, and I would recommend that you guys not do it right now, and we don't need to get into that, because we don't have all the values for it, but I'm just saying, at the June council meeting, it would probably be good to have a firm setting on where you want to go with it, and that way -- I have a feeling that we're going to have to tier from this, in order to deal with all the actions that will be included in this amendment. The next steps, the first one is consider directing staff to begin an amendment for scamp and yellowmouth, and then the other one is to get the SSC to provide ABCs for both MSY proxies. Any questions for me?

MS. MCCAWLEY: Tim.

MR. GRINER: Going back to the setting the sector ACL from the ABC, and looking at, you know, this other approach, I'm pretty sure that's how they do it in the Mid-Atlantic, with their species, and why would we not want to do that right now? I mean, you said wait, and I understand waiting, but why would we not want to approach all of our species in that manner?

DR. COLLIER: It's your decision, and so you can do it. Typically, one of the reasons that it is done like that is because, when the assessment is provided to you, it's usually broken out into landings and discards, and so that split has already been done, and the reason for doing it that way is it's just tracking how the landings and discards had historically been kind of proportional to each other, in order to estimate a landings stream.

MR. GRINER: So, as a council, do we request that the SSC, going forward, give us the information in that way?

DR. COLLIER: Yes, that can be a request.

MR. GRINER: I say request it.

MS. MCCAWLEY: Carolyn.

DR. BELCHER: Chip, just because I'm not in current command of what species are where, you talked about yellowmouth being broken out of a complex, and what other species are in that complex?

DR. COLLIER: It's a lot of the hinds, and so that's coney, graysby, rock hind, red hind, and -- Monica.

MS. SMIT-BRUNELLO: I've got it in front of me, because I was looking at the regulations, and so it's in the other shallow-water grouper complex, and it's combined to red hind, rock hind, yellowmouth grouper, yellowfin grouper, coney, and graysby.

DR. BELCHER: The only reason I'm asking is because we've said that we would like to look holistically at our fishery, moving forward, and is this something that we should talk about? I'm just trying to think -- Again, if we just kind of keep chewing away at this, it seems like we get

farther and farther afield of actually coming back and trying to do something holistically on the fishery.

DR. COLLIER: One of the issues with this is the current ACL for the other shallow-water grouper species is in CHTS units, and so we would have to go back in and update --

MS. MCCAWLEY: Monica.

MS. SMIT-BRUNELLO: Chip, maybe it's to that point, and I don't know, but I was going to say that we probably need an action that will -- Once you pull yellowmouth grouper out of that complex, we're going to have to figure out what's left of the complex, right, and what that amount is, and so you'll probably need an action that respecifies what's left, and we can figure that out going forward, but I think we should keep that in mind.

DR. COLLIER: This is similar to what was done with blueline tilefish, when that was taken out of the deepwater complex.

MR. CARMICHAEL: The two options that Chip has up here on this slide, there's pretty significant differences there, and it's a big deviation in how we've done business, certainly in the last twenty years under SEDAR, you know, and what has happened is we've always treated this as the council works within the landed fish, you know, the fish that are brought in and harvested, and you establish the allocations based on that, you know, and you've not typically looked at discards.

When we took the historical periods and came up with allocations, most of those are based on what was the landings. When we've done the unassessed stocks, we've looked at the landings, and a lot of that was because of concerns that have been expressed since then, and continue today, about reliability of the discard information, inconsistencies, potentially, and discard estimates and where they're available for the different sectors within our fisheries, but it is true that a lot of other councils do tend to estimate, from assessments, the yield of the population, and then the managers, you know, allocate that and look at that by sector and then apply their knowledge about what the discards have been and what they think the discards may be, going into the future, if you do management changes that impact discards.

We've always sort of let the discards roll, and we've made like projections of a different F, and the assumption is the assessments is that F and discards are kind of linked, and, if you did something to reduce harvest, and directed F, then, you know, discards came along for the ride. We kind of know, and have known since the first day that was done, and questions were raised about that in the SSC twenty years ago, that, you know, discards and landings don't operate in lockstep like that, and, a lot of times, actions that you take as a council to reduce directed harvest in a multispecies fishery could very well lead to increased discards in that species, because of the regulations that you're doing, because people are fishing.

I mean, I think we can absolutely do this information, but just be prepared, in terms of going there, that we're probably going to have to look at our basis for allocations, and our historic information, and change the information that we've brought into it, if we want to allocate the yield, and then back our discards on a sector-by-sector basis, and that may very well be a better way to go. It does tend to bring more attention to the differences in discards between sectors, and it may mean that

we will need -- Like you're going to consider assessed stocks versus unassessed stocks. If you wanted to do this for unassessed stocks, we would have to look at discard estimates for those, which we don't have, you know, particularly for the commercial, from the discard logbook. You know, we have it for MRIP, across-the-board, but, for other sectors, we may not.

You know, we can certainly request this, and we're seeing this come up more and more, and I think, you know, we're going to hear some more about gag, and what the Science Center has looked at with that, but I think we are seeing, even from the agency perspective, more of a look at the discards, and certainly a questioning of this longstanding assumption that we've had that discards were just accounted for in the assessment, and you just focused on the directed fishery harvest, and the discards would follow along, and so there's a lot going on here, and it's probably a good move, in terms of our robustness and our ability to understand why maybe management actions don't do what you hope that they would do, but it may create quite a bit of work, and you may see more changes coming, through say management plans and such, as we do this.

MR. GRINER: Thank you for that explanation, but I do think that we need to go through this, to do it, because, quite frankly, discards are one of our biggest issues right now, and so I really think that, you know, in order to get our arms around what's really happening, and the relationship between the landings and the discards, that this is very valuable information and a great approach to do it. Thank you.

MR. CARMICHAEL: I totally agree.

MS. MCCAWLEY: John.

DR. WALTER: Chip, I was hoping your animation worked, because I think you worked really hard on those pie charts, and I think it illustrates it really well, and I think that we can give that advice on our projections and actually separate the -- Give the combined ACL in both landings and discards, and I think it does clarify where the action needs to be, and so I think that is going to be really helpful for this council and for everyone to see, okay, where can management work on these, and then potentially where are the benefits of converting those discards into potentially landed catch, and so we're happy to be able to help do that, and I think scamp is a good example of this, and so I think, the further we can take these projections and help make this process a little clearer, as scamp goes through the rulemaking process, I think it will help with that, and so I think this is a great example to use. Thanks.

MS. MCCAWLEY: Any other questions? All right. Do we want to provide direction to staff to begin an amendment? I see heads nodding yes. Tim.

MR. GRINER: Would it not make more sense to wait to direct staff to start an amendment until we've heard from the SSC?

DR. COLLIER: So you did hear from the SSC, in regard to some of the issues with scamp, and so we can start building the framework of what's going to be in the amendment, starting to frontload this, and then we can place in the values, once we get them from the SSC in April.

MR. GRINER: Thank you.

DR. COLLIER: Now, going into the overview, this is what we've been doing for the past few years, in regards to when you guys get a stock assessment or something is going on significantly different in management, and we typically try to provide you some background information on what's going on in the fishery, and what we've been doing, in order to -- Realizing that it's very difficult to remember what meeting you guys actually talked a species, and therefore where the fishery overview might be, Nick has been gracious enough to start posting these on the regulations page, where we have other information for individual species, and so, for this one, we do have the fishery overview.

It's going to be on the regulations page for both scamp and yellowmouth, because we combined the data as well, and so you just click on the fishery overview, and it's going to be that Shiny app that you've seen for a variety of other species, where we have the welcome page that lists a variety of information that's included, and you can -- If you're wondering exactly where we got the information, or what it's based on, we provide some of the information on that introductory slide, and then, if you're looking on some of the management history, we do provide that in the history of management. This is focused on either all species or scamp-related management actions.

We also have a fishery performance report, where the Snapper Grouper AP talked about scamp in their October 2019 meeting, and so you'll probably hear some of those same tones of what Kyle gave, a very negative picture for scamp grouper. There weren't too many positives in that fishery performance report.

Then we also have the graphs, and so, if you want to see some of the assessment outputs, we do include those. They're not as nice as Kyle's, but it does give the general information provided there, and we do have the fishing mortality rate, and, once again, as Kyle had mentioned, it's not overfishing, but it is overfished, and you can see the current biomass relative to the MSST, as well as the SSB MSY of 40 percent.

Then we have the phase plots. If you're in yellow, it's not horrible, but, for this stock, it is not overfished, and overfishing is not occurring. These are the recent time periods, and then you can follow it back through time, and, as has been talked about quite a bit, it's just this overall reduction in recruitment, through the long time series, and we do provide the indices of abundance that were used in the stock assessment, and they are just recreated here.

Getting into the fishery data, or going into the projections, we do have a couple other projections that they have provided, and I will add the additional ones in there, and so one of the big things to notice is where the current landings are, and this includes landings and discards, relative to what the projections were estimating and where things need to go. It's not a very big change in the first few years, and, in actuality, if we were lucky enough to get back to average recruitment, catches would go up pretty quickly, or, if we're going to with recent recruitment, catches stay fairly low, to around where they are right now, and so I will update that in the coming months, as we get more information on the projections.

We do provide information on both the sectors combined, and you can look at how the landings break out by state, and Florida and Georgia are lumped together, due to confidentiality issues, but you can see a lot of the landings come from South Carolina. There is one year with very high landings in Florida, and then, in the early part of the time series, there was substantial landings in North Carolina, but all three states are showing declines in scamp landings.

Breaking out the commercial and recreational, as Kyle had mentioned, a lot of the catch is coming from the commercial fishery, and that's displayed here, where you can see the commercial catches in gray and the recreational catches in blue, and then the timing of landings. As I had mentioned, in 2009, that's when the regulations for a four-month closure came in for scamp grouper, and you can see that catches drop out once that occurs, and you also see these very high landings in 2014 in the recreational sector. The other thing to notice is, over time, from 2000 all the way up to 2021, you're just seeing a consistent decrease in the overall landings in both sectors.

I'm not going to go into the landings, and we've talked about those quite a bit, and you can look at -- This is a little bit more detail on commercial only, and we provided it in waves, and the reason that I provided it in waves is the ability to combine it in the previous group, and it just reduces the amount of work, and, also, it reduces the potential for confidentiality issues in the commercial fishery, and you can see the commercial landings by state, and then this is a new feature that we added in this time.

We do have a red dash on there that indicates the approximate size limit for a species. Scamp, if you've ever tried to measure one, has a filament on their tail that varies for the individual, and so most of the fish are measured in fork length, and that's what I have provided here, and so it's fork length, and the dashed line indicates a relative estimate of the size limit, and what you can see is a lot of the catch is right there on the minimum size limit, but there is, overall, a fairly good distribution of the size of the fish through time, but you're just seeing an overall abundance decrease.

Then, looking at what pounds were caught on a trip, for the most part, in the early 2000s, or 2011 to 2014, you can see some really high landings, and they had greater than 900 pounds on a trip, but, as you get to 2016 and beyond, you're seeing very few trips, or very pounds coming in on trips with greater than 900 pounds, and this is following -- If you go down below, that's looking at the number of trips that had greater than 900 pounds, and you're just seeing that drop out, and you're seeing an increase in the number of trips with less than 100 pounds of scamp, even without a change in the trip limit.

Recreational sector, we do have landings and discards for this, and you can see, over time, it was increasing, all the way up to around 2005, and then it started decreasing. You also see an increase in the number of releases in 2009, and then it decreased, and there was a sharp decrease. It's fairly uncommon to have scamp releases, and usually you catch over a twenty-inch scamp, and that's fairly common. Smaller fish seem to be very hard to catch, and, in fact, the name scamp comes from that they're bait stealers, and that's why they got the name "scamp", and so they are difficult to catch, and they were named as such, back in the day.

Looking at the seasonality of landings, you can see, generally, the recreational landings are in the warmer months, and that's also when scamp begin to spawn. They spawn later in the year, and I believe it's May to July for the species, are the common spawning months. Recreational landings by state, once again, it drops out around 2006, with the exception of the one estimate in Florida of very high landings in 2014.

There is very few observations for lengths in the MRIP sample, and we do have landings here, or the estimate of landings, by size, provided from 2010 to 2021, and most of the sizes, or most of the length, is coming from the recreational fishery, and it's a very wide size distribution here.

Going into the number of fish caught per angler, and so this is looking at the number of fish, and it's grouped into two different time blocks, due to the low sample size. We have 2010 to 2016 and then 2017 to 2021, trying to get you the most information that we could and trying to aggregate it into something that made sense, and what you can see, from 2010 to 2016, is the dominant, or the modal, size, or the modal catch, was only one fish per angler, but, even in the more recent time period, you're seeing less than one fish per angler, and so that means, if you had six people on the boat, maybe you only caught three scamp, and so you're not even getting -- They're not getting to the one fish per angler for that, and, in order to give you guys a little bit more information, I also did a per vessel, number of scamp per vessel, and that is provided in the 2010 to 2016 data and then the 2017 to 2021.

The most common number of scamp, or yellowmouth, per trip is around three fish per trip, from 2010 to 2016, and it really drops out to less than two fish per trip, with in fact one fish per trip being the most common. There is one point that you see out here, in gray, and that was a charter boat, where they had seven fish per trip, and that was a single intercept, and it seemed very different than most of the data that I was seeing, and we also have the biology of the fish.

One very interesting thing, with scamp, is the life history of them, and they're an interesting fish, where they begin spawning at a size of around twelve inches, and the minimum size limit is at twenty inches, and they get up to around thirty inches, the average maximum size, and so it's very uncommon for a fish to start spawning at about a third of their maximum size, as opposed to 75 percent of the maximum size, where a lot of fish begin spawning, and so it is interesting behavior, and that's all that I was going to point out for the life history, and we do have the length, or the weight at length, and we have the maturity, as well as the growth, and so all of that information is there, as you're digging through and thinking through about scamp and wanting to know any details, and this is the fishery overview, and so please let me know if you have any questions.

MS. MCCAWLEY: Laurilee.

MS. THOMPSON: Do you know what that outrageous increase in recreational landings happened in 2014? I mean, that doesn't even seen realistic.

DR. COLLIER: I didn't look into details, and I was busy trying to get it done. I can look that up for you and get your more information on that single point, but it's likely just a single point, but let me check on that and get back to you.

MS. MCCAWLEY: Any other questions? Dewey.

MR. HEMILRIGHT: I just want to thank you for this Shiny app stuff. It's pretty informative, and it's easy to go back over and look at some stuff, and so it's very helpful, when you look at things, to be able to go to different species and just get an idea of what's happening over time, and so I appreciate it. Thank you.

MS. MCCAWLEY: Anything else? Thank you, Chip. All right. I'm going to pass it back to our chair to close out our day here.

DR. BELCHER: Okay. Just because we're going into Amendment 53, which, obviously, we've got five minutes to five, and, rather than go so far and watch everybody crash and then have to pick it up back, I figure we'll spare Allie having to re-go through everything in the morning, and so we're going to go ahead and recess for now, and I will talk about hospitality off-mic.

(Whereupon, the meeting recessed on March 7, 2023.)

MARCH 8, 2023

WEDNESDAY MORNING SESSION

The Snapper Grouper Committee of the South Atlantic Fishery Management Council reconvened at the Westin Jekyll Island, Jekyll Island, Georgia, on Wednesday, March 8, 2023, and was called to order by Chairman Jessica McCawley.

MS. MCCAWLEY: All right. We're going to get started. First up this morning is we are going to go into the gag and black amendment, and that's Amendment 53, and I am going to pass it over to Allie.

MS. IBERLE: All right, and so we held public comments for this amendment January 10 and 11, and so I'm going to start on the public comment summary, and we can jump back to this document as we go through the decision document, but I thought this would be easier to review separately, and so I'm not going to go through these tables in a lot of detail. This kind of gives you the breakdown of commenters, and then I'm going to switch to the comments and how they apply to the actions.

We had some comments requesting to retain the current 51 commercial and 49 recreational allocation percentage, noting that reducing the commercial allocation would disproportionately affect North Carolina fishermen, and so that's applicable to Action 3. We had comments that the commercial trip limit should be low enough to allow for the longest season, and so keep the commercial season length the same as well, and that kind of has more to do with regards to the spawning season closure, and so this commenter didn't want the spawning season closure extended, which currently isn't an action, and that was removed from this, but kind of still applicable to the commercial trip limit.

We had a comment recommending a one-gag-per-person-per-vessel with a six-fish max vessel limit, and, again, this is applicable to gag, and so that's Sub-Action 5a, and then, in terms of additional suggestions here, one commenter noted that the snapper grouper two-for-one limited entry should be removed, and we had a note that a commenter thought that the six-dollar-per-pound ex-vessel price was too low and that an eight was more realistic, and we had multiple

comments received saying that sharks and red snapper are the reason behind the decline in gag grouper and that they have concerns that those two players would hinder rebuilding.

We had some talk about creating a gag stocking program and habitat improvement, and so additional offshore artificial reefs, and then we did have some conversation about trust issues between the government and fishermen and how this is a pervasive problem with the snapper grouper fishery, and so kind of something that we've heard before, but, below this kind of bulleted list, you have your verbatim comments, and then, at the top of this document, you have a link here to access those comments, and so I kind of went through that a little quick, and that was a short-and-sweet summary of all of those comments, and so, before I jump into the decision document, is there any questions on the public comment?

MS. MCCAWLEY: Any questions about what was heard during public comment, or that document? I am looking around the room, just to make sure. Judy.

MS. HELMEY: I kind of agree with the person that was talking about the sharks and red snapper would make -- We have so many of the sharks, and so many red snapper, it is going to kind of slow the recovery of the gag, and I do notice that I am not catching a lot of gags anymore, and that was one of my specialties, because I am catching more red snapper, due to the fact that they're taking over the ledges where these snapper usually stay. Thank you.

MS. MCCAWLEY: Thank you, Judy. Kerry.

MS. MARHEFKA: Just to back them up, eight is a better number for the ex-vessel value of gag grouper, and, if a boat is taking six now, they're getting hosed.

MS. MCCAWLEY: Anything else? I don't see any more hands. All right. We're going to go into the decision document.

MS. IBERLE: All right, and so you guys have seen this decision document a number of times, and I'm not going to spend too much time on stuff that we've already gone over, and so I'm going to switch to our objectives for this meeting, and so we reviewed public comment, and we just went through Attachment 5c, and, again, there's a link there to read those comments.

We can go through and review the actions, just highlight your preferreds again, and then we're going to go through your draft rationale and just make sure that we've got everything summarized, and so what you'll be seeing is a bulleted list, and the full draft rationale is in the amendment document, which is included in your briefing book, and I've got the attachment number and sections in this decision document, so it makes it easy to flip back and forth. Then, at the end, we'll have an opportunity for the council to approve all actions and then approve the amendment for formal review.

The timeline, we're not going to spend too much time on this, because we're at the end of our timeline here, and so we conducted those hearings, and then you will have the opportunity to approve all actions and approve for formal review. At the last meeting, we had some clarifications to the purpose and need, and again, we're not going to spend too much time on this, noting the modifications that you made, but all of those changes have been made, and then we'll review them as we go.

At Full Council at the last meeting, we talked about clarifying and making sure that the purpose and need wasn't fuzzy in any way, and so the purpose of this amendment is to establish a rebuilding, revise the acceptable biological catch, annual catch limits, and sector allocations for South Atlantic gag based on the results of the most recent stock assessment. This plan amendment would also make modifications to management measures for South Atlantic gag and black grouper and recreational accountability measures for South Atlantic gag, and so that was the modification that we made, was making sure that it was clear that the accountability measures are not being modified for gag grouper, and so, because it was a decent change, I do have a draft motion here to approve these changes to the purpose and need, just to make sure this is kind of set in stone before we go final.

MS. MCCAWLEY: All right. I hope that folks are checking out the purpose and need statements. Since we're at the final stop here, we would need a motion to approve these statements as modified. Spud.

MR. WOODWARD: **Madam Chair, I will make that motion to approve the purpose and need as modified.**

MS. MCCAWLEY: All right. Motion by Spud, and it's seconded by Mel. Any more discussion on the purpose and need? I'm just making sure that people have time to review it and read it. **Any objection to this motion?** All right. **Seeing none, that motion carries.**

MS. IBERLE: All right. That moves us into the actions for this amendment, and so Action 1 establishes the rebuilding plan for gag, and we have the non-viable Alternative 1, Alternative 2, which is that shortest time of seven years, and then your current preferred, which establishes a ten-year rebuilding plan. I am not going to go over the effects summary for this action. Nothing much has changed, and the summary is available here, and the full effects summary is available in your amendment, and so I'm going to switch to the draft rationale.

The full amendment is Attachment 6a, and this draft rationale, the full rationale, is in Chapter 5, Section 5.1.5, and so I'll summarize it for you. The council recognizes that the South Atlantic stock has been experiencing overfishing and is overfished, and the preferred rebuilding timeframe was selected to reduce the severity of the rebuilding plan, the requirement measures, and, thus, resulting in fewer short-term negative social and economic effects. Then the council is also discussing management measures that would address measures with the snapper grouper fishery as a whole, and so that's a really short summary for the rationale for this action, but, at this point, I'm going to turn over and have any more discussion on anything that you feel might be missing from this rationale or any modifications.

MS. MCCAWLEY: Andy and then Laurilee.

MR. STRELCHECK: I am going to actually turn the mic to John Walter, and so one of the things we wanted to raise -- I had mentioned to you that, before final action, there's a scientific review of all the amendments, and these rebuilding plans, or the preferred rebuilding plan, is based on achieving a 70 percent probability of rebuilding, but, like red snapper, that's contingent on reducing discards, and, for gag grouper, we don't really have any actions in here that would substantially reduce discards, and so what the center has done has kind of looked at this in terms

of whether we would still meet the mandates of Magnuson in achieving at least a minimum 50 percent probability of rebuilding and whether, if not reducing discards, we would end overfishing, based on the projections, and so I will let John speak more to that.

DR. WALTER: I think we're beginning to come to a realization that the projections implicitly assume a commensurate reduction in discards, and, without an action that does that, then that won't be achieved, and the rebuilding, the 70 percent probability of rebuilding, won't be achieved. It happens that -- That was a real problem with red snapper, where it would not ending overfishing, as we've stated.

However, for gag, it looks like there's still going to be about a 50 percent probability of rebuilding, even if discards are not reduced commensurate with the landings, and so, in that case, it would still have a greater than 50 percent probability of rebuilding, but it's unlikely to achieve the 70 percent probability, and so where -- That is in our letter that we responded back, noting that, that it's not likely to get the 70 percent, which was the assumption in the recommendation from the SSC, and the council can then choose how they -- How you would want to deal with that, and there are some other alternatives that would allow for higher probabilities of rebuilding, because they take a lower fraction of, I think, the OFL, or of some of the alternatives, and so the council could consider that, if they wanted to achieve a higher probability of rebuilding.

MS. MCCAWLEY: Go ahead, Andy.

MR. STRELCHECK: Just in follow-up to that, I think, when we get into Action 2, I will want to talk about Action 1 alternatives, but, with Action 1, and the actual amendment itself, we'll want to build-in some language, and information, with regard to the probability of rebuilding, given this information, and so we can share that with council staff and work to make sure that rationale is in there.

MS. MCCAWLEY: Thank you. Laurilee, you hand your hand up?

MS. THOMPSON: Yes, and, in our actions to try to help the gag, we never really talk much about how the percentage of males in the population keeps going down, and I don't know if this is the right place, but would an additional action to change the minimum size limit, and increase the minimum size limit, assist more males being into the population? I was glad to see that there's some consideration being done about doing some surveys in the estuaries, you know, to look for juvenile gag, because I think that's where a lot of the problem is, or at least half the problem, but would increasing the minimum size limit help more males survive in the population, although it would probably increase discards?

MS. MCCAWLEY: Let me say this, and so here we are at final action. We do have a timeline here that we're trying to address, and there are a number of things, like what Laurilee is mentioning, that we could dive into, but I don't know that trying to add it to this document, at this point, is going to be beneficial, based on our timeline, and I believe that the letter that we received from the service was maybe July of 2021, and so we are under a time crunch here.

Another interesting thing is there's a lot of work on gag, and gag is not in great shape in the Gulf either, and Dale talked a little bit about this in the liaison report, and the Gulf is doing a lot of work on this, and looking at the movement of gag to offshore areas, et cetera, and so maybe there is a

way, at some point, that we could get a presentation about all the things that the Gulf is working on with gag, and part of that includes things like size limit, et cetera, but we've already moved this to the Considered but Rejected, and I think we're a little too far in the process, based on our timeline, to go back on that and rediscuss it and go back out to the public, et cetera. That's just my advice, but, if other folks have other ideas, I would certainly welcome them. Tim.

MR. GRINER: Thank you. I couldn't agree more. You know, we've just heard about this rebuilding timeframe, and it does meet the mandates of Magnuson. We're down the road with this thing, and I think we need to keep moving forward, and I agree 100 percent. Thank you.

MS. MCCAWLEY: Okay. Any more discussion on this particular action, Action 1? I am just looking around the table. All right. I'm going to pass it back to Allie.

MS. IBERLE: Yes, and I just kind of flashed it on the screen really quick, but we do have an Appendix E of the draft amendment, and we do have that, the size limit action, and I believe it was December of 2021 that that action was moved to Considered but Rejected, and the discussion on that was there was concerns over discards, and that was why it was moved, and so just to highlight that, and I kind of flashed it up and took it away, and so all right.

Action 2 would revise the acceptable biological catch, total annual catch limit, and annual optimum yield for gag. Alternative 1 is your non-viable retaining the current ABC and ACL. Your current preferred is setting the ACL and OY equal to the ABC, and then Alternative 3 sets a 5 percent buffer, and then Alternative 4 is a 10 percent buffer. We've already gone over a lot of the figures and information in the discussion, and so I'm going to breeze past that, but, if you have any questions on anything, let me know.

The same thing here with the effects summary, and we've gone over this a decent amount, and so I'm not going to take too much time, and I'm going to go straight to the rationale, and so, again, Attachment 6a, but this is Section 5.2.5, and so the council has been, and can legally, set the ACL and OY equal to ABC. The council chose not to include a buffer between ABC and ACL and OY, but, instead, rely on the following things, the rebuilding plan that you guys are establishing through Action 1, the gag management measure modifications, and black grouper recreational management measure modifications, due to misidentification issues between the two species. Again, just reviewing this rationale, making sure that you don't have any modifications or additions, and then, obviously, we'll have to think about the issues that were brought up in Action 1, and so I will hand it over.

MS. MCCAWLEY: All right. Is there discussion on this? Andy.

MR. STRELCHECK: As I just mentioned, you know, the rebuilding plan probability is less than we had expected, because of that lack of reduction in discards, and there's kind of two things in play here, right, and so, yes, we still calculate that we're ending overfishing, and we still have a probability of 50 percent or greater to rebuild the stock, but we're under a tight timeline to rebuild the stock in ten years, right, and the stock is severely depleted, and then, because we're already into 2023, we're not going to likely be able to fully realize the reduction in discards and landings for this year.

My recommendation, and this is also based on the advice from the Science Center, is that we change our preferred alternative from Alternative 2 to either Alternative 3 or 4, to give a little bit more of a buffer with regard to reducing mortality, and we can always have a status check with the next stock assessment, which is in two or three years, and make modifications to this, if we happen to be on track, or maybe ahead of schedule, but this will at least give us a little bit more room, in terms of if we're wrong, if discards don't come down as much -- If discards don't come down at all, or even go up, that we're still reducing mortality and meeting the mandates of MSA, and so I would be interested in conversation around that.

MS. MCCAWLEY: So let me ask a couple of questions. So then you would be suggesting that the council select maybe a different alternative here, instead of the Preferred Alternative 2 that we have under this action, and I guess I would say, and maybe we need to come back to this action at the end, and maybe not make a decision on it now, but, as we go through some of the other actions, I would like to understand how changing that would affect some of the other actions, and maybe look at some of those tables, and I don't know if I would be ready to do a motion right now, but maybe others feel differently. Andy.

MR. STRELCHECK: To that point, Monica and I briefly looked through the amendment this morning, and Action 3 is certainly tied to the decision you make in Action 2, and we would -- We think we could still take final action, and we would likely need some tables and information brought back to the council by the end of the meeting to do that, if we made a change to Action 2.

MS. MCCAWLEY: Okay. Got it. That was helpful. That was the same thing that Allie was going to say. All right. Other thoughts here? Tim.

MR. GRINER: I understand the issue with possibly having more discards, but, at the same time, you know, part of me feels like we're going to have less discards. I mean, if the stock is in such bad shape that we're catching less and less, which, really, in my mind, means less discards, and so I really don't view the discards as a huge issue here, and I don't think -- I don't think a 5 percent buffer is going to change that one way or the other, and I don't think that -- I do feel like you're right, and a stock assessment, in a few years, gives us the chance to reset, and it also gives you a chance to reset and look at the discards again, and so I'm leaning toward leaving things like they are.

MS. MCCAWLEY: Remind me when the next stock assessment is. I can't remember. I see that Chip is looking that up.

MS. IBERLE: 2025.

MS. MCCAWLEY: Okay. 2025 is the next assessment, if that factors into people's decisions here. All right. Allie has got another point that she wants to bring up here.

MS. IBERLE: If the preferred -- Since these actions tier, there might be a little bit more work involved if we change the alternative, and I don't know, and I would have to look and make sure, but we would have to recalculate some of the analysis for the different sector ACLs, and so that might not be something that we could fit in this week, and I just wanted to put that out there.

MS. MCCAWLEY: Kerry.

MS. MARHEFKA: I mean, I'm inclined to go with Tim, and part of my rationale for that is this is a species that has a four-month closure, and so that's four months that you can out-and-out avoid, because it's closed with a bunch of other shallow-water species that coexist. Where you -- A lot of it, you can avoid discards altogether, which is different than say the other fish, red snapper, where, you know, you're interacting all year, and there is four months, in theory, of very low or no discards, and I don't know if that's been taken into account.

MS. MCCAWLEY: Spud.

MR. WOODWARD: So the next assessment is scheduled to start in 2025, and so the finish on that would be more likely in what, 2026?

MS. MCCAWLEY: Yes, and it starts late in 2025.

MR. WOODWARD: So we might not get results to contemplate until maybe even as late as 2027.

MS. MCCAWLEY: Yes.

MR. WOODWARD: Then we've got, you know -- Say we wanted to make changes, and you're talking about another year or two to actually put them into effect? Okay.

MS. MCCAWLEY: All right. Chip has got something, but let's go to Kerry first.

MS. MARHEFKA: I mean, to that point, we also have this MSE coming along the heels of it, and I don't know if that will be done before then or not, but remember that we have this overall goal of looking at all these species, outside of stock assessments, and saying what's a better way to do this, and I don't know that we necessarily have to wait for an updated assessment to make changes to how we manage shallow-water grouper in general, and so, you know, I don't know that that has to be the trigger for something we change, and we're trying to look at things holistically now, remember?

MR. WOODWARD: I was just asking the question, just so I know kind of what our expectations are, in terms of making adjustments, if we don't see that we're making success towards rebuilding, and, you know, that's not to say that we change our preferred, but just to make that I understand the timeline here. I mean, I might not be around by then anyway, and so --

MS. MCCAWLEY: All right. I am going to go to Chip and then to Dewey.

DR. COLLIER: Just a reminder that we are going to be trying to provide you guys SAFE reports every two years, which could include information from the index of abundance, as well as catch levels, and so it's not going to be until 2027 where you're seeing information on gag, and you're going to be seeing it on a more regular basis.

MS. MCCAWLEY: Thank you, Chip. Dewey.

MR. HEMILRIGHT: I understand like council workloads and stuff, but do you all have -- Given these expectations, is it possible to have timelines, even though you're not held fast to timelines

of thinking of some of this stuff, and projections, because projecting something out four or five years, or it could be six or seven years, or looking at something, and so some reality sinks in that it's like this is what we're thinking, and then, in reality, it could be a lot longer, and it probably will be, versus what it is, and so I am just wondering about if the council could make up these different projections of timelines, and not that you're held to that, but just be a realist that it's probably going to be longer, because that's just the nature of the process here.

MS. MCCAWLEY: Yes, and I think that's exactly what we're saying. Good points. Any more discussion on this? Is there a desire to change the preferred alternative? Do we want to come back to this action, after we go through the document, or, Andy, are you wanting to make a motion?

MR. STRELCHECK: I'm not ready to make a motion. I think probably this is catching people by surprise, and so I wanted to let it sink in a little bit and give some thought to it, but I will say we have a ten-year rebuilding plan, right, and so there's kind of a risk-reward here, right, and so the risk is, if you don't reduce mortality early on in the rebuilding plan, we're going to have to really tighten down on it in the second-half of the rebuilding plan, in order to be successful, right, and so, to me, what you want to try to do is get a jumpstart on the rebuilding plan as early as possible, and hopefully minimize that risk in the second-half of the rebuilding plan, right, and so being --

I don't want to even say being more conservative, right, and so I think this is really kind of trying to better align it with that original 70 percent probability of rebuilding, because we aren't reducing discards sufficiently, at least consistent with the rebuilding plan, and we need to look at other ways to reduce that mortality, and, unfortunately, that comes off of the landed catch, in order to compensate for the reduction in discards.

I don't disagree with comments by Tim and others, and, you know, what we're seeing is a reduction in discards over time, because the stock is shrinking, and there is less fish out there, right, and that's obvious, in terms of what's going to occur, but it still doesn't negate the fact that you have to reduce even that smaller level of discards by some amount, and so I will just leave it at that, but I think it will be good to come back and discuss this at Full Council, or later in this committee.

MS. MCCAWLEY: Thanks, Andy. Mel.

MR. BELL: I would like to maybe come back later, and I will tell you that I've paid a lot of attention to gag over the years, and I actually share Laurilee's concern, in that gag, because of kind of the unique nature of how they recruit to the estuaries, and are depending upon estuarine habitat, which we are, in some cases, diminishing, or diminishing the quality of, or the availability of, and I've always had concern about gag, and so I'm not as confident in our ability to effect a change through, you know, our normal methods. I know that the habitat stuff is outside of our control, and so I'm just perhaps a lot more, I don't know, precautionary about gag, in my head, as opposed to that other fish that we talk about, but, yes, I wouldn't mind coming back, myself.

MS. MCCAWLEY: Chip.

DR. COLLIER: Just to build on what Andy was talking about, the rebuilding plan for gag assumes an average recruitment. However, gag is one of the species that instigated the SSC to come

together on a catch level workgroup on how to deal with recruitment. It is having very low recruitment, or has had low recruitment, for several years in a row.

There is some information, being gathered through citizen science, that there is increased recruitment, at least some juveniles that are being seen in the estuaries, and so there are some positive signs of recruitment has increased, but, for the most part, gag has also been on that low-recruitment side, and so this rebuilding schedule that was there -- It had very similar indications to what you saw for scamp yesterday, where, if you assume the average recruitment, it can rebuild very quickly. However, with low recruitment, it is going to be a long-term rebuilding plan, and it might not be successful, unless those recruits come back up.

MS. MCCAWLEY: That was helpful. Thank you. Other comments or discussion? If not, then clearly we're revisiting this at some point, whether it's as we're going through it this morning or at Full Council, but lots of new things to think about here. I'm going to pass it back to Allie.

MS. IBERLE: All right, and so I've got some notes on that one, and I'm going to go switch gears to Action 3, which would revise the gag sector allocations and sector annual catch limits. Alternative 1 retains your current 51/49 commercial/recreational allocation. Alternative 2 allocates 36.37 to the commercial and 63.63 to the recreational. Alternative 3 allocates 43.06 to the commercial and 56.94 to the recreational, and then your current preferred, which is that novel split reduction method, and then you guys had also a Preferred Sub-Action 4, which based this allocation method on the most recent, or recent, 2015 to 2019 five-year average.

Then, really quickly, just to remind you, the basis for allocations for all of these alternatives -- The no action alternative, Amendment 16 used the landings distribution from 1999 to 2003, but it used CHTS recreational estimates to calculate that percentage. Alternative 2 recalculates with those same years, but it incorporates the FES recreational landings estimates. Alternative 3 is the Comp ACL Amendment allocation formula, and then, like I mentioned, Preferred Alternative 4 and Preferred Sub-Alternative 4b is that novel allocation method that essentially splits the reduction proportional to each sector's landings for that year range, and then, each year that there's an increase, it splits the increase, poundage-wise, and divides it up between the two sectors.

Again, I'm not going to spend too much time on the discussion. These tables explain that split reduction method, and they kind of show you how that all went, and we went over that, and I'm not going to spend too much time on the effects summaries. I did want to note, just for the record, and we've seen this before, but I wanted to note that the current preferred, as far as economic effects -- It provides an economic benefit, but it's not the highest economic benefit of all of your alternatives. If you're wanting to look at how the numbers shake out on that, in the draft amendment, you would be looking at Table 4.3.2.5, and so, if you're wanting to reference that, and I also have it pulled up too, but I just wanted to note that.

As far as your rationale goes, again, Chapter 5, Section 5.3.5, and so the council developed this allocation method to fairly allocate the substantial reduction in the total ACL, and, while this method might not result in the highest net economic benefit, it still provides a benefit, and it most fairly deals with the reductions in catch needed, with the updated catch levels, and, because this method reduces each sector's ACL proportional to recent average catch, the method is both fair and equitable, and, also, if you remember how the numbers play out in the percentages, by 2027, allocation percentages, using that Preferred Sub-Alternative 4b, shift to 50/50 commercial and

recreational, by that year, and then they remain that way until modified, and so, again, I will turn over to discuss any additional rationale that we might need or any modifications.

MS. MCCAWLEY: Judy.

MS. HELMEY: If possible, I want to go back to where Tim and Kerry were talking about, go back to that section that we're going to take a look at later, and I wanted to add something to it. I think we should put weather is also a factor, which is going to mean less people in the ocean. That is going to be a big factor, which will, you know, enable to fish to recruit.

MS. MCCAWLEY: All right. Got it. That is going on the screen there.

MS. HELMEY: Thank you.

MS. MCCAWLEY: You're welcome, and so back on Action 3. We have a preferred there, and a draft rationale, and is there more discussion on this particular item? Kerry.

MS. MARHEFKA: I'm comfortable staying here, I think, regardless of what do back in Action 2. In my mind, I think we hashed it out, and I want to give credit on the record to Tim for this stroke of genius, because it really is one of the fairest ways that I've seen us do something like this, and so I would be really hesitant to change it at this point, regardless of what we do in Action 2.

MS. MCCAWLEY: Yes, I agree. I think we're doing something new and innovative here, and, yes, props to Tim for getting us to this place. Any more discussion on this particular action? All right. I'm going to turn it back to you, Allie.

MS. IBERLE: All right. Action 4 will reduce the commercial trip limit for gag, and so we've got a number of alternatives here. Alternative 1, your current trip limit is 1,000 pounds gutted weight until 75 percent of the commercial ACL is met. At that point, the trip limit is reduced to 500 pounds gutted weight. Alternatives 2 through 5 go up, or start at 200 and increase to 500 pounds, and your current preferred is that 300-pound-gutted-weight trip limit, and then, in Alternative 6, we looked at different increases to the commercial trip limit, using that decision tool, that awesome decision tool that was put together for us, and, essentially, we looked at when the commercial ACL would be met, under different trip limits, and then we increased when the commercial trip limit wasn't expected to be met, and so that's where Alternative 6 came in.

Again, I'm not going to spend too much time on this. If you have any questions on any of that, let me know. I am not going to spend too much time on the effects summary. Again, there's not many changes there, and so draft rationale, looking at Section 5.4.5, and so the council is reducing the commercial trip limit to allow for a longer commercial season under the reduced commercial ACL, and the 300-pound trip limit strikes a balance between extending the season and making sure that the trips are efficient and economically viable, and so that's two points for -- The full rationale is in the amendment, but I kind of tried to condense it for you, and so, again, any additions or modifications to that rationale?

MS. MCCAWLEY: Kerry.

MS. MARHEFKA: In my mind, I will want to come back and look at this, based on what we do in Action 2, and I heard something about maybe getting some more tables by Full Council, or at a different time, so we can see, under -- If we change the ACL, the total ACL, and it's lowered, then, with 300 pounds, versus 200 pounds, when the season would close, and so I don't feel comfortable -- I would like to revisit this if we make a change.

MS. MCCAWLEY: Yes, I agree. We've had a lot of discussion on this, I feel like, on this particular 300-pound limit, and we got feedback from the AP, just lots of discussion on this item. Anything else we want to talk about on this preferred on Action 4 at this time? I don't see any hands.

MS. IBERLE: All right, and so Action 5 deals with modifying recreational management measures for gag only. Sub-Action 5a would establish a recreational vessel limit for gag, and so, currently, there is no recreational vessel limit. The rec bag limit is one fish per person per day within the shallow-water grouper aggregate, and no more than one grouper can be gag or black.

You have two preferreds and then two preferred sub-alternatives, and so we kind of looked at this within the different recreational components, and so Preferred Alternative 2 would establish a private recreational vessel limit for gag, and Preferred Sub-Alternative 2a would set a two fish per vessel per day, not to exceed the daily bag limit, whichever is the more restrictive, and then Preferred Alternative 3 establishes a for-hire recreational vessel limit of Sub-Alternative 3a, two fish per vessel per trip, not to exceed the daily bag limit of one fish per person per day, whichever is more restrictive.

We talked a little bit in December about providing kind of a summary of how this plays out, because there was a -- We talked a little bit about like the different scenarios that would happen with the existing bag limit and the vessel limit, and so I included -- Sorry for the scrolling, but Table 16 kind of goes over that, and so it's the number of gag that can be retained under different passenger and captain and crew scenarios, and so the next sub-action deals with that captain and crew bag limit, and so you can see the number of passengers and then the number of crew, including the captain, and then the number of fish that can be kept per trip, and so this is for both of your preferred alternatives and assuming that there's no captain and crew bag limit, and so, if you have one passenger, and I know Ms. Judy said she had situations where there was one passenger, and then number of crew, including captain, and so two or more, and then you can keep one fish.

However, if there's two passengers, or three or more captain and crew, then two fish can be kept, and so it kind of -- It depends on the amount of people on the boat, but that's kind of how we looked at that, and that was -- Table 16 is, I believe -- Sorry. Table 16 deals with for-hire vessels, and then Table 17 is private recreational, and so, again, number of anglers and then number of fish that can be kept, and so the captain and crew number isn't as big of a deal here, because you're not assuming that there's multiple trips, and so that was where the issue came in. It was, if you took a second trip, how many fish can be kept if there was already one retained on Trip 1, and so that's -- Comparing Table 16 and 17 kind of helps you work through that a little bit easier.

I am not going to dive into the effects summary too, too much, and we've already seen this. Let me know if you have any questions, and then, for rationale, the council has decided to establish a recreational vessel limit, similar to the commercial trip limit, to constrain recreational harvest to

levels and allow for a longer season under reduced catch levels, and the council felt that the most restrictive vessel limit would best meet the purpose of ending overfishing. Considering the differences between the private and for-hire components of the recreational fishery, the council decided to separate the vessel limit into per-day and per-trip, and the per-day and per-trip limits will help minimize effects on for-hire businesses that take multiple trips, and so any modifications or additions?

MS. MCCAWLEY: All right. This is, once again, Action 5, modification to the recreational management measures for gag. Is there any more discussion on this particular item? I see heads nodding no. I am looking around the table. Monica.

MS. SMIT-BRUNELLO: Just an idea that, when we put out a Fishery Bulletin or whatever, I think these tables might be very helpful for people who are in the for-hire industry, and others, and recreational, to know how many fish they can keep under different scenarios.

MS. MCCAWLEY: Thank you, Monica. Anything else that we want to say on this action? It doesn't look like it, and I'm going to pass it back to Allie.

MS. IBERLE: All right. Sub-Action 5b will prohibit the retention of gag by captain and crew, and so you've got two alternatives. Alternative 1 is captain and crew on for-hire vessels can currently retain the daily bag limit of gag, and then your preferred, which is the gag bag limit for captain and crew on a for-hire vessel would be modified to zero.

I just wanted to again mention that, when we looked at the data -- Again, MRIP doesn't count captain and crew, and so we were kind of looking at the amount of passengers, and it didn't seem as though captain and crew were retaining that many fish, but we had discussion on that in December.

I am not going spent time on the effects summary. There's nothing drastically changing there, and so, shifting into rationale, the council felt that additional harvest constraints were needed for the recreational sector, in addition to that vessel limit that we established in 5a, and removing the captain and crew may not initially constrain harvest, but, as the stock rebuilds, and landings increase, it can be expected to constrain harvest, and so that's a little bit of a discussion that we had when we looked at it, and it didn't seem as though captain and crew were retaining, and so, assuming that the stock is rebuilding, we put an extra constraint on that recreational harvest, and so, again, any modifications or additions?

MS. MCCAWLEY: Thanks, Allie. Any modifications or changes on this one? I see heads nodding no, and I'm just looking around the room. No. All right. Back to you.

MS. IBERLE: All right. Action 6 will revise the gag recreational accountability measures. You know me, and I like to use this table, and so Alternative 1 -- Currently, you have an in-season closure, and so, when recreational landings exceed the ACL, you have an in-season closure, and then you also have a post-season, where, if the recreational landings exceed the ACL, the total ACL is exceeded, and the stock has an overfished status, the recreational landings are monitored and reduced the following year by the overage. Again, all three of those triggers have to be triggered to have that post-season AM go into effect.

Alternative 2 would have NMFS annually announcing the recreational fishing season end date, and so this would operate similar to black sea bass, but your start date would always be the end of the spawning season closure. Alternative 3 would remove the in-season closure and uncouple the post-season, and so your post-season would still be the recreational season is reduced by the amount necessary to prevent that recreational ACL from being exceeded, but the only thing that would trigger that would be the recreational landings being exceeded.

Then your current preferred, which would retain the in-season closure, and so, if recreational landings exceed the ACL, the current season would close, and then you would also uncouple the post-season, and so you would have that reduction in the following season only if the recreational landings exceed the ACL.

Then the effects section, and not too much has changed here, and then, to your rationale, and, because of the substantial reductions in harvest, the council felt it was imperative to have an effective and timely recreational AM. Retaining the in-season AM would ensure that closures, which are expected in the first years of the rebuilding plan, are addressed in the current season, and the post-season AM was uncoupled from the three current triggers to prevent potential disruptions to the commercial sector, because of post-season paybacks.

Then I have a discussion question in here, just to make sure that we're capturing all the rationale that we need, and so, considering the constraint of harvest in the early years of the rebuilding plan, will AMs be able to ensure that ACL overages are addressed in a timely manner? Then I guess, adding into that, the discussion that we've been having, as far as the rebuilding plan goes, and if the Action 2 -- If there's modifications to Action 2, and so, again, keep that in mind, and so I will turn it over.

MS. MCCAWLEY: All right. Any questions or concerns or comments on anything here? Andy.

MR. STRELCHECK: I am comfortable with the accountability measure. In response to Allie's question, this is a concern of mine for 2023, because the amendment is going to be coming to the Fisheries Service, but the season opens on May 1, and we likely will not be able to close the fishery in as timely of a fashion to prevent an overage, right, and so we will be implementing the season for the following year, consistent with the accountability measures, but we likely will be already offtrack, with regard to at least the recreational landings, in the rebuilding plan.

MS. IBERLE: We do have a current in-season closure for gag.

MR. STRELCHECK: Right, but the catch limit is much higher, currently, and so I can't close it until the catch limit gets adjusted downward.

MS. MCCAWLEY: Thanks for the clarification on that. It seems like we're comfortable with our current alternatives, but I see a hand. Laurilee.

MS. THOMPSON: I just wanted to comment that, you know, I feel like the start date is unrealistic, and, you know, when you compare it to what happened with the golden tilefish amendment -- Those fishermen, they're still waiting on the increases that, according to all the months that we were using, should have gone in place two years ago, and so I see that this is tracking the same way. We've got a start date of 2023, and we're just now approving the amendment, and so there's

no way that it's going to take place in 2023, and we'll be lucky if it starts by 2024, and so can we change the start date on these charts, or does that have to be done by the SSC? Who sets these start dates?

MS. MCCAWLEY: Chip is coming to the table.

DR. COLLIER: So it's generally staff making recommendations to the analyst on when we think regulations could go in place, and we have to make these assumptions towards the end of the stock assessment, and so it's a couple of years ago that we made the recommendation on the 2023 start date, looking at the potential two-year timeframe. It did take us, I think, a little bit to get the gag catch levels to you guys, and I think that's where some of the delay was, but, yes, we're trying to -- A couple of years ago is when we put together this timeframe for the rebuilding plan, and it is a bit of a challenge to get all the numbers right, but we were pretty close.

MS. THOMPSON: So can the council change the start date, or, since it's already been out to public comment, we're kind of wedded to what's here?

MS. MCCAWLEY: Myra is coming.

MS. BROUWER: So the council could request a change in the beginning of when management starts. Right now, the projections are with management beginning in 2023. If that is changed, then, as Chip said, it would have to go back to the SSC, and we would have to redo the analyses. Since this amendment is under a statutory deadline, I think that would put us in kind of a tough situation.

MS. THOMPSON: Okay. I just thought I would bring it up. Maybe, based on the track record of the amendments that we've worked on, at least since I've been on the council, maybe staff needs to add an extra year or two in their projections, at the end of the stock assessment.

MS. MCCAWLEY: I think that would be direction to the SSC, because they're the ones that give us the projections, but, the further out we project, the more uncertainty there is. Mel.

MR. BELL: I mean, I understand your point, and we're looking at this, and the public is looking at it, and we go, well, dang, 2023 is already effectively gone, and so, I mean, the question is just how does this really work then in reality, what hits, and, I mean, we don't go into effect until 2024, and I think we just need to be able to answer that question to folks, because 2023 is -- While we're in it, we're not going to -- It's a legitimate question, but understand the limitations, and, no, we're not going back and doing that.

MS. MCCAWLEY: Laurilee.

MS. THOMPSON: So, if we lose 2023, does that mean that we're just -- That we're going to start with the ACLs that are in place for 2024, since it will be 2024? No?

MS. MCCAWLEY: Andy.

MR. STRELCHECK: Before the meeting, we were having a pre-brief with South Atlantic Council staff, and we encourage, obviously, as quickly as we can have the South Atlantic Council transmit

this to the agency, and we're going to work as rapidly as we can to prioritize this and implement it in 2023. That probably won't be soon enough to avoid some ACL overages in the recreational and commercial sectors, but our goal would be to have something in place in 2023, under these new catch limits, and then, obviously, fully effective in 2024.

MS. MCCAWLEY: Thanks for the clarification on that. All right. Allie, I'm going to pass it back to you.

MS. IBERLE: All right.

(Whereupon, a recess was taken.)

MS. MCCAWLEY: All right. Thank you for that break. We should be good to go again on the microphones, and I am going to turn it over to Allie.

MS. IBERLE: All right. Sounds good. Okay, and so Action 7 -- This is going to be mirroring Action 5. However, these actions and sub-actions will apply to black grouper, and so Sub-Action 7a will establish a recreational vessel limit for black grouper. You have the same alternatives and preferreds that you had for gag, and so establishing a recreational, private recreational, vessel limit for black grouper of two fish per vessel per day, not to exceed that existing bag limit. I will note that the bag limit is currently the same for black grouper as it is for gag. Then establishing a for-hire recreational vessel limit for black grouper of two fish per vessel per trip, not to exceed the daily bag limit of one fish per person per day.

We've already gone through this discussion, and I'm not going to spend time on that. Again, your effects summary, you have that summary there, and these are changes from December, and so that brings us to our rationale. The council is not required to update catch levels or management measures for black grouper. However, based on discussion and input, a discussion that you all have had, and then input that we heard from the Law Enforcement AP in February of 2022, the council felt that there was an issue over misidentification between gag and black grouper in the recreational fishery, and, to ensure the rebuilding of the gag fishery, the council would like to retain consistency between the gag and black grouper recreational management measures.

Modifying the black grouper recreational management measures may be limiting, but the council determined that this was a necessary tradeoff to ensure the rebuilding of gag is successful, and so that's kind of a summary of your rationale thus far, and so I will turn it over for any discussion or modifications or additions.

MS. MCCAWLEY: I am just going to remind us, and so this was something that FWC had suggested, and this partly based on discussions from throwing it way back, to like 2014 or 2015, when we had the South Florida Committee, and we looked at possible management of black grouper, mutton snapper, yellowtail, and possibly moving those to the state, and that's, ultimately, not where the councils ended up, but, also, FWRI conducts the black grouper stock assessment, on behalf of the SEDAR process, and it goes through the process, and the last couple of assessments couldn't be conducted, because of these identification issues, and so what we are suggesting here is that, because of this misidentification on the recreational side, that, in order to help rebuild the gag stock, we're suggesting that having the same limits for black and gag could be beneficial here, partly due to these past misidentification issues.

When we go through SEDAR, there is a black grouper stock assessment, that will be conducted by FWRI, on the schedule, and so we can talk about that as well, and so we can talk about that as well, and so I'm just providing a little additional rationale there. Anything else on this action? All right. I'm going to pass it back to you, Allie.

MS. IBERLE: All right. That brings us to your last sub-action in this amendment, and that is Sub-Action 7b, which will prohibit the retention of black grouper by captain and crew, and so, again, similar -- The same alternatives, similar discussion, and so Alternative 1 would allow the retention of black grouper by captain and crew, whereas Preferred Alternative 2 -- The bag limit for captain and crew would be zero, and so, again, we talked about how MRIP doesn't categorize captain and crew, and we looked at that, and we didn't see a lot of retention of black grouper by captain and crew, from what we inferred from looking at that.

There's not a huge changes on the effects summary, and so I'm going to switch to our draft rationale, and so I'm not going to reread that first bullet, but, essentially, that same rationale applies here, wanting to keep the regulations consistent between the two species, but modifying the black grouper recreational management measures -- Again, it's the same kind of thing, where it might not initially be limiting, but, as gag rebuilds, and there's more catch of gag, there's the possibility for more misidentification issues, and so this might be more constraining in the future, helping to contribute to the success of the gag rebuilding plan, and so that's very similar bullet points here, and, again, the overarching rationale is to keep the regulations consistent.

MS. MCCAWLEY: All right. Thank you, Allie. Anything else on this action? All right. I'm going to pass it back to you.

MS. IBERLE: Usually, or from what I've gathered so far, usually we approve all actions at a separate meeting, and then we approve the amendment for formal review, and we're doing both of that here, and so I've got two separate draft motions. However, I feel like there's -- It seems like we want to have some more discussion, and so what we can do is just include these motions, draft motions, into our committee report, and we'll put together some discussion and maybe bring some other things to Full Council and have some more discussion and go from there.

MS. MCCAWLEY: Thanks, Allie. Any more discussion on this? Once again, this will come back in Full Council. I am looking to make sure -- Monica.

MS. SMIT-BRUNELLO: Just a reminder that, in the briefing book, you have the draft codified text as well to review.

MS. MCCAWLEY: Thank you, Monica. All right. Anything else on gag and black? All right. Okay. Thank you, Allie. I think we're going to now move into wreckfish with Christina. All right. We're going to dive into Amendment 48. Christina, I think you're going to take us through the decision document?

MS. WIEGAND: Absolutely, and so we're going to sort of juggle things in the decision document around a little bit, for timing, and I'm going to give you guys just sort of a brief refresher on what we're trying to do with this amendment, and then I'm going to turn it over to Jessica Stephen. At your last meeting, you had requested a bit more information on the cost recovery program, and so

she has generously agreed to be here today to provide you guys a little bit more information on that, and so we'll sort of jump to the end of the amendment, get that presentation, talk about those actions, and then move back to the top and work our way down.

Again, just as a refresher, this amendment stems from the wreckfish ITQ review that happened back in 2019, and, among many things, probably the biggest issue found in that review was the need to sort of modernize the wreckfish program, and so that's really the goal of this amendment. We've got a series of actions in here, and you've selected preferred alternatives for most of them, but we will be talking about a VMS and offloading site and time requirements in a bit more detail at this meeting.

The goal for this meeting is going to be to address those things, and you're also using the public comment session this afternoon as the public hearing for this amendment, and so, with timing, that means that you would be looking at approving this amendment for formal review in September of this year. If you all remember, this amendment comes to you at every other meeting, and so, with that, I am going to go ahead and let Jessica give you a presentation on cost recovery. She's going to talk in detail about the different actions and alternatives that are in this amendment related to cost recovery, and so we'll just go through those through the presentation.

DR. STEPHEN: Today, I just wanted to talk a little bit more in-depth about how cost recovery works within the wreckfish program. I just wanted to start off by explaining how cost recovery works, and it's mandated under the Magnuson-Stevens Act. In the Magnuson-Stevens Act, the fee that we can collect, and not exceed, is 3 percent of the ex-vessel price, but keep in mind there are times when the agency cost does exceed the 3 percent that we can collect, but that is the maximum amount.

Each year, the agency catch share program will determine what the fee would be, and the fees must be collected by NMFS either at the time of landing, filing of a landing report, sale of a fish, or last quarter of the calendar year in which the fish is being harvested. Also, in relation to Magnuson, cost recovery will cover the costs of both management, data collection, and analysis, as well as any enforcement activities.

I wanted to talk a little bit in general about how cost recovery works in the other programs, as well as in the programs run by SERO. In general, the permit holder landing the fish has been paying for cost recovery across the nation, and there are a couple of exceptions, and those occur either in cooperatives as well as in the Alaska crab and Pacific groundfish. In Alaska crab and Pacific groundfish, due to some of the different work with their FMPs, the cost recovery is paid equally by the harvesting and the processing sectors. In the Pacific groundfish, three different sectors actually pay that, due to the way that their fishery is set up.

If we were to choose an electronic system for wreckfish, we would build it upon SERO's existing catch share online system, and, in our existing system, we calculate cost recovery based on a vessel account and its related shareholder account, based on the landings submitted by that vessel account. Just a reminder that our shareholder accounts may or may not hold shares, and it's just the type of account that we use, and the vessel accounts are always related to the shareholder account, based on the permit, and shareholder accounts receive the initial annual allocation from the system, and it's then moved to the vessel account, in order to complete harvest and landings.

Within the Gulf of Mexico program, I want to talk about how we use it for the red snapper and grouper-tilefish program. In this case, we have the dealers collect on the behalf of NMFS at the time of landing, and the dealers are then submitting those fees to NMFS quarterly, and we do allow thirty days from when they're given the bill to submission to us, and the cost recovery is based on the actual ex-vessel price, and that means that there can be no deductions for ice or allocation or bait.

Some of the benefits we've seen for the Gulf programs is that this allows a little bit of accountability for the dealers. If there's a failure to submit the cost recovery fees, we do lock-off the dealer, and they can no longer accept IFQ transactions. The quarterly submission of a cost recovery fee does spread out those payments throughout the year, so there's not one large bill, and fishermen do know what the cost recovery fee is at the time of landing.

For wreckfish, what we have in front of the council today is four sub-actions relating to cost recovery, and they are Sub-Action 7-1 to 7-4, and I'm going to briefly go over them here and then go into depth on each one, and I want to highlight that there's a lot of combinations between these too in how you make your decisions.

The first action, 7-1, really goes to should an external party be used to collect the fee on the behalf of NMFS, and this allows us, in the Gulf programs, to allow the dealer to collect the fee for us. The second question is at what time should the fees be collected, and, again, that is set according to Magnuson, and we do not have any flexibility, other than the options given within Magnuson, and then, because you can use an external party to collect on behalf of NMFS, there is Action 7-3, which would then set when those fees that were collected already could be submitted to NMFS, and, in our document, we have four actions, annual, biannual, quarterly, or monthly, and then the final action is whether we should use an actual ex-vessel price or standard ex-vessel price.

I know this is a little bit of a busy slide, but I want to give a bunch of information out to you as we're talking through it, and so the first action is whether you want to use somebody to collect on the behalf of NMFS. I will remind you that, again, we only can collect during those first four types of categories listed in Magnuson and that this action is kind of compounded with Action 7-2 and 7-3. If we were to use a dealer to collect on the behalf of NMFS, we have all the options that are available in Action 7-2. We allow some increased flexibility in those submissions to NMFS, and it allows the creation of a compliance mechanism for dealer reporting. As I mentioned before, if the dealer fails to submit, we can lock-off their account, and it does not directly affect the fisherman who is doing the harvesting.

If you don't use another party to collect on behalf on NMFS, that means that NMFS is directly collecting, and we are limited to the four times available in Magnuson, and so some of the challenges that may exist when doing this, when NMFS is directly collecting, that's particularly at those ones that are sort of a real-time basis for collection, which is the time of landing, the time of the report, or the time of sale, and it also could be influenced by the need for correction of landings, which would mean you would need to readjust any cost recovery that was over or under-collected, based on changes in landing forms, and it has a little bit of an impact when we think about how we're going to collect the information. We use pay.gov in order to do that collection, and the real-time nature does make this a little bit more difficult along the way. Keep in mind that, if NMFS is directly collecting, Action 7-3 is not an option.

Action 7-2 deals with the times of collection. As mentioned before, Magnuson says that we can collect during four times. Three of those occur throughout the year, and only one of them is an option for an annual occurrence, and so time of landing, time of landing report, sale, or throughout the year collections, and collecting the last quarter of the calendar year is the one that occurs annually.

Keep in mind that, with this selection, we must actually calculate the fees within the year, the last quarter, that we're selecting, and so there might be an offset to how the fees are collected. For example, if you are collecting in November of 2023, the last quarter of the year, you would be collecting for January through September of 2023 plus October through December of 2022 of the previous year, and that's just so that you can do the calculations in time and give enough time for the fishermen to submit those cost recovery fees.

As I mentioned earlier, this is kind of compounded with Action 7-1 and 7-3. If a dealer is collecting on behalf of NMFS, we can allow a little bit more flexibility, because the dealer could collect in that real-time basis, at the time of landing report or sale, and then submit to the agency at a later date. If NMFS is collecting directly, most likely there are going to be challenges and an increased burden to collect in real time, and the more likely scenario would be collecting just in that last quarter of the year.

As I mentioned before, Action 7-3 only works if you have someone collecting on behalf of the agency, and, when we're looking at this, the submission time must be equal to or greater than the collection time, in order to make sure that we're calculating everything. When fees are submitted to NMFS, we collect through pay.gov, and that allows either credit cards or what they all ACH, automated clearinghouse. For those of you not familiar with the time, it's, in essence, writing a digital check to the agency. When NMFS is collecting directly from the fishermen, there is no action here, and so it becomes sort of -- Action 7-2 becomes the same as 7-3.

I want to go over, a little bit, the benefits to each of the different types of submission methods, and so, when you're submitting annually, the benefit there is that there's only one payment to track, for both the fisherman and for the agency. A potential negative could be that it is a larger payment, as you're saving up all the cost recovery for an entire year and paying it at once.

When you're looking at submissions that are occurring throughout the year, you have some benefits as well. They're a smaller payment, per transaction, and this is critical in some of our larger fisheries, where the credit card limit for pay.gov is at \$30,000. Once you get over that, you have to pay by the check, or ACH. This ends up having some repercussions down the road. If there are refunds that need to be instituted for overpayment of cost recovery funds, the credit card is instantaneous. If you are paying by that digital check, unfortunately, it requires a form, with signatures by both the agency and the fisherman, and it needs to go to pay.gov, and so, typically, we've seen refunds for ACH can weeks, in order to get the money back in the hands of the fishermen.

When you're paying throughout the year, you tend to have more frequent payments, which also allows us to have more frequent compliance checks and balances that someone is paying along the way, and this also ensures that the agency is recovering a portion of the cost recovery, particularly if the dealer goes out of business, that we've collected a couple of quarters before that happens.

When looking at the ex-vessel decision, this is the difference between standard and actual ex-vessel price, and so just a little terminology before I dig into this. The ex-vessel price is the price per pound of fish, and that generates then the ex-vessel value, which is the ex-vessel price times the landings. In our electronic systems, the ex-vessel price is entered into the system and validated by both the fishermen and the dealer, and then we use that also to calculate an ex-vessel value for the fishery.

Within our system, because the information is being entered during landings, we can use real-time calculations of a cost recovery fee for each landing that's occurring, and so use of an actual ex-vessel price uses the actual price reported by the fisherman and dealer, and it does allow you to reflect the different pricing that can occur across trips, if you think about changes in ex-vessel price that may occur by region or by time and space or by demand. Actual ex-vessel price tends to have a minimum administrative burden for the agency, and that is because we're calculating it when the landing is being completed, and it's all automated. We don't require any Federal Register requirements, and there are no confidentiality requirements, but it's only available to those that are actually landing the fish. In addition, we can then use that value that's automatically calculated, through some computer algorithm, to send to pay.gov for collection and then track that payment in pay.gov back into the system.

When we're talking about standard ex-vessel price, this is a calculated ex-vessel price that is going to be used for the year. Looking at how other catch share programs have done this, typically it uses the prior year's average ex-vessel price and applies it to the current year. There have been cases, in other programs, where there is an expected change in price, due to what you're seeing going on with that average prior year price maybe changed slightly when calculating it. It does require time, in order to calculate it from the previous year, and that average is always applied, regardless of when you're fishing within that fishing year, and so it's the same price throughout the entire year, versus the actual ex-vessel, which differs over time.

Standard ex-vessel price does come with an increased administrative burden. Because we are calculating the price, it does require Federal Register notification that shows how we calculated that price and gives notice to the fishermen of what that standard ex-vessel price would be. Additionally, there is time needed to calculate that average collection price, and so we might be, again, offset with that last quarter and what we are at the start of the year, and so it could be that the notice doesn't come out until fishing has already begun within the fishery.

I know that I've covered an awful lot, and these are a little bit compounded ones, and so what I wanted to do is just put up a table and show some of the different options between these different actions that could be taken, and, again, I just want to point out that Action 7-3, the submission time, cannot occur in any more frequent basis than annual when we are looking at the fishermen directly submitting to the agency.

I also wanted to show you a little bit of what's occurring in the other catch share programs, and that will give you some insights in how to do things. I will say that a lot of the decisions in these other programs were based on the nature of their fisheries, their collection mechanisms, and how those fisheries operate. As you can see here from a group of these, the ex-vessel price is almost split evenly between those that use actual versus standard.

When we're looking at the collection time, it's typically more often in the last quarter, but there are quite a few that also do it at the time of landing, and who is collecting the program is somewhat evenly split here between the dealers, or a co-op manager, versus the fisherman, and, when we say "collected by", that means the fisherman is directly submitting to the agency, and you will see that, a lot of the times, where the fisherman is collecting, the collection time must be that last quarter. Then, when they're looking at the submission time, you can see that it's frequently yearly. Only the Gulf program and the Pacific groundfish program collect it more frequently, from the dealers in those cases.

What we would like the council to consider, when thinking about the cost recovery actions, think about both the administrative and stakeholder burden under each of the different scenarios, and think about the consequences for compliance within the program and the likelihood of the agency receiving the cost recovery fees. As, again, I mentioned, in the Gulf, we do have dealers who have gone out of business before paying their last quarter of the cost recovery fees, and that does make it hard for the agency to recoup those. We do have mechanisms to recoup those, but they go through the Treasury, and there are some limits, and, oftentimes, the cost to collect it may actually exceed the amount owed to the agency.

There also could be benefits, when thinking about it, of similarity within a region. If the programs do collect in a similar manner, you can ease the administrative burden and reduce confusion on anyone who participates in more than one catch share program within the region. I think that's my last slide, and, in that case, I will take any questions that anyone has about these.

MS. MCCAWLEY: Thank you so much for the presentation, Jessica. We definitely have hands up here, and so Laurilee and then Chester.

MS. THOMPSON: I should know this, but I don't. Jessica, do you know how often the rock shrimp -- That's the only VMS fishery that we have currently in the South Atlantic, and do you know often they submit their cost recovery fee, and is the rock shrimp submitting it, or is the dealer submitting it? Thank you.

MS. MCCAWLEY: So they're not an ITQ, and so they wouldn't have a fee.

MS. THOMPSON: Okay. Just because they have VMS, they don't have to -- They just pay the VMS charge. Okay. All right, and so if the -- If this goes into effect for the wreckfish, they will have to pay the cost of the VMS plus this cost recovery fee also?

MS. MCCAWLEY: If they select to use VMS, the answer would be yes, and so all other -- Christina, correct me if I'm wrong, but all other ITQ programs have a cost recovery system in place, and ours doesn't. Ours was the first, and so it kind of pre-dated the cost recovery, and so we're kind of out of compliance by not having a cost recovery program.

MS. THOMPSON: So, even if they didn't have VMS, they would still -- You know, they would still be required to pay the cost recovery fee, because they're under an ITQ program?

MS. MCCAWLEY: Yes.

MS. THOMPSON: Okay. Thank you. I appreciate the clarification.

MS. MCCAWLEY: Chester.

MR. BREWER: Thank you. Do you know what the total ex-vessel value, either actual or standard, is for the wreckfish fishery, and, here, I'm talking about in total and not the individual vessels. Thank you.

DR. STEPHEN: I believe that's in the document, right?

MS. MCCAWLEY: Yes, and Christina is looking for that, Jessica. All right. I'm going to take some other questions while Christina is trying to find that number for us. Other questions on the cost recovery presentation for Jessica? I don't see other hands. Oh, wait. Dewey.

MR. HEMILRIGHT: What's the value of the cost recovery that would be derived from the catch? I understand 3 percent, but what's the value of the poundage?

MS. THOMPSON: That's what they're looking for.

MR. HEMILRIGHT: Okay.

MS. MCCAWLEY: That's what Christina is working on.

MS. WIEGAND: All right, and so this table is in the document, and this is Section 3.3, the economic environment section, PDF page 49, actual document page 41, and, if you look at Table 3.3.3.2, this shows the total revenue and the revenue per vessel statistics for the eight vessels that were active in the wreckfish IFQ program from 2017 to 2021 by year, and so, if we just, you know, scroll down to 2021, you're looking at the total gross revenue of \$1.1 million.

MS. MCCAWLEY: Chester, do you have a follow-up?

MR. BREWER: No, and I was just curious what the magnitude was of the -- I mean, we could estimate, I guess, pretty closely the 3 percent of that number is going to be your cost recovery number, and so I was just trying to figure out -- With all the different stuff that we're going through, you know, how much money are we really talking about?

MS. WIEGAND: I would say that I think one of the important things to keep in mind, when discussing cost recovery, is that determining that percentage, whether it be 1 percent, 2 percent, or 3 percent, is something that is determined by the agency, and that's not a council decision.

MS. MCCAWLEY: All right. Any other questions for Jessica on cost recovery? Kerry.

MS. MARHEFKA: Well, I assume that we're going to get into this and go through all the actions, and, Jessica, thank you. That was really, really helpful, but hopefully you can stick around, so that, as we get into a couple of these things -- Maybe, if we get bogged down, she may be able to answer questions.

MS. WIEGAND: My recommendation now would be, instead of sort of going back to the top of the document and working our way through, let's start with the cost recovery actions. That way,

while Jessica still has time to be here, we can take advantage of her incredible insight into this process, and so let me go ahead and pull up the decision document and jump us down to the cost recovery actions.

We'll start with Sub-Action 7.1, which, again, this looks at who is submitting that -- Who is responsible for that cost recovery fee. Right now, you guys have selected Preferred Alternative 2, which would have the shareholder landing wreckfish responsible for collection and submission of the cost recovery fee, and so Jessica talked to you a little bit about the pros and cons of that. While you guys are thinking about it, I can go ahead and pull back up her presentation and scroll back to this slide, 7.1, that talks about those pros and cons, and so, right now, you guys have the shareholders collecting and submitting.

MS. MCCAWLEY: Kerry.

MS. MARHEFKA: Taking into account -- Jessica made really good points, but, regardless, I feel pretty strongly that we stick with our preferred. The rationale I think I've laid out a couple of times, and it's well laid out. When we had the wreckfish shareholders meeting in Key Largo, that's what I believe they wanted. My thinking behind that is also -- I will remind everyone that the dealer permit is not a closed-access permit, and so a dealer could -- You know, we've been wreckfish dealers, and the dealer permit is under Mark's name.

Mark could not pay, and his account could get locked, and there's nothing stopping me from opening one in my name and starting to collect, and it just doesn't feel like the enforcement element is really there. I think it's a burden on -- I think the burden needs to be on the fishermen. I understand that, you know, the Gulf is doing it the other way, and I respect that, but I still feel pretty strongly that we stick with it being collected by the fishermen.

MS. MCCAWLEY: Tim.

MR. GRINER: I agree with Kerry. I mean, there's really a big difference between this program and every other catch share or individual quota program out there, and there's only six guys involved in it, and so it just seems that it would be a lot easier to collect from six guys than a bunch of dealers all over the country.

MS. MCCAWLEY: All right, and so I appreciate that input, and I'm going to turn it back to Christina to go through more of the sub-actions.

MS. WIEGAND: Moving on to Sub-Action 7.2, you have -- This is, you know, sort of when the collection of the cost recovery fee is occurring, and so these are the only three available options, as outlined in Magnuson, and you have fees collected at the time of landing, or report of landing, and your current preferred alternative is Alternative 3, which would have fees collected upon the sale of such fish during the fishing season, and then Alternative 4 would be fees collected in the last quarter of the calendar year. Again, I'm going to go back to Jessica's presentation, because she did talk a little bit about how Action 7.1 interacts with 7.2, and so I will go ahead and turn it over to you guys for discussion.

MS. MCCAWLEY: Thanks, Christina. It looks like folks are reviewing this. Kerry.

MS. MARHEFKA: I am trying to figure out -- I feel like there was less strong feelings about this, and I have less strong feelings about this, and so I'm just trying to figure out, based on what Jessica's presentation, what is the best for the agency at this point, since we kind of already messed them up on the first one, and I would like to help them out on the second one. Can you go to the last -- To Jessica's very last slide, that showed the different programs and when they collect it?

MS. WIEGAND: Absolutely, and just, before I sort of jump from this slide, I will note that, here, Jessica noted that, if NMFS is collecting directly from the fishermen, as you guys have selected, that the last quarter of the fishing year is sort of simpler for all parties, but let me scroll -- Are you looking for this table or this table?

MS. MARHEFKA: You answered my question, and so I am comfortable, if other people are, switching our preferred to Alternative 4, if that is what makes it easier for the agency.

MS. WIEGAND: That's my understanding, but, again, Jessica, please feel free to jump in, if that understanding is not quite as nuanced as it needs to be.

DR. STEPHEN: You guys have it correct.

MS. MCCAWLEY: All right. Kerry, do you want to make a motion to select a different preferred here?

MS. MARHEFKA: Sure. **I move that we change our preferred to Alternative 4, such that the fees will be collected in the last quarter of the calendar year in which the fish is harvested.**

MS. MCCAWLEY: All right. Motion by Kerry and seconded by Mel. It's under discussion. Laurilee.

MS. THOMPSON: So you're the one that's been buying the wreckfish from the boats, and could that possibly, you know, create a huge burden for the fishermen, because they could be writing a huge, huge check in the last quarter of the year, that they may not have saved their money during the year to cover it.

MS. MCCAWLEY: Kerry.

MS. MARHEFKA: I mean, if it was me, yes, that would be a problem, because I'm really bad at setting aside that much, but, in theory, I mean, they're going to know they're going to have to -- It's no different, in my mind, than having to pay your quarterly taxes, which most fishermen have to do anyway, and, obviously, it's not quarterly, and it's annually, but those of us who run our own businesses and are self-employed are already in the habit of knowing that, you know, when you get paid, that's not all your money, and so I believe we still -- Are we taking final action? Great, and so, hopefully, you know, if this brings them a lot of heartburn -- I don't remember this being a huge sticking point. If I am wrong about that, and I will reach out to the couple of folks I know, hopefully we'll hear that, but I am trying to strike this balance between what makes it easier for the agency and what is easier on the fishermen, and so that's kind of why I went that way.

MS. WIEGAND: I do have the shareholder recommendations here from June of 2022, and I wasn't going to go over them sort of in detail again, since we did that at the last meeting, but your

recollection, Kerry, is the same as my recollection. Their bigger concern was with Alternative 2, being concerned about sort of the lead time on return from landing for wreckfish, and I also do not remember them having a great concern over Alternative 4.

MS. MCCAWLEY: Go ahead, Laurilee.

MS. THOMPSON: Why is there not a quarterly option included for this? It's either at the time of sale or once a year, and it seems like quarterly would be better.

MS. WIEGAND: So Jessica might be able to explain this in a way that's a bit more eloquent than me, and we're talking about -- So Sub-Action 7.2 is selection, whereas 7.3 is submission, and it does get a little bit convoluted when it's the fishermen that is sort of collecting the fee from themselves and then submitting it to the agency, and so, if you remember, we are going to get into submission, and I think you guys, if you stick with the preferred alternatives you have now, are going to need to have some discussion about 7.3, based on Jessica's feedback, but that's -- So we're talking about the difference between collection and submission, and it's just the shareholder collecting the fee from the shareholder.

MS. MCCAWLEY: Dewey.

MR. HEMILRIGHT: What happens at the end of the quarter, or the time when this is due, and it is not paid? Is there revocation of the permit, or the permit is not given, or what happens under that scenario?

MS. WIEGAND: Jessica, would you be able to provide some detail on that, when it's the shareholder responsible and not the dealer?

DR. STEPHEN: I can provide some. We'll probably need to put it into the amendment, but, typically, some of the things we've seen for non-payment in other catch share programs would be no distribution of your allocation for that next fishing year, because remember, in a lot of these scenarios, the collection is occurring as the fishermen, and in the last quarter of the year, and so then we would withhold your next year's allocation until payment. There are also ways to go through treasury.gov to collect those fees, and we can probably have a discussion, but there could be hold on renewing your permit without paying those fees as well, and so those are the types of options when it's a fisherman not submitting to the agency in time.

MR. HEMILRIGHT: Is there a point where, after six months, if there's no payment, that the permit is revoked, or the shares revoked, or is it just allowed to be in limbo until it's paid, for no matter how long it goes on for, and is there like a time period of a year, similar to a snapper grouper permit that's not renewed, and, after a certain period of time, you lose it, and I'm just asking these scenarios because it's almost like there needs to be, or could be -- Given that I believe that there's only six fishermen, according to this, or something like that, that is in this program, possibly, and, you know, it might be something that you have an escrow account, where you put something into effect, and I'm just wondering what happens when the possibilities of not payment, how long does it go on for, and the carrot should be, you know, a minimal time, and then, all of a sudden, you lose your shares, just like you lose your permit in snapper grouper if it's not done within a year, just to make sure -- Because somebody will figure something out, if there's actually something that is going to take place with enforcement, versus some ambiguity of a long-term deal, and you

pay when you get ready, and stuff like that. I think it's very important for this particular thing, given that this is an ITQ.

MS. MCCAWLEY: Andy.

MR. STRELCHECK: Certainly Jessica can correct me if I'm wrong, and I don't recall the penalties, and I don't think this has been a rampant problem in the Gulf of Mexico, which is dealing with a lot more dealers and a lot more fishermen, and, for non-payment, oftentimes, it's kind of smaller amounts that are harder to collect.

The stick, at least in the Gulf, with tying it to the dealers, is that, if they do not pay their cost recovery, they're not allowed to then operate within the IFQ system, right, and so their account essentially gets shut off, or locked, until payment is received, and then they can begin receiving, you know, fish again, and reporting those through the system, and so there's kind of that immediate feedback loop to them that they need to make payment, if they are late, in terms of making payments, in order to operate within the system. In terms of permit revocation and penalties and all, I mean, that would have to be referrals to law enforcement, based on the violation to not pay under the cost recovery program.

MS. MCCAWLEY: Monica.

MS. SMIT-BRUNELLO: I think that's good information to add into the document. We have some other -- On Slide 11 from Jessica's presentation, there's some explanation, or some examples, excuse me, of some other IFQ fisheries in which it's collected, the fees are collected, from the fishermen, and it's done on a yearly basis, and so we could find out from them as well, as to what they do, and then the council can look at that, and maybe you would even have an action on what you expect as a council if the fees aren't paid by a certain time period, and so we could definitely look into that.

MS. MCCAWLEY: Thanks, Monica. Kerry.

MS. MARHEFKA: Well, to Dewey's point, currently, right now, and I forget what our preferred is in this document, but, currently, right now, you have to have a snapper grouper permit to wreckfish, and so, if your snapper grouper permit wasn't renewed for a year, because you didn't pay your fines, in essence, that's what would happen, right? I mean, we would have to think that through, and I don't know, but you --

MR. HEMILRIGHT: There's two different things though. Your snapper grouper is different than paying some administrative cost, and your snapper grouper is the part of it is the year, and you would go up, and so I understand what you're saying. You could actually do your snapper grouper renewal in a year, but not pay your money for your share of your ITQ administrative costs, and nothing would happen, and I don't think that's tied in, or is tied in? I don't see the language here before us that says that.

MS. MCCAWLEY: Monica.

MS. SMIT-BRUNELLO: It's not tied in, and, actually, this council was the one who decided how frequently you had to renew your permit, right, and it's on a yearly basis. There used to be sixty

days after it expired, but you changed it to a year, and so, if you wanted that tie-in, you would have to have that as an action in the amendment.

MS. MCCAWLEY: Okay, and so are we wanting to add an action about what happens if you don't pay, because that's not in here, and it seems like that's kind of where we're headed here.

MS. WIEGAND: You do still have a motion on the board, too.

MS. MCCAWLEY: Okay. So think about that. Back to our motion to change the preferred alternative under -- I believe we're at 7.2, and so let's dispense with this motion first. Any more discussion on the fees being collected in the last quarter of the year? **Is there any objection to changing this preferred? I see heads nodding no.** All right. **That motion carries.** Then back to -- Are we wanting to add to this document an action for what happens when you don't pay, and it looks like Andy has a suggestion.

MR. STRELCHECK: Monica and I were just talking, and I think it would be better if the Fisheries Service came back with a recommendation, some input, after we do some research on this, and this may just be more administrative in nature and not something the council needs to weigh-in on.

MS. MCCAWLEY: Okay. Christina is going to capture that. Thank you.

MS. WIEGAND: All right, and so then, moving on to the next sub-action, again, this is the submission of the cost recovery fee. Right now, you guys have quarterly selected, which does sort of conflict with what you have selected in 7.2. Again, I will just very briefly pull up Jessica's presentation providing you the details of this action.

MS. MCCAWLEY: Kerry.

MS. MARHEFKA: I will change our preferred -- **Make a motion that we change our preferred alternative from four times a year to Alternative 2, which is once a year.**

MS. MCCAWLEY: All right. Motion by Kerry, and it's seconded by Carolyn, and we're getting that on the board there. Once again, this is matching what we just selected for the previous sub-action, that these two work together. More discussion on this? **Is there any objection to this motion?** All right. **That motion carries.**

MS. WIEGAND: All right. Last, but not least, for cost recovery is Action 7.4, and this is where you all are suggesting whether the cost recovery will be based on the actual ex-vessel value of wreckfish landings or the standard ex-vessel value of wreckfish landings. Your current preferred alternative is the standard ex-vessel value. This is something that the shareholders did have quite a bit of discussion on, and so I do want to go down to their recommendation, which was the standard, noting that they felt it would avoid people underreporting to lower cost recovery and to make it easier to calculate future expenses. Then, again, I will pull up Jessica's slide, which goes over sort of the pros and cons of actual versus standard ex-vessel price, including the administrative burden.

MS. MCCAWLEY: Kerry.

MS. MARHEFKA: Sorry that I'm talking so much. That jibes with me too, because one of the things that can happen is a fisherman can be their own dealer, and that is the case, I believe, right now with a couple of the guys, and so it would not be very hard to only pay yourself, on the boat, an artificially-lowered fee, and collect it on the other end, and so standard seems -- You know, if we're really trying to get the money we need to do this program, standard seems the fairest.

MS. MCCAWLEY: Okay, and so, just to kind of wrap that discussion up, then we would stick with the preferred that we already have. Andy.

MR. STRELCHECK: The Fisheries Service has quite a few concerns about standard pricing versus the actual pricing, and so I would like to ask Jessica to just briefly speak to this.

DR. STEPHEN: Yes, I'll speak to this, briefly, and so, when we're doing the standard ex-vessel price, it will take the agency time to collect all the information, and then we release how we do the calculations for that, and I would like to remind the council that there are times in this fishery that data has become completely confidential, due to the small number of dealers and fishermen operating it, and, typically, it's a smaller number of dealers, and so that may impact how much information we can show on our calculation, moving forward.

This also does add quite a bit more burden of going through a Federal Register notice for each year when we're doing the calculations, moving forward, and we have had, in the Gulf, fishermen that are also their own dealers, and, typically, when they first joined the program, they didn't understand, and I think we could add some language to the modified text to say that you need to report what the actual ex-vessel price would be, and give scenarios of if you were to telling to someone else, and not deducting because you are your own dealer. That said, for most of the problems that we've had in the Gulf, they've been resolved fairly quickly, with a phone call to the dealer who was submitting kind of that lower ex-vessel price, and it's been cleared up and handled fairly well.

MS. MCCAWLEY: Dewey.

MR. HEMILRIGHT: I was wondering -- The confidentiality part of this fishery, is it because there is three or less dealers, or there's not three or less fishermen, and so it's just the dealer part that keeps the confidentiality, and is that not correct?

DR. STEPHEN: That's correct. Most often, it has been the dealers that have reduced the confidentiality and the ability to share the data. Now, in recent years, we've had three or more dealers, which has been helpful.

MR. HEMILRIGHT: Right, but I'm just talking about in general to the public. You know, I like to know how much is caught by the fishery itself, in general, which is -- There is more than three fishermen, and there is less than three dealers, and so that keeps the confidentiality, but it don't keep it on the part of the fishermen, and so, by publishing the numbers of the catch, how does that deal with the dealer part of it? I mean, you're getting data from the fishermen, and so why not publish about what's caught and how much fish is caught and all that other stuff? Do you understand what I'm saying? It's the dealers. It's the dealers that's three or less, triggering the confidentiality of this thing, but how about the fact that them six fishermen, and do they just sell to them three dealers, three or less dealers?

I am just wondering why -- I am always interested in numbers and seeing what fisheries produce and different things, and one thing is the confidentiality of the dealer, but then there's the confidentiality that there's not three or less fishermen that is harvesting this quota, and so why isn't that made public? Why do we -- I call it hiding behind the dealer confidentiality, three or less, and I have witnessed that numerous times, and I'm just curious as to why isn't it more transparent about how much fish is caught, seasonality of what's caught, different things, because it's not based on dealer, and it would be based on fishermen, three or more.

MS. MCCAWLEY: Andy.

MR. STRELCHECK: I mean, I would want to probably bring the Science Center, Dave Gloeckner or someone that does the dealer landings, into this, but I believe confidentiality is less than three, and we oftentimes run into this with smaller fisheries. Laurilee, for example, called me, earlier in the year, and we hadn't posted golden tilefish longline landings, right, and there was, I think, ten longliners that had landed at that point, to two dealers, and so we couldn't share that information, but, as the season goes on, and there's more information to kind of mask that confidentiality and the sales and purchases and, you know, landings of those fish, then we're able to share that publicly, when appropriate, right, but there's rules and regulations related to Magnuson and maintaining confidentiality of data that we have to abide by.

MR. HEMILRIGHT: But that's just based on the dealer part, and so the dealer triggers everything else and not the fishermen, that's more than three.

MR. STRELCHECK: This is where I'm probably needing help, but I think it depends on what we're reporting, what information we're sharing, in terms of how we have to aggregate that data and whether it triggers confidentiality provisions or not.

MS. MCCAWLEY: John.

DR. WALTER: It's a business entity, and so the dealer is a business, and so, if it's less than three business entities, then that information would be protected information and not able to -- It would be confidential.

MS. MCCAWLEY: Okay, and so back to this action here, Sub-Action 7.4. Can you show us the alternatives one more time, Christina? Okay, and so we have a preferred here. We've heard a little discussion about that. Andy, are you --

MR. STRELCHECK: I would like to make a motion to select Alternative 2 as the preferred.

MS. MCCAWLEY: All right. We have a motion. Is there a second? Okay. The motion fails for lack of a second. Andy.

MR. STRELCHECK: Then I would like to ask staff to, when this gets brought back to us, for you to capture the administrative burden on the agency to calculate standard ex-vessel price and, also, a discussion of, you know, the concerns that the fishermen have about requiring standard ex-vessel price, as well as the potential limitations of that being a problem if we collected ex-vessel price, and I think we need more discussion around this.

MS. MCCAWLEY: Okay. Christina is trying to capture that, and so if you wouldn't mind checking out what's going on the board, to make sure this captures those couple of things there. What was the other thing, Andy? What are we missing?

MR. STRELCHECK: So there's a presumption that, by collecting actual ex-vessel price, that fishermen, dealers, would cheat the system, essentially underreport, and so I think we need to capture the potential for that and how problematic that has, or hasn't, been, in other IFQ programs and how that could be addressed if we went to a preferred of actual ex-vessel price, versus standard.

MS. MCCAWLEY: Okay. Andy, do you want to check it out now? I think we have it captured, but do you mind looking one more time? All right, and so he's suggesting that that's okay. All right, and so thank you, Jessica. I know you need to get to another meeting, and so, if you can't stick around with us, we appreciate the cost recovery presentation, and thank you so much for working on this for us. We're going to take a ten-minute break, and then we'll come back and we're going to go back to the beginning of the document, and we have just finished the cost recovery action.

(Whereupon, a recess was taken.)

MS. MCCAWLEY: All right, Christina. Moving back to the beginning of the decision document for Amendment 48, and we're going back to the beginning of the document, and we're going back to the purpose and need, and I'm going to turn it back to Christina.

MS. WIEGAND: We're only going to briefly go over the purpose and need. I just wanted to remind you that, at the last meeting, we modified the language slightly, to remove the goals and objectives for the snapper grouper fishery from this amendment, because it's now in a different amendment, and so, again, a purpose of this action is to modernize the wreckfish ITQ program and revise management measures, and the need is to improve program monitoring and enforcement, as well as data collection and management and provide more flexibility for fishers and increase profitability in the wreckfish ITQ program. There's no action needed here, but I will just pause briefly and make sure everyone is still sort of comfortable and doesn't have any questions about the purpose and need for this amendment before we dive into the actions that are addressing that.

MS. MCCAWLEY: Okay. We're going to move on. I don't see any hands, and so we're going to move past the purpose and need.

MS. WIEGAND: All right. Action 1 looks at revising sector allocations and sector annual catch limits for wreckfish. Again, the purpose of this action was based off of a recommendation that came from the Snapper Grouper Advisory Panel. There was concern that the recreational allocation was a little too high, in terms of recreational fishing, and it's really intended to be a bycatch fishery and not a targeted fishery, and the shareholders, in particular, felt that a lower allocation may be appropriate, especially considering the low encounter rate in the MRIP program.

Right now, your current preferred alternative is 98 percent of the total annual catch limit to the commercial sector, 2 percent to the recreational sector, which is a change from the no action, which is 95 and 5, respectively. I will go ahead and scroll down to this table, which I think illustrates

things quite a bit better, and so you've got your Alternative 1, Preferred Alternative 2, and then Alternative 3 and 4, which are not preferred, make the commercial allocation sort of slightly higher, and, again, there is no action necessarily needed for this, and I just wanted to sort of note your preferred alternative and open it up, if there was any additional discussion to be had.

MS. MCCAWLEY: All right. We've had a lot of discussion on this, and we already have a preferred. Is there any desire to change the preferred? I don't see any hands. Back to you, Christina.

MS. WIEGAND: All right, and so, moving on to Action 2, this looks at implementing the electronic reporting system for the wreckfish ITQ program, and sort of like was outlined in the purpose and need, the goal of this action is to improve the data management and user experience, get away from those paper coupons to an electronic system.

There are a couple of things that I want to go over here. First, the preferred alternative you have right now would move wreckfish to an electronic system, and there a number of sort of interacting electronic systems, and you've got the ITQ system as well as the electronic reporting, the sort of coastal logbook, the wreckfish logbook, reporting, and those are two separate things. Most of the actions in this deal with the ITQ system, but we would also be moving the wreckfish logbook online. If you remember, on Monday, Myra talked about sort of changing the timing of the electronic logbook amendment to line up with the timing for wreckfish, and that's because this amendment moves wreckfish logbooks over as well, and so keep in mind that there's sort of multiple electronic systems that we're talking about here.

The other thing I wanted to make sure to start going over with these more administrative actions is talking a bit more about the administrative burden. We have all of the environmental consequences listed here. For the most part, the biological, economic, and social effects have not changed since you guys reviewed this document last September, but we did sort of beef-up the administrative costs section quite a bit, and so, as you'll see here, while Preferred Alternative 2 would increase the administrative burden on NMFS initially, and this involves, you know, the development and implementation of these new electronic systems, ultimately, the cost would be minimized by working through the already-developed systems, and Jessica talked a little bit about this when she was discussing cost recovery, and then, of course, once that system is in place, the administrative burden of manually maintaining the existing ITQ program would be reduced.

I did just want to sort of go over those in a bit more detail, and, with that, I will scroll back up to your actions and alternatives. Again, no action is needed here from you guys at this time, but I just wanted to go over your current preferred, in case there was more discussion to be had.

MS. MCCAWLEY: All right. Are we good with this preferred? It looks like heads are nodding yes. Andy.

MR. STRELCHECK: I will admit that I am not well prepared for this discussion with wreckfish, but I want to reiterate some comments that I've made at previous meetings, and, you know, it gets back to the administrative burden of this program, and so we have a very antiquated system, you know, and we are looking at building an ITQ online system, kind of analogous to what we have in the Gulf of Mexico, with some differences, but there is a substantial cost that comes along with that, and so, as we move forward with this amendment, it's going to be really important that I think

we pay attention to the cost and benefits of building a system like this, and I would like to probably have some more discussion, if we see that, you know, building a full-blown ITQ system is going to be way more costly, to the agency, than what we're going to recoup in cost recovery. Is there something in between kind of where we're at today and what the full-blown ITQ system could look like that would be more cost effective, and so I just wanted to kind of lay the groundwork for that for further discussion down the road.

MS. MCCAWLEY: Would you guys be ready to talk about that, I guess, in September, if there's a middle ground here between paper tear-off and a full-blown system?

MR. STRELCHECK: Yes, and I think we definitely want to spend some more time kind of thinking through this, yes.

MS. MCCAWLEY: All right. Thanks for that discussion. I don't see any other hands suggesting that we should change the preferred here.

MS. WIEGAND: All right. Then I will move us down to Action 3. This one looks at modifying the requirement to possess a commercial vessel permit for wreckfish, and so we've talked a little bit about this at past meetings, and there is currently a requirement to have two permits plus shares in the wreckfish fishery, and you have to have your snapper grouper unlimited permit, and you have to own shares, and then, once you own shares, you can get the wreckfish permit, and so it's felt that those are sort of redundant requirements, and it can -- There's some language in there about whether an entity is an employee, contractor, or agent of the vessel owner, and that language, in particular, makes it very complicated for the National Marine Fisheries Service to gather that information and administer these permits.

We have a couple of different alternatives here. Alternative 2 simply removes that sort of "agent" language, but it would still maintain the requirement for the wreckfish permit and the South Atlantic snapper grouper unlimited permit. Your current preferred alternative would remove the wreckfish permit, but would maintain the requirement that the snapper grouper permit holder must be a wreckfish shareholder.

Then Alternative 4, that was newly added by a motion at the last meeting, removes that language saying that the permit holder must be a wreckfish shareholder, and so there are a couple of things that I want to go over here. First, we have added this table in here, which sort of shows you how each alternative has sort of progressively fewer requirements to participate in the fishery. The other thing you asked us to come back with more information on was sort of why the wreckfish permit was originally maintained after the development of the ITQ program.

I believe it was Amendment 3 that implemented the wreckfish permit, and, at the time, it was put in place to sort of gather necessary information on, you know, catch per unit effort and things like that, and significantly more people were participating in the fishery at the time.

When the ITQ program was implemented, the rationale, in that amendment, for maintaining the wreckfish permit was to add another layer for sanctions, should that be needed in the fishery, but I'm going to sort of look to Monica, and I know Monica has done quite a bit of work digging up the rationale for that permit as well, and so, if there's anything I missed, Monica.

MS. SMIT-BRUNELLO: I was going to turn on my computer to answer your question, which makes no sense. I think you covered it, and I'm going to look through my notes, because I know I really had to go and research this issue when Amendment 15B put in that you had to have a commercial permit to sell the bag limit, and those sorts of things, and so I will look through the document, to see whether we need to have any additional information in there for you, for the next meeting, on the history of the permits.

I think it kind of evolved over time, in that, to some extent, the wreckfish permit maybe was even established before the snapper grouper permit, and then they kind of went -- They kind of leapfrogged a little bit, and this program is such a unique kind of entity within the Snapper Grouper FMP that it just went along, and, I mean, you see that you have kind of paper coupons and those sorts of things, because it was working, sort of, right, with the fishermen, and so nobody -- We had all these other -- The council had other issues, and they just left it alone, and so I think it's a good time to look at it is still required, do you still need it, and what would be the rationale behind keeping all of these requirements listed in the no-action alternative.

MS. WIEGAND: Thank you, Monica, and so the other thing I wanted to go over, before we sort of open it up for discussion, to make sure you guys are still comfortable with your preferred alternative, was the shareholder recommendations, again, from that June 2022 meeting, and this is something that the shareholders have had I would say a lot of concern about, and I think the important thing to keep in mind here, and I don't know if Jessica was still able to be on, and I know she had other obligations, but she's made it very clear that sort of the eligibility requirements, as they stand in the wreckfish fishery right now, can be built into the electronic system, even with the wreckfish permit removed, and the shareholders made it clear that their desire was to make sure that things were sort of status quo, in terms of eligibility to participate in the fishery, and that can be done, built into the electronic system, and would be, under the current preferred alternative.

Then, certainly, last, but not least, again, these administrative impacts. Overall, they're expected to be minimal and similar between all of the alternatives, and it would be mostly about education, outreach, compliance, and law enforcement. There would be a, you know, slight reduction in the administrative burden with removing that wreckfish permit and, again, if the electronic ITQ system is developed, and so, with that, I will go back to your alternatives and see if there is any discussion or desire to modify the current preferred alternative.

MS. MCCAWLEY: Okay. Then I think that the table might be more beneficial, to see the preferred and then see them against each other, and so, yes, I agree, but the shareholders, at their meeting, were very concerned about which one of these was the preferred. Go ahead.

MS. WIEGAND: Sorry, and I also wanted to specify -- So we met with the shareholders in June of 2022, and this new Alternative 4 was added in September, and so that alternative has not been presented or discussed with the shareholders.

MS. MCCAWLEY: Perfect. Thanks, Christina. That's helpful. I am looking to Kerry, to determine if we want to stay with Preferred Alternative 3, and then I'm thinking that we do, based on the feedback from the shareholders, until we get the issue figured out about the new electronic system, which it sounds like we're going to have more discussion on that at the next meeting as well, but let me go to Kerry, because you were at that meeting and heard what the shareholders had to say as well.

MS. MARHEFKA: I don't know why it's so hard for me to wrap my brain around, and it's so complicated, and just explain to me -- I want to do what they want, I think, and so, if that's where we're at right now, then I'm fine staying there, but, for my own curiosity -- The way it is right now, if a wreckfish shareholder wanted to lease their shares to say someone like me, who is just a snapper grouper permit holder, you cannot -- Tim is saying you cannot do that.

MS. WIEGAND: Correct, because, in order to get the wreckfish permit that's required to harvest, you have to own shares.

MS. MARHEFKA: I don't recall a lot about that discussion, in terms of was there any concern about how that limited potential -- I mean, this, like the rest of our fisheries, is an aging fleet, and sort of -- You know, it's not like we're trying to grow the snapper grouper fleet, I mean the wreckfish fleet, but how -- Were they concerned about the impact to getting new entrants into the wreckfish fishery? That's the only thing I can --

MS. WIEGAND: So, I don't recall the shareholders having a discussion specifically about concerns of aging of the fleet and getting new entrants into this fishery, and they very much felt like there's not really any more shares to go around, and there's not a lot of room for expansion. However, we've presented this amendment sort of briefly, just giving updates, to the Snapper Grouper AP, and there has been some discussion, at the Snapper Grouper AP, of fishermen wanting to sort of open up the ability to participate, in a way that it isn't now, with that requirement to own shares to get a permit. One of the things, sort of after we get through this, Mike is going to talk to you all about what you would like on the agenda for the Snapper Grouper AP meeting, and one of the things that the AP did request was a bit more detail on this amendment.

MS. MCCAWLEY: Go ahead, Tim.

MR. GRINER: Thank you. Isn't that why we added Alternative 4? If they haven't seen that yet, I think they need to see that too, but I'm not saying change the preferred or anything, but I think -
- Wasn't that the whole reason we added Alternative 4?

MS. WIEGAND: So that was my understanding of one of the reasons that you guys wanted to consider Alternative 4, but I will also look to Andy, who is the one who proposed that motion, in addition, in September, but my understanding is your understanding, Tim.

MR. STRELCHECK: I guess what is the question, again, for me? In terms of difference between 3 and 4?

MS. MCCAWLEY: No, and it's more about, if you're wanting new entrants into the fishery, the way to do that might be to change the preferred to Alternative 4. The reason that's coming up right now is because the Snapper Grouper AP met after our September meeting, and after the shareholders' meeting, which I think was in the summer, maybe June, and the Snapper Grouper AP, in October, I believe, said that they were thinking that new entrants should be allowed.

MR. STRELCHECK: Okay, and so Alternative 4, if you go back to the table, right, and so Alternative 3 is tying it to the shareholder, and only if you can shares are you going to be able to harvest, right, whereas you would be able to lease allocation to someone who doesn't have shares,

and they would be able to operate within the fishery. That's similar to what the Gulf programs do. The main difference here is that, in the Gulf programs, they also allow people that don't have a permit to hold shares, right, and that's been a criticism of the program, and we don't have that as an option here, right, and so I think we're good there.

You know, if you want, obviously, fishermen who maybe get sick, you know, that they want to lease out their quota, and other people, Kerry and others, want to go fishing for wreckfish and get involved in the fishery, then it provides for those opportunities for them to do so.

What we've run into in the Gulf, primarily with red snapper, is that the sale of what we call allocation, right, and not shares, and so it's the annual allocation, has gotten very high, relative to the ex-vessel value, and so those that are leasing that allocation, on an annual basis, are paying a lot for it, and so their profit margins on trips are pretty minimal, and so, you know, you either limit, upfront, who can participate, and you force them into buying shares, in order to operate within the fishery, or you allow for that greater access, but there is potentially the ramifications of access to quota and then the prices they might have to lease it for. I think it's reasonable, and it could expand out the universe of participants, to go to Alternative 4, but I'm not ready to make a motion for that.

MS. MCCAWLEY: Thanks for that explanation. Chester.

MR. BREWER: Andy has touched on something that has -- It really is a problem in the Gulf. I mean, it really is, because you've got people that do not own -- You know, they don't have a permit, and they don't have a boat, and what they have is they've gone out, and, for whatever price, they've bought shares. Then they turn around and lease them, and I'm sure they amortize it, but they amortize it pretty good, and they're making a killing, and so what's happening is you've got this situation where more and more and more of the shares are actually being held by people that are not in the fishery, and they're just out-and-out investors, and so, as we go through this, that's something that needs to be looked at and remembered and something that I think should be studiously avoided. Thank you.

MS. MCCAWLEY: Kerry.

MS. MARHEFKA: I was going to try to wrap it up, but, since there are other hands up, I can pass, or whatever your desire.

MS. MCCAWLEY: What were the other hands up? Dewey, go ahead.

MR. HEMILRIGHT: It seems like there is three or four ongoing scenarios here of whether you're selling shares, you're leasing shares, and, given that it's only about a 200,000-pound quota, there's not a whole bunch of wiggle room, and it's probably a really small ITQ fishery, compared to other places, and so, looking at this, if the shareholders want to worry about new entrants, and the graying of the fleet, and possible -- Maybe there's some scenarios you do that, if you are to lease shares, it can only be 25 percent of the value of the fish, or something like that, so you don't have one of these sharecropper things, where somebody is just out there leasing.

The second thing is, if they want to sell it, then, if everybody has to have a share, then they're able to sell a share to somebody that has a snapper grouper permit, which allows them to go buy more quota, and so, if you're trying not to turn it into something that's in the Gulf, there's ways to put

parameters on that, such that these six or eight folks that own these shares, that want to pass it on or do something, and so you put some parameters on it, and some sideboards, and here's how you deal with it.

MS. WIEGAND: I do want to note, and I think Andy brought this up, the way Alternative 4 is written now, it doesn't necessarily, you know, get around how much they're charging to lease shares or allocation, but it does require that snapper grouper unlimited permit, which my understanding is those permits are not easy to come by, and it is under a two-for-one program, and so, in order to harvest wreckfish, you would still be required to have that snapper grouper unlimited permit, which does sort of restrict the universe.

MS. MCCAWLEY: Okay. I'm going to go to Kerry, to see if she can wrap-up this discussion on this action for us.

MS. MARHEFKA: At this time, I think that I would recommend that we stay with Preferred Alternative 3, and I think that we've laid out a pretty good case of why we're there right now. If the AP looks at it and compels us to feel some other kind of way, after their meeting -- I personally am going to talk to some of the wreckfish guys, just to make sure that we're approaching this right, but I don't think that we're going to move away from this right now, and so --

MS. MCCAWLEY: All right. Thanks for that discussion.

MS. WIEGAND: All right. Then I will move us on to Action 4, and this one is a little bit of breather for you, before we get into VMS, but Action 4 looks at modifying the commercial fishing year for wreckfish. The reason we're looking at this is to reduce the administrative burden and system downtime that would be needed as the ITQ program moves toward an electronic reporting system. It's sort of lining it up with a calendar year lines it up with the other ITQ programs that are administered by the agency. If they're not lined up, you could end up with this situation where wreckfish has to be shut down when everyone else needs downtime, and then everyone else needs to be shut down when wreckfish needs some downtime to reboot the system for the coming year.

The current preferred alternative would modify the fishing year from January 15, or from April 15, through April 14, to the calendar year, and so January 1 to December 31. Again, the shareholders did say that they were comfortable with the modification of that fishing year, and this would reduce the administrative burden on the agency. There is no action needed here, but I just wanted to, again, let you know about your preferred alternative and open it up, if there's any additional discussion.

MS. MCCAWLEY: All right. It looks like people are shaking their heads no, that they're okay with this preferred. Okay.

MS. WIEGAND: All right. Well, let's move on to Action 5, which is going to require a bit more discussion. This is the action that looks at requiring all vessels that are participating in the wreckfish portion of the snapper grouper fishery to be equipped with vessel monitoring systems. You have not selected a preferred alternative with this, and I guess we're going to provide a little bit of history on why this is included and sort of where we've gone since then.

There was initially some discussion about whether or not VMS would be beneficial when it comes to enforcing offloading requirements, and, right now, the wreckfish fishermen are required to offload during certain hours and at certain locations, and that's addressed in the subsequent action. Their biggest concern with that is not so much the locations, because they are -- If they're going to be landing at a different location, they just have to give twenty-four-hour notice.

Their bigger frustration, as shareholders, is the hours they're required to offload, and so, while VMS was proposed as a solution to that, it's really only a solution to the location part of it. Offloading hours would still be required, and so we wanted to provide you a little bit of detail on this.

The wreckfish shareholders, when they met in June, said that they -- Given sort of the fact that VMS was not likely to get the offloading site and time requirements removed, they felt there wasn't really any tangible benefit to VMS, especially since one of the things that law enforcement noted is that VMS is helpful for enforcement of marine protected areas, and there are no marine protected areas near their fishing grounds, and, additionally, they felt that the current logbooks they fill out do provide enough information to use for science and that VMS is not going to provide any additional information, and, again, sort of the social, biological, and economic effects are the same, and we're just noting the administrative burden of VMS would be significant, because it would require development of infrastructure to monitor those vessel monitoring tracks and would require significant outreach and education to make sure that these fishermen were compliant with the VMS requirements.

You guys currently do not have a preferred alternative selected under this, and what, you know, we would like you to do is sort of discuss your additional rationale for the use of VMS in the wreckfish fishery and why you feel it's going to improve the fishery, or, vice versa, if you want to continue considering VMS for this fishery at this time, and so, with that, I will turn it over to you, Jessica.

MS. MCCAWLEY: Thank you, Christina. I expect some discussion here. Kerry.

MS. MARHEFKA: I would like to make a motion that we remove Action 5 to the Considered but Rejected Appendix, please.

MS. MCCAWLEY: All right. Motion by Kerry and seconded by Chester. It's under discussion. Mel.

MR. BELL: For all the things that Christina just covered, I'm just trying to see what's the value, unless there is some particular value for enforcement, but, then again, we're not worried about marine protected areas, and we're not worried about offloading locations, and I'm not sure what the value in it is, and so it might make sense to remove it.

MS. MCCAWLEY: All right. Laurilee.

MS. THOMPSON: I thought I heard, earlier this morning, that, because they are an IFQ program, they were required to have VMS. Did I hear that right? Okay. Good.

MS. MCCAWLEY: More discussion here? Andy.

MR. STRELCHECK: I mean, I would be interested in, obviously, getting input from the Office of Law Enforcement on the utility of VMS. You know, in the Gulf program, we have the hail-in and hail-out requirements, and we have the landing locations, and they also have vessel monitoring systems, and so, to the extent that, you know, the vessel doesn't report a hail-out notification, the VMS is kind of a secondary tool, to let us know that vessel is coming into port, if that step is missed in the process, and it can allow, obviously, officers and port agents to meet the vessel at the dock.

It's also kind of just a broader check on the, you know, reporting, to ensure that there is landing transactions and logbooks and everything else that are matching up with trips that are taking place. I was asking my team, in terms of IFQ programs around the country, and I think the only other one that doesn't have VMS requirements is golden tilefish, up in the Northeast, and I don't know the details behind that decision.

You know, certainly this is a small fishery, and it's, you know, pretty easily managed, and so I think there is some reasons why maybe VMS shouldn't be required, but I don't know if Pat, or others, would have any other thoughts, in terms of VMS requirements and the value of them here, or not.

LT. O'SHAUGHNESSY: Andy covered the majority of the reasons. The main one is we have that option to know when the vessel is actually coming in. This is such a small fleet, and I have a limited number of personnel, and so knowing whether the vessel is coming in, or where it's coming in, without having to rely on phone calls or anything, and, likewise, we do check to make sure reporting is done, and the way we can do that is we see a VMS trip on a vessel, and then there should be an associated landing and reporting with it, and so those are the two main benefits that I could see for this fishery.

(There is a break in the audio recording.)

MS. MCCAWLEY: All right. Chester, you had your hand up.

MR. BREWER: The things that were said by the AP make a lot of sense, and so I'm wondering if it's -- I realize, and I don't want to add anything to this at all, period, but I'm wondering if it might make some sense to have a short amendment to change the way that law enforcement is notified of these boats coming in, in such a way that it lets -- It's the least trouble for everybody involved. Right now, you know, it seems, to me, to be horribly inefficient, and I'm not a participant, obviously, in the fishery, but it seems really inefficient.

MS. MCCAWLEY: A couple of things. I think maybe let's go to the next action, and talk about that a little bit, because I think that this will maybe help answer some of those questions first, and so just standby. Monica.

MS. SMIT-BRUNELLO: Because the microphones were off, could you just say, for the record, what the council just voted on, eliminating -- Moving this action to the Considered but Rejected, because I'm not sure that record captured that.

MS. MCCAWLEY: All right. **Will do, and so the last motion was to remove Action 5 and send it to the Considered Rejected Appendix, and Action 5 is the action on VMS, and we took a vote, and the motion passed eleven to zero to two.** All right. I am going to pass it over to Christina to dive into the next action.

MS. WIEGAND: All right, and so I think it's going to be helpful if we talk about sort of the current offloading site and time requirements for wreckfish, since this is really the crux of the issue. The wreckfish shareholders have sort of been frustrated, mostly about the timeframe, feeling that it was overly burdensome and that, you know, the allowable time requirements really affect the efficiency of their fishing operations, and they would like to see the offloading site and time requirements removed completely.

We've got a number of alternatives over here, and I know they're a little wordy. There's a table down here that I think is going to help in a second, but, right now, the current requirements are that wreckfish be offloaded between the hours of 8:00 a.m. and 5:00 p.m. They have to be offloaded only at a fixed facility of a dealer with the GSAD, the Gulf and South Atlantic dealer permit, and they can be offloaded at a location other than that facility so long as they give the NMFS OLE office the location not less than twenty-four hours prior to offloading. None of these alternatives address that site requirement, and they are only looking at the offloading hours.

Under Alternative 2, the offloading hours would be expanded to 6:00 a.m. to 6:00 p.m. Under Alternative 3, they would be expanded to 5:00 a.m. to 8:00 p.m., and then, under Alternative 4, those offloading hour requirements would be removed entirely, and so I'm going to scroll. Here, you can sort of see the difference in hours between each of those different actions. When we talked to the shareholders, they did note that they would prefer Alternative 4, to completely remove the offloading hour requirements. They did say that, if they had to pick offloading requirements, they would prefer Alternative 3, which does give them sort of the widest range of hours to offload. You currently don't have a preferred alternative under this action, and so we would be looking for you all to discuss and select a preferred alternative.

MS. MCCAWLEY: All right. Thank you, Christina. Andy.

MR. STRELCHECK: I don't know if Kerry or Tim could speak to this, or someone that attended the meeting, and I guess I'm struggling with how this is so restrictive on the fishermen. I get, obviously, that if a boat comes in, and they can't offload, if they're outside of the offloading hours, but these are often multiday trips, right, and we're talking potentially a twelve-hour time lag, at worst, between a boat coming in at 6:01 p.m. and being able to offload the next day at 6:01 a.m., and so can someone kind of explain this further to me, the concerns?

MS. MCCAWLEY: Who wants to go first, Kerry or Tim? Tim and then Kerry.

MR. GRINER: Well, part of the problem with that is exactly what you said. You've been on a multiday trip, and you come in at six o'clock, and, instead of unloading your boat and going home and going to bed and not going back to your boat for two days, now you're back at the dock first thing in the morning, to finish what you could have done in another two or three hours, and so that part of it is a little bit burdensome.

Personally, I find not only that burdensome, but I find the fact that you have to go to a fixed dealer facility burdensome as well, and I will explain why. It's getting more and more difficult to find these fixed facilities, and it's getting more and more difficult to get your boat into them at these times of day and to keep it there, and so, to me, it's not just the time, but it's also the fact that you can't get your boat to any dock that you can and have the dealer's truck meet you there and unload, and I just wanted to throw that out there, because I know that's not really on the table as an action right now, but I did want to have some discussion on that as well.

MS. MCCAWLEY: Kerry, did you want to add anything to that?

MS. MARHEFKA: Yes, and I feel very strongly, like Tim does, about both of these, and so I think this is not reflective of the state of the current infrastructure of our fishing industry. I can tell you that, at our dock, you can only unload at high tide, and there is no other mechanism to unload. We have no crane, and we are lifting hundred-pound totes from the boat up onto the dock, and no one is going to do that at low tide, and so, if you get in at, you know, whatever, high tide until -- You have to wait two tide cycles in order to get law enforcement out there.

We are so strapped for infrastructure, you all, and I don't think that -- Like I don't think that people understand, and so I agree with Tim. These guys need as much flexibility as possible, and what I'm wondering, between these last two actions, whether it's VMS or this, the offloading requirements, is there some rampant problem that has not been -- I have not heard that we're trying to fix something.

I have not heard of a -- I read the law enforcement reports, every time we get them, and I have not heard of a case made against these guys for not reporting, or not doing what they're supposed to do, and it feels like we're trying to solve some problem that does not exist, and there's six guys, and these guys -- I'm telling you that there's only a couple of places they have left to go, and we are hamstringing their business so badly, and it's obviously very frustrating to me.

MS. MCCAWLEY: Thanks for that explanation. Dewey, I think you had your hand up.

MR. HEMILRIGHT: I can attest to Kerry and unloading in Shim Creek. When we were going there to unload shark, and we had to lift up stuff about ten foot high, with a long gaff, and it was almost virtually impossible, but, given the limited ability of where these can land, I wonder if a call-in system of we're going to be landing at a certain dock at this time, and we're going to be unloading at this time, is enough to suffice, three hours ahead of time, for whatever capability is needed.

It is difficult, with the amount of dockage that's left out there, the timeframes of unloading, meeting trucks, and you could be coming in at three o'clock in the morning, and that means you've got to wait until a certain time, and you've got a truck there at eight o'clock in the morning to unload, to get that product, and so there is a lot of variables here that is not captured here, and, as Kerry said, I wonder if -- What's the problem of why we're having to address it through these different things, and I think a call-in system could cure that, to let enforcement know that you're going to be here, at this dock, unloading, and there's the timeframe, and, if they wanted to come there and check you, or be there afterwards, and just we need the flexibility. Fishermen need the flexibility, given the limited dockage, unloading times, meeting trucks, truck schedules, and all of the above, and so it's vitally important for that.

MS. MCCAWLEY: I was talking to Christina up here, and we're discussing possibly adding an action, if this is what the committee chooses to do, that would deal with a hail-in/hail-out type provision, because we don't have anything like that in there now, but let's, I guess, consider that, in your minds, in thinking about what you want to do here on Action 6 and then if you want to direct staff to come back with a separate action that would have more items. While Christina is going to the different alternatives, Monica has her hand up.

MS. SMIT-BRUNELLO: Well, does it need to be a separate action, or can you add an alternative in here? I mean, the action is modify offloading site and time requirements for wreckfish, and it seems like you might be able to come up with an alternative or two that would go under this action.

MS. WIEGAND: I think we could possibly do that. I think it would be something for the IPT to discuss, before I say anything on the record about what's possible with that.

MS. MCCAWLEY: All right. Kerry and then Dewey.

MS. MARHEFKA: Well, let's try it, shall we, and I'm trying to think of the best way to do this.

MS. MCCAWLEY: There was discussion over here about Christina could come back at Full Council, but, still, don't you want to maybe make a motion to direct staff to consider something, consider an item, and, that way, they can decide what's best, whether it's an alternative or another action. I'm going to pass it back to you.

MS. MARHEFKA: What Jessica said. I want to make it clear that my intent -- **Had that suggestion not come up, my intent was to select Alternative 4, to remove the offloading hours completely. Just so you know, my intent, or I think our intent, is that we would like to get at removing the site location and the hours and would be willing to look at a call-in, a hail-in/hail-out provision, in order to address that.**

MS. MCCAWLEY: Okay. We're trying to capture that on the board there, and so then I would - - Process-wise, I agree, and I don't think that you should pick a preferred here, because you don't know whether we're adding a whole separate action or another alternative to the document. Dewey. Andy had his hand up, and can I go to Andy and then back to you? Okay.

MR. STRELCHECK: I almost think it would be cleaner if we had a separate action for a hail-in/hail-out provision. One of the struggles I'm having is, with the Gulf program, part of the ease of doing a hail-in is they have VMS requirements to be able to do that hail-in, but, with that said, you know, with this action, I think we're dealing with two issues, right, and so the -- Where you offload is kind of the first problem, and then the time of the offload is the second problem.

I think the first one can be easily addressed, and kind of aligned with the Gulf, in that what we do is we allow people to land at an approved landing location, and that doesn't have to be the dealer, or it doesn't have to be a fixed facility, and so think of like a trailered vessel, you know, someone that's going to be landing at a boat ramp, but they still specify the dealer as part of that landing.

The offload, I still question, you know, whether or not there's value in terms of at least limiting the range of times in which offloading occurs, and if it's -- You know, going back to Kerry and

Tim, when you're offloading fish, I mean, are you really offloading fish at all hours of the day and night? Is that truly happening?

MS. MARHEFKA: Yes.

MR. STRELCHECK: Okay.

MS. MCCAWLEY: I have a suggestion for what to do here, but Dewey had his hand up, and then, Mel, your hand was up.

MR. HEMILRIGHT: The only reason why I was plugging the hail-in and hail-out is I believe that all states probably have a twenty-four-hour person onboard that you can make a phone call, and I believe I've done that in North Carolina before, to where that -- I mean, we're not talking 10,000 vessels here, and you're talking a handful of vessels. They call in and say, hey, we're leaving, or they're hailing-in and saying we're going to be arriving three hours before, and we're going to be at this location, and this time, and something like that, to do -- It's something that suffices the need for what's trying to be done here, because you do need to have flexibility of landing times and different things, and I think that could be the simplest thing, a phone call.

Even if you didn't have phone service an hour out, you still had to wait two hours, and you had to do it three hours, to get that ability, and that's documented through the call system that you would be doing to that state, and it's not like you have everybody doing it, and this would be just like a special type of program or something, and a limited number of people, and I think that's very doable.

MS. MCCAWLEY: All right. Thank you. Once again, I have a suggestion for us, but go ahead, Mel. You had your hand up.

MR. BELL: I was just going to support what Kerry was saying, and we do have limited waterfront access now, and we're losing it, in terms of infrastructure to support offload of a multitude of fisheries, and so that is an issue, and we do have tides that make it difficult to -- You know, you can't just pick your time, because you can't get to the dock, and so that is true.

The other thing, and we don't need to tie it up here, and I still go back to the what is so special, and I know it's an ITQ fishery, and it's our only one, but what is so special about this fishery that we're concerned with the level of oversight, and it may go back to the origins of when the fishery started, and it's completely different, but, you know, what's the problem that we see with this fishery that we're trying to fix through these measures, and we don't need to have a history of the fishery right now, but I still go back to that, in my mind, is what's so different about this fishery from other fisheries that we need to do this.

MS. MCCAWLEY: Okay. Let me make a suggestion and see what you think. Christina and I had a short conversation up here, and so we don't think that we'll be able to solve this in Full Council, just because we think there would be significant discussion about this whole site and time requirement, as well as the hail-in and hail-out provision. Right now, the amendment has been coming back at every other council meeting, and so it's set to come back to September for final action.

Christina is suggesting that maybe these two actions can come back to June, just the piece of the amendment, and we could have that discussion then, in order to prepare it for final action in September. Myra just passed out over there, but anyway -- That's just a suggestion for something that we could do, because I suspect that there would be significant discussion, but I think we want to hear more from the IPT and let them try to figure this out. We've had a request for some history to come back, and they would need to research that and bring it back, and so, if possible, maybe there's a way to just bring these two pieces back in September, and we could still finalize in September, and so just a thought there. Kerry.

MS. MARHEFKA: I am great with that if staff can figure out how to work that little matrix. I want to make sure that it is captured, and Mel's question I think is really important, and I really want the IPT to address why this is so important for this fishery and what problem we were ever trying to solve with this.

MS. MCCAWLEY: Yes, and Christina is typing that right now, and so if you would look at the direction to staff and make sure that you think that captures everything that we've been discussing here around the table. Okay. It looks like we're okay. Andy, do you think this captures what we've been discussing and what we want staff to come back with?

MR. STRELCHECK: Yes, and so has the motion then been withdrawn? We have a motion on the board.

MS. MCCAWLEY: It hasn't been voted on, and so let's go back to that motion. **The motion was to direct staff to develop an alternative that would remove offloading site and time requirements, but would have a hail-in/hail-out provision, and that motion was seconded.** Is there any objection to that motion or more discussion on that motion? Andy.

MR. STRELCHECK: I would like more discussion, and so, if we're asking staff to bring back the information, it seems like it's contrary to the guidance to staff to eliminate it from the document. That's why I was suggesting that it be withdrawn.

MS. MCCAWLEY: Maybe the motion should be just to add an additional action. Kerry.

MS. MARHEFKA: Whichever is cleanest. I don't have a problem withdrawing it, and I feel the issue -- Whatever you think is cleanest.

MS. WIEGAND: My personal preference, and I guess I can look to Monica, to make sure this is accurate, is, if we want to stay somewhat on the timeline for this amendment, I think it would be helpful to have a motion, be it an alternative or action, and I feel very clear that I understand the council's intent with this. That way, staff can go ahead and develop the language for you all to see in June, whereas, if you discuss it in June, and then we develop the action and alternatives later, we would have to delay the timeline of this amendment, and so that's my thought, wanting to sort of keep it on the timeline that you guys have established thus far.

MS. SMIT-BRUNELLO: I agree with that. What you're saying though, to recap, is you would prefer the IPT be given flexibility to develop what the council intends here, through some alternatives, or perhaps another action, whatever the IPT thinks would fit best within the document,

and then that would also include the rationale, some history as to why we are where we are and all that sort of thing, for June.

MS. WIEGAND: That is exactly what I think I'm trying to get at.

MS. MCCAWLEY: Andy.

MR. STRELCHECK: **So I wasn't, obviously, the seconder of the motion, but I would be comfortable with a motion, just to give staff direction to add a hail-in and hail-out provision, or bring back discussion of hail-in and hail-out provisions in June, but eliminating that first component, since it's contrary to the guidance below.**

MS. MCCAWLEY: Andy, does that work?

MR. STRELCHECK: You have to go back to the motion maker and seconder, but that's fine with me.

MS. MCCAWLEY: Okay. Kerry.

MS. MARHEFKA: **I'm fine with it.** I just want to make sure it's clear that that doesn't preclude us from later going in and taking out -- I'm fine with that. I don't remember who the seconder was, but I'm fine with it.

MS. MCCAWLEY: Okay, and so we just added the timing component that we just discussed, and so let me read the motion. **Direct staff to include a hail-in/hail-out provision and bring that back to the June 2023 council meeting.** All right. We have a revised motion. The seconder is good. Any more discussion on that? **Any objection?** All right. **That motion carries.**

MS. WIEGAND: That's all -- We already talked about the cost recovery actions, and so that brings us to the end of this document. That's all the action we need from you at this time, and I would just, again, remind you that the public comment period this afternoon is serving as the public hearing for this amendment.

MS. MCCAWLEY: Thank you. Monica.

MS. SMIT-BRUNELLO: I promised you, back in September, that I would talk to you about what this meant when you hear that the fishermen paid for a stock assessment, and so I see that it is 12:02, and so I am happy to do that now, or I am happy to do that in September, or I am happy to do that when you come back from lunch, whatever you would like, and it will be brief, but I did want to get that on the record, so you all understood what happened, just kind of in a summary form, and so, if you would let me know when you would like me to do that, I would be happy to do it.

MS. MCCAWLEY: Maybe when we come back from lunch. I don't think we're going to finish the committee before lunch, and I'm going to turn it back to our chair to make some decisions about lunch.

DR. BELCHER: I am going to go ahead and tell us to break now, because, again, I don't know where our conversations will go, but I do want to make sure that, you know, we don't get to where we're pushing it too far out, and so let's go ahead and do our hour-and-a-half for lunch, and we'll come back and we'll finish this up, and so 1:30. I think we're fine with 1:30. Let's be back at 1:30.

(Whereupon, a recess was taken.)

MS. MCCAWLEY: We're going to go ahead and get started here. We're trying to wrap up the Snapper Grouper Committee. We only have a couple more items left, and so the next item on our list is we're going to look at the topics for the upcoming Snapper Grouper AP meeting, and I'm going to turn it over to Mike, who has the list of topics.

DR. SCHMIDTKE: All right. Thank you, and so we'll get started with the AP topics. Staff have come up with a list of topics here, based on just some of the needs of ongoing amendments, as well as some of the feedback that we've gotten from council members and leadership and some of the things that have been brought up in previous meetings, and so you see the list of topics here.

We have a red grouper fishery performance update, and several amendments to go through, and there will be some time set aside for the MSE folks to come in and have some discussion, and there will also be a review of the research recommendations, and that's one of the items -- Just for the timing aspect, that's one of the items that needs to stay on for April, because, after the AP goes through the research recommendations, they will have feedback for you all, as you evaluate those in June, and there was also discussion of the space launch activities and how they're affecting fishing off of Florida, and so that's there within those topics as well.

Then, at the bottom, we just have kind of some general updates, and I do want to point out that, last time our AP chair, Bob Lorenz, presented, one of the things that he really wanted to prioritize a little bit more is being able to have some time for some of the updates, some of the programs like citizen science and such that the AP are able to get involved in, trying to prioritize some of that time, and so he and I work together in the scheduling process, to try to make sure they get their deserved attention as well. As you can see, this is quite a bit for us to cover in two days.

MS. MCCAWLEY: Wasn't there something in the evening, during the Snapper Grouper Committee, and they're going to have some sort of an evening meeting? Chip is nodding his head. Yes, and so I can't remember what that was.

DR. COLLIER: It's the scoping for the MSE, trying to get that additional stakeholder input.

MS. MCCAWLEY: All right. Thanks for that. All right. What do we think about this list? Any comments on this list? Are we good with this list? Okay. I see some thumbs-up. Okay. Thumbs-up. All right.

DR. SCHMIDTKE: Then I wanted to note, in addition to the April AP meeting, just kind of looking at the scheduling, and the SEDAR Committee I think is up after Snapper Grouper, but you'll go into the SEDAR Committee there, and, if you look at the schedule for SEDAR, you'll see that there are a bunch of assessments coming up. Before the assessments happen, we get the AP together to do fishery performance reports, and so we have red grouper coming up, but, within

the next -- You know, through 2023, and into 2024, we have I think six, six or seven, fishery performance reports, and meeting two times a year, doing one fishery performance report per year, the math doesn't quite add up there, and so we're talking --

Internally, we're just thinking about how we can try to accomplish those responsibilities of the AP, in addition to the topics that come to them in their meetings, and so one of the routes that we're thinking about right now is possibly having a summer webinar, where the AP can sign-on, and it would just be dedicated to filling out some of these fishery performance reports, so we can knock those out ahead of those assessments. That sometimes can be a time-consuming process, and so that would be potentially one way that we can approach that, and we'll kind of keep you all updated, as we go through, with any scheduling of those meetings.

MS. MCCAWLEY: All right. Very cool. Any additional comments on this list? All right. I don't see any additional comments. I think the next item on our agenda is maybe a short discussion on yellowtail, and then Other Business, and so I'm going to turn it back to you for the yellowtail discussion. Allie is coming up. She's going to talk to us about yellowtail.

MS. IBERLE: The Gulf expressed concerns, and, obviously, you heard that for this meeting, over timing, and so we had planned to bring this to you guys in June, and so we've got an options paper together in June, and so I guess just discussion on the timing going forward. Just note that this has to go to you all's meeting, and then it also has to go to the Gulf, and so there has to be joint stuff, and so it might take a little bit longer.

MS. MCCAWLEY: A question, and so then does it go to the Gulf first and then back to us, because they meet in June as well.

MS. IBERLE: So we're the administrative lead, and so I think we were trying to keep it on a schedule where, any changes, we dealt with first, and then it would go to the Gulf.

MS. MCCAWLEY: Okay, and can you remind us of the estimated time to complete this, when we were scheduled to do final action, and it seems like we talked about this.

MS. IBERLE: We did, and I believe the workplan, which is what I think we should be going off of, we have an amendment document in September of next -- Of this year, and my apologies, but let me confirm that, but I believe that's what was on the workplan.

MS. MCCAWLEY: All right. Then we can talk about it during the discussion of the priorities list, and so we did talk about this earlier in the week, and Dale brought this up as an item coming from the Gulf, and suggesting that we need to get moving on this, because the stock assessment was updated by FWRI, and, by the time we finally get something in place, it will be old again, and so, Dale, I don't know if you wanted to add anything here.

MR. DIAZ: The only thing I wanted to add is I talked to Ryan before I came to the meeting, and it was my understanding, from Ryan, that we were going to try to discuss this during our June meeting, which our June meeting is from June 5 to 8, but I don't know, and he did say he was working back and forth with Allie, and I'm sure they can work out any problems there might be, and, by the way, he did compliment Allie as being a very good scientist, by the way, and a very competent scientist, and so thank you.

MS. MCCAWLEY: Okay, and so Allie is saying that we'll have a decision document in June, but, yes, we need to get moving on this, so that the data is not old again. All right. Any questions about yellowtail? We'll look at it again in the schedule, when we look at the priorities document later in the week.

Then now we're going to talk about some Other Business items that have come up through the week, and so one of the items -- I have two or three on the list here, and so, if you have Other Business items, then feel free to bring them up. One of the items that we talked about a little bit this week, in the committee, had to do with regime shifts, and so I think that it would help me if maybe we could get a little bit more information about that paper that the SSC is using on regime shifts, and so maybe this is something that the SSC could bring back to us, but, also, in addition to hearing from the SSC, I would really like to have a discussion on the management side, about what is and isn't allowed under the MSA currently relative to this, and I don't know if this is possible, and I don't know how soon something like this could come back.

MR. CARMICHAEL: Jessica, I think it's important, because this has come up a couple of times, and it's been right there, as, you know, an issue within several rebuilding plans, and recruitment that's feeding projections, and, you know, it's becoming a pretty fundamental issue, and so I do think maybe having the SSC consider it, and try to provide some guidance to the council, as to how regime shift is potentially being evaluated now and what the consequences could mean, in terms of, you know, what they provide, the fishing level recommendations that they provide, and then perhaps combined with maybe our staff and the Regional Office staff looking at that, to think about, you know, what does the council do with that, and how does the council approach that, in terms of, you know, buffers and setting, you know, risk tolerance and that sort of thing, because I see it as definitely, you know, a risk-tolerance-type issue, and so I think we do need to have some more discussion about it and maybe come up with, you know, are there other ways to evaluate it, and we've commented a couple of times about the last one, where there are seven criteria, and six were pulled, or there's eight and seven, whatever it is, you know, and where does this evidence go, but I think, importantly, for the council, what does that really mean?

What does that mean to the fishery and the productivity of the stock and all that, which I think will take sort of some SSC looking at the process and the science mechanics behind it, and then maybe our staff and the Regional Office getting into the management, or maybe consulting with like Monica, perhaps, on the legal side, and where you might have some flexibility in Magnuson.

MS. MCCAWLEY: Thanks, John. I see hands up. Kerry.

MS. MARHEFKA: Thanks for bringing this up, Jessica. This has been on my mind a little bit, and, last night, I kind of couldn't sleep, just thinking about Dewey had asked the question about it, and it got my brain turning a little, and so I reached out to Mike and was asking about sort of that paper that Mel brought up, about -- You know, that they were using as the scoring criteria, and so I asked Mike to help me find it, and there's nothing more dangerous than someone who doesn't know a lot trying to teach themselves this stuff, but one of the things I did notice is that paper relates to single stocks, and we're dealing with a multispecies stock, and so I would just -- You know, it helps for us to educate ourselves, and we can never learn too much, you know, as we go through this process, and I personally would like be educated more on this whole concept of

regime shifts, what they're basing these decisions on, and so I really appreciate you bringing it up, because I feel pretty strongly about it too.

MS. MCCAWLEY: Thank you. Mel.

MR. BELL: It's something we've never had to talk about before, you know, and it's something new, but it's something I think we may find ourselves talking about more, just given other things, dealing with climate change and things that might be going on with systems, and the paper that was referenced, that they were looking at, seems to focus on let's say you take a management action, and a stock just doesn't seem to be rebuilding like you would think it would, but I would also ask the question of, well, in a regime shift, can it also go the other way, you know, and can a stock be doing something, in terms of its rebuilding capacity, that you weren't anticipating, and it looks like it's the complete other direction, but then what all that has to do for us is what do we do, as managers, and how do we -- You know, is it a matter of risk tolerance, or what it is that we do to respond to those sorts of things, if we find ourselves in that situation.

MS. MCCAWLEY: I am hoping that maybe staff can capture some of this and then this could go on the priority document, and we could figure out when it could feasibly come back, and I don't necessarily think it needs to be the next meeting, but sometime later this year.

I guess another item -- So this came up during the gag discussion, and there were some questions about size limits, and there are some really interesting things going on with Gulf gag. Sue Barbieri has done a bunch of research, and so I'm looking a little bit to Andy, and maybe, at some point, there could be a presentation, and maybe it's a joint presentation from Sue, and maybe some of your folks, Andy, about what the Gulf is looking into, as well as some of this new research that Sue has come out with, and what do you think about a presentation like that in the future?

MR. STRELCHECK: I need to check in with Carrie Simmons and the Gulf Council, but I believe we are targeting a summer, July, SSC meeting, to have a more focused, research-oriented discussion of gag spawning and reproductive behavior, and so, timing-wise, I mean, I think we probably want to let that happen in the Gulf, as an opportunity to then build off of, and then see what might be relevant to extend over to the South Atlantic, in terms of those conversations.

MS. MCCAWLEY: All right. Sounds good. Also, I am wondering if we need to have a discussion about changing interpretations on projections, and so that seemed to come up today, in one of our discussions, and so I'm wondering if we need to have a broader discussion about this at a future meeting. I don't know if others have thoughts. Andy.

MR. STRELCHECK: I am not sure I would characterize it as changing interpretations, or, you know, correcting misinterpretations of the prior projections, but I agree with you, and I think this is something that hasn't been well understood, and I think it would be good, between the SSC and the Science Center, to be able to clearly kind of lay out the projection methodology, some of the assumptions behind that, ways that maybe those assumptions can be evaluated with regard to presenting us projections and disconnecting landings from discard reductions when we're provided catch limit advice.

MS. MCCAWLEY: John.

MR. CARMICHAEL: I think, you know, the points that Andy made on what needs to be looked at should go to the SSC, because they have given us projections and rebuilding scenarios and, you know, recommended catch levels for a given P^* based on one assumption, that we are hearing is certainly being changed, and I think it is a change in interpretation, and I think it's important for the SSC to realize that and begin to factor that into the work that they do.

It also fits in line with what we talked about, that Chip presented, about, you know, projecting out stock yield and allocating stock -- Total stock yield and then subtracting out sector-based discards, because that also could potentially affect the SSC's approach to giving recommendations, you know, for fishing levels, and so I think there needs to be a presentation, probably from the Science Center, to explain, you know, the way they're now interpreting the presentations and the handling of discards versus catch when they are projecting potential future Fs and what that means and how it's going to be done in the future, if it's really going to be different, because I feel like this is one of those things where we do need to build a very good record on how we're changing the interpretation of these analyses, because we've been doing it a certain way for twenty years, and we've instructed the council, you know, to focus on the landings, and the SSC has been instructed that, to give ABCs based on the landings and that the discards were handled in the assessment.

This is a pretty significant change in that advice, and that advice came from here down to the SSC, and so, if that stuff is changing, and there's a sound basis for doing that, the SSC needs to be aware, and we need to have a good record of that, and, at some point, we're going to have to come to grips with, you know, updating other things that are under rebuilding, perhaps, for this new approach, and certainly, when we look at the next set of projections for something that is, you know, now under a rebuilding plan, it's going to have a different set of circumstances applied to it in the future and be prepared for some changes that may not be what you are anticipating.

MS. MCCAWLEY: John.

DR. WALTER: I think, as someone who has done a lot of projections, and given advice on the basis of projections, there is a lot of devil-in-the-details, and, because it's often a two-way street, in terms of your projections are making some assumption about what management will do, you've got to have the conversation with managers to determine what is likely to be implemented, and then that implementation in the management has an effect on what the projection -- Where the population goes, and so it is a necessary back-and-forth, and I think this is opening the door to the further communications we need to have.

In terms of is it a change from what we've done, I think it's an opening of the conversation to say, hey, in the past, we made these assumptions, but perhaps that didn't actually happen in the management action, and so our projections maybe weren't getting us where we assumed we were going, and so now can we make more realistic and better assumptions in those projections, and so that conversation, I think, needs to happen.

I think working its way through the SSC, and this is something I've talked to the SSC chair about, and to our staff about, being able to be a little bit clearer on what the implicit and explicit assumptions are in the projections, and getting a presentation, and maybe using scamp as the example, and then the SSC can probably make that presentation to the council here, and we could further this conversation, and so I think this is positive steps.

I will also say that part of the probably need to change is because we are in a different situation, in terms of we've got some really short seasons, and so you can't really just adjust effort, with only a two or three-day season, like for red snapper, because most of the effort is occurring outside of it, and so we've got to account for those kind of dynamics, and that is going to require some different assumptions in the projections, and so I think this is positive, and I think we can certainly help. Thanks.

MS. MCCAWLEY: Thanks. John.

MR. CARMICHAEL: You know, I agree with how John laid it out, the way projections ideally should go, and I think it's critical to success that you do that back-and-forth and that projections do account for what management may potentially be doing, and that's where this is such a significant change for us, because that's never been done.

I think most of you guys realize that there's been this very hard-and-fast line between the science and the management, and the projections were just given with an F rate, without consideration to what managers may do, in terms of affecting that, and, importantly, affecting the discards that are associated with that, and so this is a significant change for the better, to actually have some of that back-and-forth and give-and-take, but, you know, it's going to change, you know, perhaps the timing and the certainty with which recommendations can just be given and walked away from, because you may need to come back to your SSC and have a look at some other things, and you may need to go to the center and say, okay, we made this change, and we might need a projection that considers this change, you know, a little tweak to it, but, all in all, I think that's good, and it may get us to more successes than we've been experiencing.

MS. MCCAWLEY: All right. Any more discussion? John.

DR. WALTER: Just I wanted to touch on, and I didn't get it pulled up in time, the regime shift topic, which is one that's quite rich, but there is at least some work on that that the SSC -- Part of their guidance is coming from their catch level projections working group draft report, or it's actually now, I think, final, and so that has worked its way through the SSC, and that's probably where at least the questions that I heard around the floor of how is this getting used, what happens, what are the things that are used to determine when that has occurred, are in that, as I was scrolling through it, and so I think that was presented at, I don't know, one of the recent SSC meetings. Thanks.

MS. MCCAWLEY: Thanks, John. All right. Anything else under Other Business? Any other items that we want to talk about under the Snapper Grouper Committee? All right. I don't see any hands. Madam Chair, I'm going to turn it back to you. We're definitely over our time.

(Whereupon, the meeting adjourned on March 8, 2023.)

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4/7/2023

SAFMC 2023 March

Attendee Report: Council Mtg (3/6-10/23)

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Yes	Bianchi	Alan
Yes	Borland	Gary
Yes	Brouwer	Myra
Yes	Bubley	Walter
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Yes	Roller	00Tom
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Yes	Shertzer	Kyle
Yes	Smart	Tracey
Yes	Snyder	Dave
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SAFMC 2023 March Council

Attendee Report: Mtg (3/6/23 - 3/10/23)

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Yes	Batsavage	00Chris
Yes	Beaty	Julia
Yes	Bell	00 Mel
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Yes	Bianchi	Alan
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Yes	collier	chip
Yes	griner	tim
Yes	h	r
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SAFMC 2023 Mar Council

Attendee Report: Meeting (3/6/23 - 3/10/23)

Report Generated:

03/13/2023 08:45 AM EDT

Webinar ID

199-009-555

Actual Start Date/Time

03/08/2023 07:37 AM EST

Duration

10 hours 6 minutes

Attendee Details

Attended	Last Name	First Name
Yes	Addis	Dustin
Yes	Allen	Shanae
Yes	Bailey	Adam
Yes	Batsavage	00Chris
Yes	Beal	Bob
Yes	Bell	00 Mel
Yes	Berry	James "chip"
Yes	Bianchi	Alan
Yes	Borland	Gary
Yes	Brennan	Ken
Yes	Brouwer	Myra
Yes	Bruger	Catherine
Yes	Bubley	Walter
Yes	Byrd	01Julia
Yes	CONKLIN	00The real CHRIS
Yes	Calay	Shannon
Yes	Cenci	Chris
Yes	Cermak	Bridget
Yes	Chaya	01Cindy
Yes	Christoferson	Jill
Yes	Corbett	Ellie
Yes	Cox	Jack
Yes	Crosson	Scott
Yes	DeFilippi Simpson	Julie
Yes	DeVictor	Rick
Yes	Dixon	Michael
Yes	Dover	Miles
Yes	Dukes	Amy
Yes	Ferguson	Raven
Yes	Fernandes	Glen
Yes	Finch	Margaret
Yes	Fisher	Jeff
Yes	Fitzpatrick	Eric

Yes	Pitts	Nicole
Yes	Poholek	Ariel
Yes	Ponte	Marisa
Yes	Pope	Scott
Yes	Ramsay	Chloe
Yes	Rathke	David
Yes	Records	David
Yes	Roller	00Tom
Yes	Salmon	Brandi
Yes	Sauls	Beverly
Yes	Sedberry	George
Yes	Seward	McLean
Yes	Smart	Tracey
Yes	Snyder	Dave
Yes	Spurgin	Kali
Yes	Stephen	Jessica
Yes	Takade-Heumacher	Helen
Yes	Travis	Michael
Yes	Uchino	Pepper
Yes	Vecchio	Julie
Yes	Walter	John
Yes	Wamer	David
Yes	Waters	James
Yes	White	Geoff
Yes	Williams	Erik
Yes	blough	heather
Yes	brewer	00chester
Yes	collier	chip
Yes	griner	tim
Yes	hallett	robert
Yes	howell	steve
Yes	moss	david
Yes	sandorf	scott
Yes	thomas	01suz
Yes	vara	mary

SOUTH ATLANTIC FISHERY MANAGEMENT COUNCIL
2023 COMMITTEE MEMBERS continued

SG Committee
3/8/2023

MACKEREL COBIA

Tom Roller, Chair
Spud Woodward, Vice Chair
Robert Beal
Carolyn Belcher
Mel Bell
Gary Borland
LT Cameron Box
Chester Brewer
Tim Griner
Judy Helmey
Kerry Marhefka
Jessica McCawley
Trish Murphey
Andy Strelcheck
Laurilee Thompson
Mid-Atlantic:
Dewey Hemilright/Skip Feller
Staff contact: Christina Wiegand

★ **SNAPPER GROUPE**

Jessica McCawley, Chair
Kerry Marhefka, Vice Chair
Robert Beal
Carolyn Belcher
Mel Bell
Gary Borland
LT Cameron Box
Chester Brewer
Tim Griner
Judy Helmey
Trish Murphey
Tom Roller
Andy Strelcheck
Laurilee Thompson
Spud Woodward
Mid-Atlantic:
Dewey Hemilright/Earl "Sonny" Gwin
Staff Contact: Mike Schmidtke

~~Spud Woodward~~ both

SEDAR

Carolyn Belcher, Chair
Trish Murphey, Vice Chair
Robert Beal
Mel Bell
Tim Griner
Kerry Marhefka
Jessica McCawley
Andy Strelcheck
Staff contact: Chip Collier

SPINY LOBSTER

Jessica McCawley, Chair
Chester Brewer, Vice Chair
LT Cameron Box
Tim Griner
Kerry Marhefka
Andy Strelcheck
Laurilee Thompson
Staff: Christina Wiegand

SHRIMP

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Mel Bell, Vice Chair
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Jamal Ingram
O'Shaughnessy
John Walter

Monica
Sue Brunello
Thomas
Newman

~~PUBLIC COMMENT~~
(3/8/2023)
S.G. Comm. Hec

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