

SOUTH ATLANTIC FISHERY MANAGEMENT COUNCIL

DOLPHIN WAHOO COMMITTEE

**World Golf Renaissance
St. Augustine, Florida**

June 11, 2026

Dolphin Wahoo Committee

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Christina Curtis
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Attendees and Invited Participants

Rick DeVactor
Dr. John Walter
Sonny Gwin
C.J. Sweetman

Shepherd Grimes
Cassidy Peterson
Dr. Marcel Reichert

Observers and Participants

Other observers and participants attached.

The Dolphin Wahoo Committee of the South Atlantic Fishery Management Council convened at the World Gold Renaissance in St. Augustine, Florida, on Thursday, June 11, 2026, and was called to order by Chairman Kerry Marhefka.

MS. MARHEFKA: The first thing I would like to do is to acknowledge Mike Pierdinock, who is the New England Council member liaison to this committee, and, of course, Sonny is there too, as the Mid-Atlantic liaison, and welcome, and please participate as you see fit in this committee, and we're happy you're here.

With that done, I am looking to approve the agenda. Are there any changes to the agenda? Any objections to the agenda? All right. Seeing none, the agenda is approved. The minutes from our December 2024 council meeting, does anyone have any changes to those minutes? Any objection to the minutes? All right. Seeing none, the minutes are approved.

Our agenda today, we're going to get a presentation on the dolphin management strategy evaluation, and we're also going to hear some feedback from Marcel about the SSC, which saw a different presentation, I believe, a little different presentation, when they met earlier in the spring. Cassidy and Tom are going to present to us our action item. We have two action items. I'll go into more detail in between them, so we're all thinking about those as we're getting our presentations, but, Marcel, if you want to come on and give us your feedback, that would be great.

DR. REICHERT: Thank you, Madam Chair. Thanks for allowing me to give a brief overview of the dolphin MSE. Indeed, we have seen a different presentation than you will see shortly, and so our comments are specific to the presentation that we received in April.

We applauded the research team for the tremendous amount of work that was done, including addressing the committee's recommendations from earlier meetings. I'm highlighting some of the discussions and recommendations in the next couple of slides, but our report has a couple of additional details.

Similar to what I discussed earlier this week for wreckfish, one of the things we discussed was that an important assumption in the model is that the model stock is closed, is a closed population, meaning there's an assumption that there's no fish movement or recruitment coming in from the outside, or going out from the studied region, and, as we know, this is likely not the case for dolphin. This is something that the MSE team acknowledged. Unfortunately, the associated uncertainty with this assumption is not known.

Related to this, the SSC also asked about stock delineation. The MSE team mentioned there's probably not enough information to truly delineate the stock. Ultimately, the SSC agreed that, given the available information and other complexities, the assumption of one Atlantic dolphin stock is a proper way to proceed.

The SSC also discussed uncertainty in the selectivity, which is held constant across years and regions in the current model, and we know that that selectivity may likely have changed over time, for instance due to changes in technology, and we recommended that examining the effect of potential changes in selectivity would be a good thing to do.

The members also mentioned that economic and weather conditions may have affected when and where dolphin are being caught, and, if dolphin catches are used to develop an index of population abundance in the model, these changes in catch that are unrelated to the population density may affect the index values. The MSE team mentioned that this could potentially be addressed by adjusting the model parameters, such as effort level and temporal and spatial distributions within the MSE model.

After some discussion, the SSC recommended that it may not be necessary right now to explore this extra model complexity until the preliminary results of the model can be reviewed, and I don't have a bullet for that, but there was also some discussion about static and dynamic control rules. A dynamic management procedure assumes that management can respond rapidly. The SSC was wondering to what extent that may be possible, and what are the potential implications for the stock and the use of this MSE in management if that's not possible.

One of our action items was to consider the operating model as consistent with the best scientific information available, and the SSC recommended to evaluate this, after the CIE review, at our October meeting. We also discussed that MSEs may not provide a usual scientific basis for management that the SSC and the council is used to, and that allows us to follow standard ABC procedures.

Information from MSE are more likely to provide proxies that may be used to provide fishing level recommendations, and, similar to wreckfish, there's a lot that we do not know about the approaches that can be used, and we would very much like to continue the discussion, and potentially get a presentation, again, maybe similar to or in combination with the one we requested for wreckfish, to clarify approaches of setting ABC, and, Madam Chair, I believe that completes my report, and I'm happy to answer any questions.

MS. MARHEFKA: Thanks, Marcel. I'm definitely looking forward to hearing from the SSC after they've seen something similar to what we've seen, but, at this time, are there any questions for Marcel? Okay. Not seeing any, I think we are ready for our presentation from Cassidy and Tom Carruthers, and so give us a second while we get that set up.

While Cassidy is walking up here, I would just like to remind the committee that, while you're listening to this presentation, be thinking about providing feedback on the Reg-Amendment 3-related modeling results. You'll see those show up in the MSE, sort of those inputs of those management measures that were considered in Reg Amendment 3, and be thinking about advice on the MSE management procedures, the design and the performance, and how we can advise on the operational management objectives, performance metrics, risk tolerance of the MSE, and so it is going to be technical.

I think you guys have all looked at it. I think we've all seen how technical it is, but I have a lot of faith in Cassidy and Tom to explain it to us like we're five, and so just be thinking about those things during this presentation though, and we're just working on getting Tom unmuted, and so bear with us a second.

DR. PETERSON: Okay. Thank you, Kerry, and thank you, John. We really appreciate you all giving us the time to come and chat with you about the dolphinfish MSE. We recognize it's kind of a tricky exercise, and it requires thinking in a little bit of a different way, but we also recognize

that, without key manager and stakeholder input, this isn't going to be valuable as a management exercise. It's going to be just sort of a scientific academic exercise. and so we really appreciate your recognition that, you know, we need your feedback here. To start off, we're going to punt over to John Walter for a quick introduction, and then we'll hop back in. Go ahead, John.

DR. WALTER: Thanks, and I just wanted to kind of give some context as to why we embarked upon this, because I think we got a lot of question as to why are we doing this, and why should the council be considering this, and what is the purpose of the MSE, and you'll note that I asked that question of what the management objectives are of one of the other MSEs, because I think that's the key thing.

We do these to serve the management needs of the council. These are not just for scientific inquiry, and I think that's why I want to impress upon the council what the value of this is and the why here. We've been, for several years now, getting a lot of feedback from the fishermen about the status of mahi, a lot of concerns about lower catch rates.

We see that the catches are about 20 to 50 percent of the ACL in the last couple of years, and so we're severely undercatching what we historically used to catch, and fishermen are saying many reasons as to why, and many hypotheses as to why that's happening, and so this is also not a good candidate for a stock assessment, for many reasons, the not being a closed system, not having control over a lot of the removals, because they can happen internationally.

The concerns there are real, and so the challenges are, if we did apply a stock assessment, we might get an answer that would not be useful necessarily. It might say that, within U.S. waters, the stock is in trouble, and so what would we do? Reduce the catches. Would that impact the stock as a whole? Probably not. Would that unfairly impact U.S. fishermen? Yes, it probably would, and that wouldn't be a useful result.

One of the things, in addition, is that we have to consider what the current management, so to speak, procedure is, and it's an average catch over a certain time period, and so essentially a moving window, and so all we're trying to do here is to provide something that's better than that, and so the bar is low for improvement here, in terms of an average catch window, and I just want to illustrate something that came out of this project.

One of the key elements that came out of a lot of the stakeholder meetings, and a lot of the deep dives into the data, was getting a better handle on the international catches and then being able to compare them to what's going on with U.S. catches, and you can see, here in this upper slide, is the relative magnitude of U.S. dolphin fishing, and I think the two lines that I would really focus on are the upper dashed red one, which is U.S. recreational catches, and then the blue line, which are international catches.

What you do see is an uptick in U.S., or in international catches, primarily from the Caribbean, and a downturn in U.S. recreational. Overall, the landings have been relatively stable over that entire time period, if you sum those up, and so that would tell most models that the stock is not necessarily in trouble, but where those removals are coming from has certainly changed, and the supply of fish -- Because of the way the currents go, the Caribbean gets those fish usually first, because of the loop current and the currents, and gets those before U.S. waters, and so probably

what is happening, and we see this certainly in the indices, is that the supply, and the catch rates in U.S. waters have declined, potentially due to an increase in international removals.

In response to that, well, there's a lot of challenges to dealing with international fisheries. I do that in one of my other jobs, but I will say that one of the best things that could be done to address that is to lead the way with science, and what gets the attention of the international community who considers international fisheries is MSE.

If you've got a working MSE, they're going to invite you to the table, and ask how did you do that, and so I know that for a fact, because I talked to the lead person who is doing the assessment for the largest fishery for mahi, which is in South American waters, which is where most of the U.S. mahi come from, and so, if you eat mahi sandwiches, it's coming from Ecuador, Peru, or Chile, and it's imported to the United States, and they are embarking on similar processes, and so they will pay attention to this MSE if we embark upon it.

The challenge being we've got a moving window management procedure. If we move that window forward, and it is right now I think like 1994 to 2007, the third-highest catch. If we move the third-highest catch window forward in time, we would have a much lower third-highest catch than we had historically. Would that be a good management procedure, or management strategy? It would certainly be a responsive one. It would respond to now the lower catches in the U.S., but would it be right? Probably not. Would it help the stock? Probably not.

That's the reason that we're embarking upon this, is to provide better management options for this council, using something that's adaptive, that uses an index. When the index goes up, the catch goes up, and vice versa, to better manage what comes into U.S. waters, noting that you can't control, right now, what doesn't come into U.S. waters from either the environment or from foreign fleets.

In addition, one of the benefits of the MSE is it allows us to evaluate a lot of the tactical actions, tactical meaning like size limits or bag limits, which are part of Amendment 3 scoping, and so you'll see the presentation on that, and then, lastly, I'll end here just on the preamble that, if this is not something the council wants, then we'll stand down. We've got plenty of other things to work on.

You've got the advice that may be useful for Amendment 3 right now. If you don't want to proceed with developing a full management procedure to better, potentially better, manage the stock, then we can stop here, but, if you're interested in this, I would say listen to Tom and Cassidy, ask questions, get involved, and really dig into what could be better management for dolphin. With that, I'll hand it back to Cassidy for Amendment 3, and thanks a lot.

MS. MARHEFKA: Thanks, John. Can I clarify, real quick, that that blue international line is for Atlantic mahi and not EPO, or Indian Ocean, or Western Central Pacific mahi, and that's just Atlantic mahi?

DR. WALTER: Yes. It's just Atlantic.

MS. MARHEFKA: Thank you, and, with that said, I'm going to go back to you, Cassidy, and I'm wondering if we should break with some of our normal tradition, and would you be comfortable

taking questions as per slide? Given the technical nature of this presentation, it might be better to ask them while they're fresh, and so I'll be looking around, if you have questions on particular slides. Take it away.

DR. PETERSON: Yes, and please interrupt. We love addressing questions right away. As John mentioned, we're going to start with Regulatory Amendment 3 scoping. As a reminder, we were embarking on this MSE, and we recognize the value that it could have in supporting some scoping for Regulatory Amendment 3, and, before we jump all the way in, here's a quick reminder of our timeline.

Here we are in June, and we're doing Regulatory Amendment 3 scoping. We also want to talk a little bit about management procedure performance, and how we should revise it moving forward, and we want to talk about operationalizing our management objectives, and so how are we quantifying our management objectives into performance metrics to gauge management procedure performance.

We do have a CIE review scheduled for next month. We'll come back in September with some more refined management procedures for you all to review and judge and analyze. We're going to go back to the SSC in October for a final review of the MSE framework, and hopefully, in December, we will have made sufficient progress for you all to select a management procedure that you would be comfortable implementing, or at least voting on, or a suite of management procedures that you would be interested in voting on.

There is some space to extend into 2027, in terms of finalizing this MSE, as well as developing exceptional circumstances and a review schedule, to make sure that we are checking in on the management procedure, so that it's not sort of left to operate unchecked, but, for this first sort of presentation of just the Regulatory Amendment 3 scoping, we're looking for feedback on what we've done so far.

As a reminder, the MSE tool is configured in such a way where there are multiple areas, and you can see that on this figure on the left, and you can see the U.S. EEZ is the pink color in the north. That's the northern North Carolina and Virginia Beach north. The delineation is at Wilmington, and so that's Wilmington north and then Wilmington south, up to the Florida Keys, and then the Florida Keys are part of the broader Caribbean, and we have needed to combine those areas because dolphin move so much.

This is a seasonal area, and so there was not enough information to support biomass measurements in the Florida Keys when that was a separate area, and so we needed to combine it, but we are using an areas as fleet approach, and so we have multiple fleets. Those are listed here on the bottom-right, and so we have a U.S. commercial fishery that operates in all of the regions, and then we have recreational fleets separate from for-hire fleets, and we have a private rec fleet in the north and the south and a for-hire fleet in the north and the south. We also have separate fleets that are sort of uncontrollable by any U.S.-based management. We have international removals. We have discards, and we have unreported catches.

Regulatory Amendment 3 is interested in exploring extended minimum size limits further north than South Carolina, modifying daily bag limits, modifying vessel limits, and removing or reducing captain and crew bag limits, and so, because of the data that we have available right now,

we have vessel limits built into the MSE tool, and Tom can talk all about how technically complicated this was to actually implement, but we don't model individual bag limits. We recognize that there's probably some bag limit sharing among anglers aboard a vessel, and so we're just treating -- We're just looking at vessel limits right now, and we're treating sort of the captain and crew bag limits and daily bag limits as sort of special cases under these modified vessel limits for the purposes of these analyses.

Here are all of the scenarios that we looked at. We started with a status quo management, and status quo management is in this green box here. We have the commercial and recreational ACL. We have the vessel limit of fifty-four fish, and we have the twenty-inch minimum size limit in South Carolina, Georgia and Florida.

Now, a particularly challenging aspect of this exercise is that, in practice, we do not meet our ACLs every year, and so, if we were to project this stock forward and assume that we do meet our ACLs, there would be a huge jump in behavior of the U.S. fisheries, and so, to get around that, we implemented two different approaches, one where we modeled future catches as constant catch, and so we just assumed that everything that was caught in 2022 would continue to be caught in the future, and we also considered this where we modeled constant effort, and so this is effort averaged over the past three years, and we assumed that that effort was going to then be constant into the future.

The results for constant catch and constant effort were very similar, and so we're just going to show you constant catch today, but, if you're interested, there's a lot of slides at the back end of the presentation, and those results are included on those extra slides.

What we did is we took status quo management, and then we added in each of these different minimum size limits or recreational vessel limits, in addition -- Or on top of the current status quo management, and so we looked at expanded minimum size limit for all commercial and private, and then we looked at different levels of recreational vessel limit, and so "RVL" stands for recreational vessel limit. We looked at twelve, twenty-four, thirty-six, and forty-eight, and then we also looked at the scenarios in which we applied recreational vessel limits separately to private rec versus for-hire rec, just to see what happens, and, for those cases, we looked at twelve and thirty-six. The "P" and the "F" delineate private rec versus for-hire rec.

Here are the stock-wide results, and so these figures are showing relative biomass, and so this is SSB relative to SSB MSY. As a reminder, we want this to be right on the one line, which is that horizontal line. On the right, we see exploitation rates relative to exploitation rate of MSY, and, as we can see, if we assume that we're catching constant catch in the U.S., we're well below our target of FMSY equal to one, which is that horizontal line there.

The vertical lines are in 2023. They denote where we switch from historical period to projection period, and so our data end in 2022, and so that's the start of the projection year 2023, and, basically, these figures are showing median performance of these different Regulatory Amendment 3 scenarios, assuming constant catch, across thirty-two different reference operating models.

These are operating models that have different assumptions about the dynamics of the stock. They're all uncertainties that we want to make sure our management is robust to, and this is median

performance across all of them, and so this isn't necessarily what we expect to happen, but this is sort of what we're projecting in light of that uncertainty.

Basically, the main take-home here is that all of these lines are overlapping, which means that, any of these tactical management approaches that we've simulated, we are not expecting them to have any impact on stock biomass or stock status, in terms of overfishing or overfished, for the entire stock.

Now, we are more interested in how this is affecting each of our fleets, and so this time we're looking at landings across each of our U.S. fleets, and we, once again, see that there's very little impact of any of these management regulations on our commercial catch, which we wouldn't expect to, and most of them are recreational measures. We see in the northern regions for rec north and higher north, there is a very, very slight reduction in landings if we expand the minimum size limit northward, and, otherwise, there's very little impact of reducing bag limits in the north.

We do see that there are some small impacts on the recreational and for-hire southern fleets with some of these different applications, and, again, to be clear, we're just showing the median lines here, but, if we do plot the uncertainty around these lines, it overlaps quite a bit, and it makes it almost too noisy to even read, and so that's why the uncertainty is not plotted here.

MS. MARHEFKA: Go ahead, Andy.

MR. STRELCHECK: So I guess a takeaway is we're not seeing really any response based on these management measures, in part because we have a small fraction of overall landings and represent a small fraction of the overall mortality for the entire stock, and is that correct?

DR. PETERSON: Exactly. Yes.

MR. STRELCHECK: Okay, and then, if you can go back one slide, the spawning stock biomass estimates and fishing mortality estimates that you're providing here, those are for the entire distribution of the stock, and not just the area in which the council manages, correct?

DR. PETERSON: Correct.

MR. STRELCHECK: Thanks.

MS. MARHEFKA: You're good? That answered your question, Jessica?

MS. MCCAWLEY: Yes, and that was my question as well.

MS. MARHEFKA: Cassidy, go ahead.

DR. PETERSON: Thank you. Good questions. Yes, and this is for the entire stock, and so, again, the capacity for U.S. regulations to impact the entire stock, when much of it is exploited outside of our waters, inherently limits the effectiveness of a lot of these proposed regulations for the entire stock, but, when we do zoom in for each of our U.S. fleets, we see that, in the south, we do have the capacity to reduce landings with some of these vessel limit approaches. This time, we're looking to sort of see --

MS. MARHEFKA: Go ahead, Mike.

MR. PIERDINOCK: Thank you, Madam Chair. Thank you, Cassidy, for your presentation. Just a quick question. With the constant catch and constant effort, that's based on what took place in 2022, and, if I recall, that was during the COVID years, and I know, up in the Northeast, there was a significant recreational increase in catch, because people fished, you know, to get away from what was going on with COVID. Is that what that's demonstrating here, and are we using a metric that's really at the higher end, other than what would be more of an average end, over what would not have been the case if there wasn't increased recreational fishing during that period?

DR. PETERSON: Good question, and so we used 2022 because that was the last year of historical data that we had in the operating models, and, to be clear, this is really an exercise to see how these different size limits and vessel limits will differ from sort of the status quo, and so, because the stock seems to be in such a healthy position, we're not seeing any problems with the assumption of constant catches, even in a high catch year, because the stock is very healthy, but the purpose of this exercise is to really look at the difference in behavior when we implement these vessel limits. Go ahead.

MR. PIERDINOCK: One last question, and not to change the subject, but, with the international catch, what is the source of that data, and is that longliners, or is that purse seine vessels, and is that the same, you know, in the Northeast versus the Caribbean? I'm just curious of where that data comes from, and how reliable it is of that catch, and what gear type was used.

DR. PETERSON: Good question. It's all gear types reported to FAO, and so the international landings are coming from the FAO database, but then we also use the Sea Around Us database to estimate unreported catches, because not all nations report on their landings of mahi, and, if you're interested in where those data come from, on the slide -- If you keep looking through the slideshow, Mandy Karnauskas did a really lovely analysis of these data, and she made it publicly available. It's published online.

The first slide we were on, where John was talking about the landings, that has the link to that Quarto document, and so I really encourage you to look at that, because she did a really lovely job. She shows you the code and how she calculated all of the landings. Good questions. I really like this.

One last thing that we wanted to look at with the Regulatory Amendment 3 scoping is we wanted to see if the tradeoff in reduced landings would sort of pay off in something like increased average length of the fish caught for each fleet, or if it would increase relative catch rates, and so these plots are sort of like box plots, but just a little bit cleaner, and so we have the median value is the dot. The thicker line is the interquartile range, and the thinner line is the 95th percentile.

Again, these are calculated. We are looking at landings -- On the top row is for-hire south, on the left column, recreational, and private recreational on the right column across all of our different management approaches, and, on the bottom, we're looking at relative catch rate, and so this is catch rate relative to 2022, but, basically, we're just interested if catch rate is going to be increased or decreased relative to the status quo with any of these different tactical management approaches.

These values are taken across the entire projection period, and so they're averaged for thirty years into the future, and one thing we can see is, in the southern for-hire fleet in particular, the effect of these really strict vessel limits, we do see a reduce reduction in our landings, as we would expect. The reduction is less pronounced for the private recreational fleet. The reduction in landings is much smaller, and, when we look at how this translate to catch rates, we see that there isn't really a net benefit to catch rate.

We haven't shown it here, but there also is not really much of a benefit in landings, or, sorry, the mean length in landings when catches are reduced, and so it doesn't seem to pay us back, necessarily, and so we'll pause for our first sort of topic and ask for some thoughts or feedback on our Regulatory Amendment 3 analyses.

MS. MARHEFKA: Jessica.

MS. MCCAWLEY: One of the things I didn't see in there was, when you were modeling the different vessel limits, Florida put in place like a thirty-fish vessel limit, and that was not one of the options that was modeled. There were some above, and some below that, but that specific option wasn't used.

DR. PETERSON: Would you like it to be used? We can rerun.

MS. MCCAWLEY: Yes. I would like to see it in there.

DR. PETERSON: Okay.

MS. MARHEFKA: Andy.

MR. STRELCHECK: I mean, I guess, to that point though, I mean, we're saying that vessel limits in that magnitude aren't really creating meaningful change, and so I'm just curious in terms of why we would need the analysis.

MS. MARHEFKA: To that?

MS. MCCAWLEY: Well, I think that this gets to kind of the overarching how we manage dolphin, and what this council is tasked with managing dolphin. We're looking at how impacts here for U.S. Atlantic coast management would impact the worldwide population, but it's my recollection that Venezuela is, you know, the highest, and we're only like the third, or the fifth, highest harvester of mahi, and so I think about spiny lobster.

I think about the king mackerel presentation, and looking at the harvest from Mexico at the Gulf Council meeting last week, and so I guess I struggle with what is the role of the council? Are we really just focused on not how do the actions of this body affect the U.S. portion of the stock, versus the worldwide stock, because I don't think it's in the council's purview to affect, you know, like the worldwide stock of dolphin.

I mean, I feel like we have the same issue with spiny lobster, and so we're managing spiny lobster at this body, and at the Gulf Council, even though those lobster were spawned in the Caribbean,

you know, off of countries that are not U.S. countries, and we're reliant on basically their management, based on the time that the larvae are in the plankton and arrive in Florida.

Then what we're doing in Florida, and by the two councils, is really managing the population that ends up back in the Caribbean, and so I struggle with how to utilize what we're seeing here based on kind of what is the charge for this body. I mean, I like how we're analyzing this, and I agree that I don't think that those types of vessel limits are going to affect the worldwide population, but that's not what this body is tasked with, and so I would love some insight on kind of how to tease out that thinking, and what is the role of this body and how do we think about that management relative to worldwide management.

MS. MARHEFKA: To that, Andy?

MR. STRELCHECK: Yes, and I certainly don't disagree with a lot of what you just said. I guess my point was just I think we know the outcome, and certainly Cassidy and others can weigh-in, in terms of we should, obviously, tune it to what is status quo, and what are the regulations, and I think that's what Jessica's pointing out.

In terms of the broader role, I mean, that's part of the challenge, right? This is really a fishery that probably is more well suited for like an international management agreement, right, that we're managing domestically, and, based on the results that we've seen so far from Cassidy, it's very clear that we represent a small fraction of the overall management, and ultimately have very little influence, based on some of the management measures she presented, in terms of changing fishing mortality.

MS. MARHEFKA: I have Amy, but I just want to caution the worldwide, that I know for a fact, because it's my day job, that Eastern Pacific mahi is its own separate genetic -- In fact, it might be one to force different subpopulations, and so really what we're talking about is the Atlantic population of mahi. I'm pretty sure they've been distinguished genetically different. Amy, go ahead.

MS. DUKES: Thank you. Cassidy, do you mind going back just a couple of slides? I just want to make sure that -- That one. Yes, ma'am. With all the colors being right on top of each other, the solid lines, the two on the top on the right and on the left, and the bottom one on the left, can you walk through the differences of your little -- For the recreational south and the for-hire to the south one more time, and just try to explain, because I know you know these graphs really well, and it went really fast, and I just want to make sure I'm understanding where the lines are actually from the color perspective here for those two on the right, please.

DR. PETERSON: Yes, of course. The big the big takeaway here is that a lot of these lines are right on top of each other up here. There's a slight increase from status quo, in most of these most of these applications, if we induce a recreational vessel limit of twelve fish on the private fleet. You'll see that same sort of brown color, and it reduces in the private rec, and it has sort of an increase in landings for the for-hire rec.

We see this sort of slightly -- You know, slightly reduced line when we're looking at a recreational vessel limit of twelve fish. That's this red line here, and we see the biggest reduction in the for-hire fleet when we have a recreational vessel limit of twelve fish only on the for-hire fleet. That

line, you can't really see, and it is slightly, slightly above in the private recreational fleet, and so there's sort of an inverse relationship, right? If you have stricter regulations on the other fleet, your fleet will benefit, and vice versa, but just very marginally, especially for the private recreational in the south.

You know, the rest of the lines are all pretty close to each other, and hopefully it's clear on this slide as well, and so these trends should fall out here also, and so you can see, you know, the reduction in the twelve fish, the difference between when it's all private -- Good. Sorry.

MS. MARHEFKA: All right, and let's move on. I know we have a lot to get through.

DR. PETERSON: Yes, of course, of course, and so we're splitting this up into sort of two separate presentations -- Sorry. John has his hand. Go ahead, John.

MS. MARHEFKA: Go ahead.

DR. WALTER: To help clarify the question about how should we interpret this from the standpoint, because I think that's why we took the conceptual management objectives we gleaned from a lot of the stakeholder group that we had, and meetings we had, and turned them into operational management objectives, like catch rate, because people said catch rate was important. That's catch rate per trip.

People want to catch a lot of fish per trip, and I think we have a few other operational management objectives that we'll go over, and those are the things that are good to look at, is does this improve what stakeholders want, because we're not really going to affect the population, from at least the western Atlantic very much, but might we, because of some management action, improve catch rate locally, or improve catches, and it's those other management objectives that I think are going to be the differentiation between a particular action. That's what to pay attention to. Thanks.

MR. HULL: Thanks for that, and that's right on target of what I was thinking. While these fish are passing through the states that we manage them in, it's to provide the best catch advice that we can, so that it can have the best effect through every state as they move forward.

DR. PETERSON: Absolutely right, yes, and hopefully you like our performance metrics, when we get to them. Just really quickly, in this presentation, we're going to talk about management procedures and management procedure design. Tom is going to walk us through a demonstration, and then we're going to talk about operationalizing our management objectives into performance metrics, and, as a friendly reminder, this is the link right here to Mandy's Quarto document, and so, if you're interested in how these data were obtained and analyzed, please check that out. Tom, I'll turn it over to you.

DR. CARRUTHERS: Cassidy, can you hear me okay?

DR. PETERSON: We sure can.

DR. CARRUTHERS: Okay, and so we've seen this slide before, but guess what? You know, you're not the biggest operator in this Atlantic fishery. About 37 percent of dolphin catches in 2022 were U.S. fleets. Those are those red, green, and black bars in that bar chart at the bottom,

but the question is, is there an opportunity here in this margin that you have access to? Are there things that we can do that would better serve people operating in this U.S. fishery? I think we're going to make an argument, over the next few slides that, yes, there is. There certainly is.

What if we were to take an operating model that we think is quite plausible, and this is what we're going to call our reference case operating model, and what if we were to project out constant catches at 2022 levels? Well, you would end up with this blue line, and the blue cloud. Let's have a look first at the plot in the top-right-hand corner. We've got the spawning biomass relative to spawning biomass at MSY, and we can see that our constant catches -- Good news, guys. This is great news.

You've got such a productive, and such a fecund creature, that, you know, currently, this stock is projected, at current catches, to stay well above its BMSY level, meaning that, you know, it's in an underfished state, basically, and, if you look across, at the F over F_{MSY} , that blue projection of current catches, if you were just to carry on, this SQ catch, the status quo catch, guess what? You stay below F_{MSY} , and so the good news already is that, you know, you are not in a situation where biologically you're going to have limits, but the question is can we do more? If you look at the blue line, the landings catches, and this is those panel plots in the bottom-left down there, you can see, for each fleet, that constant blue line. The question is, can we do better?

Okay, and let's take this thing out for a spin. It's healthy, it's fecund, and it's productive, and so what else could we do? Well, one approach is to move to a management procedure that responds to an index, and, as John described, a very typical type of management procedure is something like this constant exploitation rate, CER. All this is going to do is it's going to go up in proportion to an index, and so, if your index goes up 10 percent, your catches next year will be going up 10 percent. It is responding to what's available.

In this case, we're going to limit that to up to 20 percent changes, but, for the most part, this thing is going to move up and down with the index, and what do we see? Well, first of all, look at those bottom-right-hand panels for all the fleets. We don't just have a fixed blue line anymore. We now respond to the data that we're given, and, when there's more fish, we catch substantially more for each of those fleets. They're all being moved up according to that index, and these are large improvements, both in the medium and long-term, in catches for those U.S. fleets.

If you look at its impact on the biology, and that's the spawning biomass and the exploitation rate, we never substantially cross these important thresholds of below one for spawning biomass, which would mean that we were in an overfished state, and we rarely go above F_{MSY} , which would say that we're overfishing.

This plot right here, for this operating model, tells you there is enormous opportunity to potentially improve U.S. interest in this fishery without substantially affecting, or meaningfully affecting, the global risk to biology, and so it's a really important conclusion.

The issue with mahi though is that there are things we don't know. It's a huge amount of uncertainty, and what would happen if let's say recruitment stayed somewhat below historical levels? What if it was just 75 percent of what you just saw, and so you're going to get just that little bit less recruitment to the fishery in projection years.

This is exactly the same as what you just saw, but what you can see now is that that blue catch line, that constant catch at 2022, has now got potentially serious problems, because the stock can decline with that, and, therefore, that constant catch is a higher exploitation rate again, and it can snowball into an overfishing situation. Even just in that U.S. margin, it can happen, and so some of this blue cloud is dropping well below SSB MSY, and the Fs are skyrocketing.

However, look at our adaptive, intelligent, to a certain extent, empirical management procedure. Yes, there's no doubt there are still biological risks with that red cloud, but the best-case scenario for the catches is still substantially higher than status quo, and the worst-case scenario for catches is also much higher than status quo. We are making hay when the sun shines. That's it doing really well when it's available, but it's also providing us protection, long-term protection, and productivity in this fishery when there are problems in the future with productivity and recruitment.

This is the core point behind moving to something that's adaptive, especially for something that could go through big swings in biomass, potentially. It recognizes that variability, and it means that you can make the most of opportunities when they occur. This is the basic case for responsive management.

You might say -- So, I mean, these are the key aspects of why we do it, but another reason why people are looking to test and implement these types of dynamic empirical management procedures is it is a requirement now of the highest standard for certification, and so, for example, in those fisheries that want to get a marine stewardship certification, they have to implement and test something like this, and so this isn't going away, and it's something that is now considered sort of gold standard for fisheries management of all types of fisheries.

So you say, okay, Tom, that's interesting, but what if we didn't want to move it around as much? What if we used that same constant exploitation rate, but, instead of the 20 percent change that we just saw, what if we just make that up to 10 percent changes between years, and so this is actually somewhere between a constant catch and what we saw before. It's slightly more constrained, and here you can see that tradeoff.

If you look at the landings down in the bottom-left-hand corner, that red line, and that's the one we saw previously, does much better in terms of expected landings in the medium-term, because it can ramp up fishing, where there's opportunity, much faster. The blue line, which is the more constrained catches, it's following that index, but you could only have these 10 percent changes between years.

Well, it has one slight problem, that it can't bring down catches fast enough, and so there is the chance for you to slightly overfish, or go lower, or you're trading off the possibility of it being a bit more risky in the long-term, the blue one, and you're trading that off against lower catches in the medium-term.

To me, it looks like a no-brainer, and you probably wouldn't want to use it. but there are reasons why you might want, and managers might want, more stable fishing, and so, of course, you can make these changes. You can impose these restrictions on your management if you want to. It's up to you, but it comes with these tradeoffs, and so stability is traded off against yield, which is traded off as well against long-term risks. Let's imagine that we instead wanted something where

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MS. MARHEFKA: Hold on, Tom. Hold on one second. I'm sorry. I was zoning out on your graph. Andy, go ahead.

MR. STRELCHECK: Thanks for the presentation, and so I guess one thing I'm noting is, obviously, these are long-term projections, and so, if you see the stock declining, right, to the biomass thresholds, or the fishing mortality targets are going up, it seems like this would be an opportunity where you could do course corrections along the way, and so I just wanted to point that out, if people weren't picking it up, because we're looking at essentially a time series that goes through 2040, or 2045, which is a very long time period for management.

We wouldn't necessarily run that entire timeframe without making management changes, and so you could, obviously, have some stopgap measures, or changes, to your management strategy that would affect, obviously, the trajectory of what is being presented here.

DR. CARRUTHERS: No, and so absolutely. We show these projections out to 2045 to show you what the behavior of what you're signing up for is, basically. You're signing up for something that has this long-term tendency, right, but, typically an MSE, you would revise or revisit the framework every sort of six to eight years or something like that, or maybe longer, but you would, as you're saying, have maybe necessarily a course correction, and so, if you start to see data, or information, or something come in which is not what you expected, you can go through a review process and update everything.

Absolutely you're not going to use something fixed for the next twenty-five years, but the point being here is that you can actually see what it implies in the long run, so you understand how it behaves, and basically you're saying, in principle, this is what we're aiming for, acknowledging that, as you're saying, you would almost certainly have a course correction within six to ten years anyway. I hope that covers that.

You guys might say, well, look, what if we put limits? We like the idea of this thing being flexible, but let's have a bounded, CER_B, and let's have a bounded management procedure that can only go between half of what we get in 2022 and 150 percent, and like we can swing around a little bit, and what does that give us?

Well, you can see the restriction on the catches necessarily down there in the lower-left-hand. All of them now are restricted to some maximum, and you can see though the benefit of those, in terms of staying well above your biomass reference point. The blue cloud never really gets close to that one line for spawning biomass, never really gets close to FMSY, the one line on the right-hand panel, and so you're trading off limits on how much you can catch against biological safety. There's a tradeoff, and it's up to managers to decide, you know, whether they want to impose those types of limits, and whether that's a sensible adjustment, and so that's the bounded version.

Let's look at a super aggressive one. This is the next slide. Let's look at CER_A. This basically kicks off and says we can't go below half of our 2022 catches, and, for every index we see, we're going to catch a lot more, and so this thing catches 50 percent more catch for the index. It starts off -- If you look down at those catches, it starts off fishing way harder, and what we get, inevitably, is higher catches across the whole time series. That's that lower-left-hand plot.

That blue cloud is always kind of above the red one, but it comes with some tradeoff in risk, and so, if you look over here to the left-hand plots, we can see biomass can drop below BMSY, and F can go above FMSY, but not substantially so. These are not large probabilities, and it might look to you that a more aggressive management procedure like this, the CER_A, is totally appropriate within your risk threshold.

Let's try another one just as a corollary. Let's have a look at a conservative one, and so CER_C is the same adaptive rule, but it can't go above our current catch levels for 2022, and so we can't get any of that upside. We can only get downside and adjustments, due to the index dropping, and, basically, we end up with something that's very, very cautious, and has a very, very low chance of overexploitation, and so there are all kinds of things we can do, and we can summarize these types of results in the types of plots you've seen before.

You could just -- If you just look, for example, at CER_A, B, and C in these plots to the left-hand side, and that's the green, black, and blue, you can see just how you're trading off landings. They go down as you go towards the more conservative one, against things like the biomass level, which is in the top-left-hand corner.

We can see these tradeoffs occurring, and we can -- Managers can look and say, well, I want more biomass, but I'm willing to take this reduction in catches, and so this framework is allowing managers to be strategic and tactical. You can say we want this, but we want these limits, and you can impose, and adopt, a dynamic approach that can essentially achieve what you want, and you can then provide the due diligence. You can say this is why we want to do this, and we're expecting this to happen.

This is just a calculator for helping you make informed tactical decisions, and so don't focus too much on these figures. It's just to show you what's possible to get out of this, and how easily you can interpret them, and, in the next plot, for example, you can see something which just lets you see very clearly the tradeoff, and so what we've got here, for two fleets, is the catch rate on the bottom, and that's showing you how much biomass essentially is available, versus the catch that you would get.

Again, you can see pretty clearly the tradeoff, and so, for example, for the U.S. commercial, which is this left-hand plot, you can see the aggressive one gets you more landings, but your catch rate is going to be more or less what it was in 2022, and you can see that reduces all the way down to the conservative one, which is that sort of dark blue one, and that gets you the lowest catches, but probably the highest catch rates relative to what you're seeing, because there's that much more biomass is available.

Here you can see two of the things you care about being traded off, and you can decide what you think is a reasonable compromise, and so this type of information is available to you, and maybe - I'm wondering now whether you're starting to see why people are enthusiastic about this approach, because you have to make these decisions about things like trip limits, and how much you want catches to vary, and this is a way of presenting that and justifying and understanding the behavior of those decisions.

The thing I would hammer home to you guys is that, yes, you can manage as you are, but there are empirical management procedures that are available, that use data that you actually collect, that

can be updated on a one-year, two-year, three-year, and you choose, basis, and they can provide dynamic management advice that allows you to do better when things are available, and also protect the stock for future benefits when things are not doing so well, and these are widely applied, and they can be tailored to your individual needs.

You can have limits on how often they update, or how much they update, and so on, and so, yes, it's about this idea of making the most of the opportunity that you are being given, even at this periphery of this large Atlantic stock, and I think those are the key take-home messages here. I'll leave it to you, Cassidy, to deal with the action items.

DR. PETERSON: Thanks, Tom, and so hopefully this demonstration was helpful. Some of our action items are to please advise on what you want to see out of your management procedure, including how you want it to perform, and so we would like to get agreement on the ability to explore adaptive annual-catch-limit-based management procedures and exploitation rate management procedures like those that we've shown.

Do we want our management procedures to include some of the tactical management measures like we looked at for Regulatory Amendment 3 scoping and that are currently in place? These are things like vessel limits and size limits. Do you want those to be included in your management procedure, and what is an appropriate management cycle for this stock?

In the examples that Tom went through, we were updating annual catch limit every year, but there is flexibility in how we model that. We can model it every two years, or every three years, and so we would like input on these, and, if you have any other thoughts or opinions on how management procedures should perform, we look forward to those feedback, or that feedback, now. Thanks.

MS. MARHEFKA: Thanks, Cassidy. I have a question, but I'll look to others first. Jessica.

MS. MCCAWLEY: I guess one of my questions is, and I had to go back to the early slides, and so, when you say vessel limits, how does that handle like the daily bag limit, or like reducing captain and crew bag limit, or does it just not? I'm just trying to figure out if, you know, the word "vessel limit" encompasses more than just a standard vessel limit.

DR. PETERSON: Right now, it doesn't include bag limits.

MS. MARHEFKA: I think my question might be more for Andy, thinking about their question about the adaptive ACL procedure, and the cycle for that, and our council, to my knowledge, has not yet been in that situation that I've seen other councils, where they have a, you know, sort of well-laid-out framework procedure, where every year they're doing sort of those adjustments to ACLs. Is that something that, you know, we're going to talk about along with, you know, looking at this MSE? Is that something this council can do? Like, procedurally, what are we capable of doing here, in terms of timeframe and ACL setting cycles?

MR. STRELCHECK: I mean, it's certainly something we could talk about, and it's -- You know, from a standpoint of if we can view it as an efficiency, if there's a procedure that's put in place for setting ACLs on a periodic basis, then, yes, I mean, I would be open to that. I think the challenge is you need to get the advice at a certain time, so that then the council has kind of the timeframe to take action, and then there's a timeframe for rulemaking.

You know, while I have the mic, I mean, I think, for a species like dolphin, and it's short lived, but I wouldn't necessarily think we would need ACL advice every year. I mean, I think we could go to a longer timeframe, and three years probably is the minimum, in my view, in terms of that timeframe for management advice.

MS. MARHEFKA: Thanks for that. Okay, and so hopefully everyone is thinking about what they're asking us to provide input on. We just heard that, you know, the suggestion that we consider sort of a -- Are we open to looking at the ACLs every three years, and that is something that we would look to establish based on what you've seen here, and then I think it's going to be really important to give them feedback on your --

You're calling it the static tactical management measures, but that's a mouthful, and so maybe the way I'm going to read that are not just the management procedures that you borrowed from Reg Amendment 3 to plug into the MSE, but do you want those still included, or do you want other things, is what you're looking for, and so now is our time to say, you know, what's not in the MSE that is -- That we've heard about, that people have talked about, or maybe that the AP has talked about, or are -- Right now, are we just considering any changes to dolphin mahi management being those measures in Reg Amendment 3, is the way I understand it. This is our time to see anything else modeled. Jessica.

MS. MCCAWLEY: I was going to speak to the are we okay with the ACL every three years, and I would say yes, and I think that's a good a good timeframe.

MS. MARHEFKA: I agree. John, please.

MR. CARMICHAEL: All right. At the risk of, I don't know, wreaking havoc, but just thinking about this, and taking a step back, from what I understand, we're catching half the ACL, and that's where we started. We have a stock that's two to three-times SSB MSY. It's in great shape. We have a limit in the -- You know, it's primarily a recreational fishery, 90 percent, and we have a limit that's like fifty-four fish, and we had a sixty-fish limit per vessel, you know, like in North Carolina and others, that was socially-oriented. People didn't want more than that.

You know, Florida went to lower limits, in hopes of seeing larger fish primarily, but it doesn't seem like that has kind of played out, and I think there's probably concerns with, you know, water temperature in the Keys and where the bigger dolphin are going, clearly, and so, talking about raising ACLs, I look at that, and I think where do you have the capacity to raise ACLs? That's clearly the commercial fishery, but that's not been the intent of this plan.

I think, to me, before the council starts thinking about, you know, adjusting ACLs three years, five years, whatever, and following this, where is the increased effort capacity going to come from, and is the council willing to consider a higher allocation to the commercial fishery to get there, and I think that's a fundamental question, because that's not what this plan was designed to do, and so, you know, I hear all the talk, and, you know, it's a great case to be laid out for being dynamic, in the case that you are pushing the line of your ACL, and I think there's a lot of fisheries where we're doing that, and this could really be helpful, but thinking about, you know, a nimbler NMFS, and all the discussion at like the CCC for several years about, you know, cost-benefit of what we're

doing, and I look at this, and I go, unless we're going to, you know, make it more of a commercial fishery, I don't see the recreational fishery being able to do it.

They haven't been able to do it. Fuel prices are going up and up and up. I increasingly hear big-boat guys talking about going to places like Costa Rica, because it's cheaper to fly to Costa Rica and fish ten miles off the beach than it is to go out of some of our, you know, coastal states, you know, and remember Art Sapp, that was on the council, said that himself, you know, and so I just -- I'm sort of looking at this from a pretty far-out view and just wondering is the council ready to do what it takes to take advantage of this whole system?

MS. MARHEFKA: Thanks, John. That's a helpful way of looking at it. Dewey, you had your hand up and then --

MR. HEMILRIGHT: Giving more fish to the commercial industry ain't the answer. We're -- I mean, you look at our catches now, you know, and maybe if -- Maybe if you whistled Dixie and they jumped in the boat, you might catch half of the thing, but it ain't there, because we don't have the vessels no more. We don't have the bullets, the hooks in the water, all that other stuff, and so you -- It was a great thought, but it was a passing thought.

Also, the example here with the indicators about the pelagic longline index, I think that would be just a poor one, because our fleet is so on the demise, and downward trend, that we'll probably be -- You know, there's less than forty active boats from Maine to Texas, and it will be less, you know, and we're down to like an artisanal fleet, instead of an industry, based on everything that we have to do here in the United States, our domestic policy, and that has pretty much killed the industry. Giving more fish to the recreational, or, I mean, the commercial industry ain't going to help, because we can't even harvest what we got now in mahi mahi.

MS. MARHEFKA: Dewey, I just want -- To that, is there a price per pound for mahi that you think would attract -- Like, all of a sudden, there would be a shift in sort of the targeting of mahi that is not happening now?

MR. HEMILRIGHT: No, and something else is, you know, you've got to realize that our waters are literally just filled with bluefin tuna for six months of the year, and, when you bluefin fish, pelagic longline, you don't get credit going mahi fishing, and so you're forced to do pelagic longline, where you're going to account for your set, to be able to get your bluefin quota, because it's so -- You know, so I don't see it, you know, and I don't know a price point. It could be -- You know, it would have to be twenty-dollars a pound to the boat, if everything worked out, but the expenses to go fishing is crazy nowadays, with bait, fuel, crew, and all that, and so I -- The pelagic longline industry is not a viable source to be worried about right now.

MS. MARHEFKA: Thanks for that. Trish.

MS. MURPHEY: So I think what I'm struggling here on, and it kind of goes back to I think what Jessica and Andy were pointing out, if I understood this right, and this is actually looking at the whole Atlantic stock, right, and so, anything we do, it basically looks like it doesn't impact the whole Atlantic stock, and that's -- But we're not managing for the whole Atlantic stock.

Just thinking about some past experience with southern flounder in North Carolina, you know, that stock was North Carolina to Florida, and North Carolina did all the management to try to get, you know, southern flounder out of overfished and overfishing, but we also had to depend on the other states, and, you know, due to their different constraints and stuff, that didn't happen, and so we were doing the lion's share of the management, and I wonder if we would get stuck in the same situation, that we would be doing the lion's share of the management, but not getting any benefit from it, if that makes sense, and so I just kind of wonder --

I mean, this is really -- I mean, it's really cool stuff, and I actually understood it. I mean, I had to go walk down our stock assessment guide and help me, but I got it, but that's just something that comes to my mind, is what -- You know, I think our goal here is probably to address our Atlantic stock from Florida to Maine, and not Venezuela or anything, and so, anyway, I just wanted to give that thought, that that's -- I almost wonder if we're trying to do -- We need to think, and bring it back in a little bit, and look after ourselves, if that makes sense.

MS. MARHEFKA: Tom has his hand up, and Andy has his hand up. Real quick, before I go to Andy, and then Tom, I want to say, to that point, a counter argument, and I'm not saying that that's where I'm sitting right now, but I'm trying to think all of the angles through to what you're saying, Trish.

I think what I heard from John Walter is there's -- Some of the utility in us pursuing this is the ability to show this in the international management stage. We can take our results, show up at WECAFC, or, you know, whichever body is going to look at this, and say, well, we've done our things, and everything, based on this very good science, shows that we can't control it any better, and now it's your turn, and you get NOAA International Affairs to fight on our behalf.

I mean, there is a point where that can happen. I think the question we all have to decide is, is that really going to happen that way? Is it our job? Do we have the time to do that, but that's how I sort of was thinking about both sides. I'm going to go to Andy, then Tom.

MR. STRELCHECK: Well, and I don't know if Tom was wanting to respond to any comments, and so I'm certainly happy to defer to him first.

DR. CARRUTHERS: If I could, that would be great, Chair.

MS. MARHEFKA: Go ahead.

DR. CARRUTHERS: So totally acknowledging the comments that were made, I think by Trish, but the issue is actually the opposite of wanting to make this smaller, and U.S. specific. When you do that, you'll be modeling fish that are actually coming from somewhere else, are actually subject to exploitation from somewhere else, from a much larger stock, that you don't think is there in that small model, that U.S.-only model, and which you predict your impacts will be absolutely enormous on, even though, realistically, you are at, you know, a smaller fraction of a much larger resource.

By acknowledging that you are a much smaller part of a larger resource, you are able to explore these opportunities, and so it's actually the opposite. When you widen the net, to include what is a much more realistic range for the fish that you're seeing in U.S. waters, when you acknowledge

the large catches of other fleets, you acknowledge that the stock is much larger, and that your impacts, in terms of biological risk, are much lower, which actually frees you up, domestically in U.S. policy, to explore more interesting and potentially more let's say U.S.-centric outcomes.

From my perspective, it's really the opposite. Like widening it up does not give you the responsibility of managing the whole stock. It just acknowledges that your impacts are actually attenuated. They're actually lower than they would be if you were sort of local, and myopic, and so I think there's -- I think it really should be presented in the opposite way. Thank you.

MS. MARHEFKA: Andy.

MR. STRELCHECK: Yes, and I'm probably looking for Cassidy or Tom's reactions. The first one is to say I appreciate John Carmichael's comments, because I was thinking a little bit along the same lines, and so just trying to kind of pull some strings together here, and so it's a limited influence we have on fishing mortality for the stock as a whole, right, and that's evident based on the MSE.

We know that our current ACLs aren't constraining, and so we potentially have issues with the commercial fleet not having capacity to expand, but I guess part of me is also thinking, well, if the fish were there, and we had some effort, would we even come close to still catching the ACLs that we have on the books, right, because we are way, way below where we're supposed to be.

Then it leads me down the path of, well, what's the benefit of doing this from a strategic standpoint, because we would essentially be adopting, in my view, a much more complex, but dynamic, system relative to what we're doing today, recognizing that we have limited capacity and control, and then the tactical management measures that are mentioned there are all more constraining, but really what we need to be doing is figuring out ways to have less constraints on our harvest, if we're going to be able to expand capacity to actually harvest more if the opportunity presents itself.

I think the take-home, for me, is where the benefits are is what you said, Kerry, which is more in the international arena of kind of showing, hey, we've done this, and we recognize we have limited ability to kind of control the overall fishing mortality, and then what Jessica was mentioning, which is can the MSE benefit us in a way that shows the kind of more localized regional social benefits, and maximizes kind of the opportunities that stakeholders would want for specific areas and regions that we manage.

MS. MARHEFKA: Thanks, Andy. Jessica, and then John Walter.

MS. MCCAWLEY: Mine is kind of like a parking lot idea, that maybe we could come back to at the end of the discussion, because you mentioned WECAFC, but I guess is there some other body, or do we get the State Department involved, or, you know, how do we take, as you're saying, Kerry, like the good management that we're doing here in the U.S. and then show people, hey, this work, you know, this is what we did, and let me show you this MSE model, you know, all the things, because we aren't the largest player in this fishery.

I guess it's hard for me to reconcile like, you know, how do we close that loop on all of those other pieces, and maybe we just make a conscious decision that we just are dealing with our stock here, and this is all we can do, and we're moving on.

I don't know, but you brought up WECAFC, and I thought that's a great point, but are there other bodies that we need to think about engaging, or have someone else, like the State Department, engage on our behalf, and so just maybe we can come back to that at the end of all this, and that was a good point.

MS. MARHEFKA: Yes, and I would like to speak to it though just for a second, and so I spend every day dealing with trying to get mahi managed to the IATTC, and we're talking about a mahi fishery that is multitudes bigger, and multitudes more valuable, to the participating countries than the mahi is to any of the Atlantic participating countries. The IATTC, including the U.S. delegation, has said we don't have the funds, and we don't have the resources, we're not touching mahi.

Now, we're working on getting it funded by industry, and we're trying to push it through, but the U.S. International Affairs has not shown interest in supporting -- Actually dedicating the resources or voting for the IATTC to dedicate resources. I do not feel very rosy about how it would look in the Atlantic, and the only reason we have the potential of getting a stock assessment for that mahi, and hopefully a management strategy evaluation for that mahi, is because the U.S. industry that imports that mahi, which is 90 percent of, like he said, what we eat here is actually going to pay for it, and so I don't see that as a viable option over here, unless -- Because I'm daily talking to the industry that relies on mahi for their businesses, and they're not sourcing from the Atlantic countries, and so, John, I had you next, and then Charlie.

DR. WALTER: Yes, and I think that's a good sobering, and probably realistic view, though there are groups who have reached out with interest, and are paying attention to what's going on here, and so I think there is definitely an opportunity to, if you build it, perhaps they will come take a look at it. Whether that leads to action, you know, internationally, we don't know.

I just wanted to go back to Trish's point, and if we could move to the slide on the operational management objectives, because there's a couple ones that we didn't talk about, and just move down to -- That's good. That I think bring it locally to the things people care about, and so catch rate by fleet in area. Catch rate is an important thing. You want to have a reasonable opportunity of having a pretty good trip.

Opportunity is the opportunity to catch the catch limit, and so that's a performance metric that we were talking about, is how likely is the fishery going to be able to catch that, the ACL, because we want to achieve the ACL. That is the goal of management, and then size of fish caught by the fleet in an area, because we've heard that trophy fish are highly valued in this fishery in some regions, and so those are all performance statistics that are output.

They're management objectives that we want to then try to achieve with the management procedure, and so those are the ones that I think are the sort of localized things to pay attention to, because we're not so worried about status and stability, or status and safety, in terms of like the stock, but we are worried about what our stakeholders are going to be seeing, and I think those are the things that we want to say can we get a manager procedure that better achieves those, and that's going to be our main goal here as we move forward, if we decide to move forward with that. Thanks.

MS. MARHEFKA: Thanks, John. That was helpful. Charlie.

MR. PHILLIPS: Thank you, and, obviously, mahi are not my specialty, but, that said, and to Dewey's point that we're not catching it, well, a lot of the reason we're not catching it, as he explained, is we've got so many management things that make it restrictive for us to catch it.

If we could change some management, where mahi were easier to catch, and weren't bounded by so many regulations, then maybe an increase in the commercial quota might be worthwhile, and then we could -- The industry may say maybe I can go do this, and it's easier than trying to put cameras on my boat for bluefin tuna, or whatever else that, you know, they might have to do, and so I think there may be an opportunity, but we would have to tie it with, you know, having regulations that aren't so onerous that people just say it's not worth it.

MS. MARHEFKA: I just want to make sure I'm clear as to what you're saying, and this brings up a topic that comes up often, you know, and the regulations you're referring to I presume are HMS regulations, and how they are. Now, in theory, dolphin regulations that we have here are, I would say, fairly not onerous, and so, in theory, a boat without an HMS permit, longline boat without an HMS permit, does have the ability to go fish pretty uninhibited now, but there hasn't sort of been that push to do it. There has been conversations over the years about the worry of these boats that exist, that aren't HMS boats, but fish for mahi. I personally don't know anyone who has done it ever, but do you think that your point is, if HMS had different regulations, those boats would target mahi?

MR. PHILLIPS: I think so, or at least they would consider it. Dewey knows the regulations far better than I do, but I think the HMS regulations, and that's where the bulk of the potential capacity is going to be, and it's not going to be in our handful of boats.

It's going to be in HMS boats, which are big, and have the ability to put some fish on the dock, if that's what they want to target. Right now, that's not what they want to target for various reasons, and I think most of those reasons are probably tied to HMS.

MS. MARHEFKA: Thanks. Mike.

MR. PIERDINOCK: Thank you. I would just like to make a few comments about the international, as well as the managing objectives, and I would just say, from an international standpoint, after being involved with ICCAT, be careful what you wish for if you go down that road, and it would be a glacial speed in which that management would occur, and it would be difficult.

There could be some -- I also have some concern with what's noted with MSC certification and international bodies or businesses that get that certification. We've seen, to the detriment of the United States, that there's many small commercial operators that do not -- Or cannot afford that, and then they cannot sell their fish nationally, and so, if this MSE goes into place, management strategy evaluation goes into place, and then you can become MSC certified, that may be to the detriment of the United States commercial fleet, and so I would like to keep that in mind.

I would hope that the new USDA Office of Seafood could possibly be a mechanism to possibly address these things, but I throw that out there. This is very new, that office, you know, and we can only hope positive things out of it.

One last thing to note, and it was about two years ago, and, for those that aren't aware, Spain provides the purse seine fleet, many purse seine fleets, for Central America and South America, the different countries down there, and, about two years ago, they left. They're now in the Pacific, and I would be curious of how much the catch has reduced since then, and I believe you only have it through 2020 -- Or it's lagged two or three years, and you may want to take a different look at that. I know it's anecdotal, but, from an international standpoint, that could be impacting more fish that we see.

The last thing, with the management objectives, the difficulty that I have is that, you know, from the extent that New England, or the Northeast, the mahi fishery is completely different than from North Carolina south, down south. We're lucky if we have a three-month out of the year of season, August, September, and October, and it's not targeted. It's far offshore, you know, thirty, forty, fifty miles, and you have to go out to the canyons, and so the effort is such, and the catch is such, that it reflects that, and it's very temperature dependent.

In some years, and I'll just say, for me, I fish out of the south side of Massachusetts, out of New Bedford, and, if I want to get mahi, I've got to go fifty miles south, all the way down to an area east of Montauk called The Dump, because the temperature is such there that that's as far north as they're going, and so there really is a temperature, as well as forage, that's key to this, but I have my concerns, with the objectives, that it's not targeted, and it's far offshore, and I'll tell you that the weather up there in August, September, and October is typically such that, half the time, you can't leave the dock in the fall.

In addition, up our way, Labor Day, a lot of the boats come out of the water, and so it's completely different, and that's where I struggle with how these management objectives, if you're going to apply them from Maine all the way down to Florida -- It's just a different animal down there, and so thank you.

MS. MARHEFKA: Thanks, Mike. I appreciate it, and so one of the things I heard from what you just suggested is that, the management procedures, we look at some that sort of change the range. We have different management procedures for sort of that far north region, to address the different needs you all have, and is that a suggestion that I feel like I'm hearing you say?

Then I just really quickly wanted to -- When I saw MSC in the presentation, I almost emailed them, and I was like please take that out. If we had three hours, I would love to talk about, you know, the feelings on that, and I think that was just -- I think Tom is on an international stage, and it's much more talked about than it is here, and that's certainly not an objective of this council, nor ever has been.

Then, finally, as far as the purse seines in the Pacific, one, it is the Pacific, and, two, the purse seines in the Pacific, while they did catch some mahi, it was not a lot. They don't have a market for purse-seine-caught mahi, a strong market, because they do a sort of saltwater bath that changes the quality of their fish that the U.S. market has no desire to have, and so, while it is in the Pacific, and doesn't affect this fleet, I also don't think it really has a strong impact. Go ahead.

MR. PIERDINOCK: I'm sorry, and maybe I wasn't clear. Those boats are no longer down in South America, South America, and they're in the Pacific, and I'm assuming the catch is going to go down, because the purse seine fleet is not there anymore, you know, having that removal, and so that's what I was trying to get at.

MS. MARHEFKA: They weren't taking a significant portion of the catch.

MR. PIERDINOCK: They weren't?

MS. MARHEFKA: No.

MR. PIERDINOCK: Okay.

MS. MARHEFKA: All right. Any other questions? We need to get back to what we're being asked, and so we have one suggestion we know already, which is sort of looking at it more sub-regionally, and having different objectives, and that's what I heard.

I'm also hearing are we moving forward with this, and I'm at a loss, and I'm going to need some help from the committee here, as far as what you all want to see. Do you want them -- Are there other management procedures you want to explore outside of what was in Regulatory Amendment 3? We need some guidance here on what the committee wants to do moving forward. John, go ahead.

DR. WALTER: Maybe I'll just help try to inspire some of those questions, particularly on the regional management aspect. What we're hearing is different management actions in different regions, which would mean potentially different bag limits or trip limits or size limits in different regions. I just want to clarify, and is that what is meant by that, in which case we're going to have to get pretty solid feedback, and it may not need to be today on that, but that's going to need to be something we're going to need to write down, which is different than right now, what Amendment 3 has got, and so clarity on that first.

MS. MARHEFKA: Thoughts? Mike, go ahead, and then John.

MR. PIERDINOCK: Certainly, and I don't know how it fits into what you're saying, but the catch in New England, and I would say the Northeast, the Mid-Atlantic on up, is just significantly -- The effort, the catch, and so on, and the duration, where you go, and how far you go, is just significantly different. I would assume that there would be different seasons, or bag limits. If at all anything, it would be status quo, or, you know, something different that would be reflected of that three-month, typical three-month, duration in which they're fishing over a short period of time.

MS. MARHEFKA: Thanks, and I see Cassidy taking notes on that. John Carmichael.

MR. CARMICHAEL: Yes, and, you know, I think one thing to say for this is there's a huge win here, because we have a stock that's been unassessed, and we're seeing that the stock is in good shape. I think that's super important, and I think there's, you know, the opportunity to take that, see where the international leverage goes, you know, and I think also to be able to keep tabs on this stock, which is important, and so, you know, you could have -- You know, to me, there's kind

of what's to tell us about status and overall, and maybe you update on the three-year or five-year or whatever, so that we can say, look, we have now some evidence that this stock is not overfished, and not overfishing, which is huge considering its importance.

Then the question is where can the model go to looking at these much finer scale along our coast regional concerns, and, you know, I think it's North Carolina wants the status quo, and New England wants the access, on the rare occasions they get them, and Florida has had the, you know, longstanding concerns with just what, you know, they've sensed is lower availability and smaller fish.

You know, we've got to kind of figure out maybe what can the model do for that, and it just seems like, with the VAST stock, and looking at, you know, Reg Amendment 3 not having any appreciable impact, I guess, I wonder if it's at a place now where it can answer those fine-scale questions to your satisfaction, you know, but I think that doesn't detract from the fact that there's a huge win here for the status of the stock.

MS. MARHEFKA: That's a really good point, and I was thinking -- I asked Cassidy, you know, to Mike's point, and it shows, right now, if you have no vessel limit, or bag limits up north, there's zero impact on anyone, right, and so is that something, you know, we need them to specifically run, so we can see it, even though they already know what it's going to look like?

Then to keep in mind further that, you know, we're going to talk about, later today, what we're going to do with Reg Amendment 3, you know, and are we going to add some options like that, and so I think that's where we can start thinking these more granular, specific sub-regional goals that we all have, and I'm really looking -- Like North Carolina and Florida specifically, I mean, you know, the other two of us are sort of caught in the middle, and not as big player in this game, and so, you know, now is a good time to talk about what you are hearing from your people, what they think should happen.

If you take what they think should happen, and give it to Tom and Cassidy, they can model it, and you can go back to them and say this thing that you really want to happen isn't really making a difference, and do you still want it to happen. Trish.

MS. MURPHEY: Tom and Dewey can weigh-in, but I think, if we're going to be able to look at it finer scale -- I know North Carolina would just like everything status quo. I don't think North Carolina feels a need for a change, but I'll also see what Tom and Dewey think.

MR. ROLLER: I mean, we've had extensive conversations with this, and, you know, while I'm not saying I don't hear concerns about availability in the stock, things have definitely changed over time. The majority of the conversation is the desire to stay at status quo.

Now, if we're going to look at these management procedures in a more fine-scale way, I mean, I am interested in seeing if we can influence opportunity in our region, if that's even possible, right, and so, I mean, that's been the big question, particularly coming from the state that catches over 70 percent, which is Florida, and it's like how can there be a greater abundance, and is it possible to look at that, but I think, you know, from my state's standpoint, I'm not hearing enough concern to want to move away from status quo.

MS. MARHEFKA: Thanks, Tom. Jessica.

MS. MCCAWLEY: I guess I'm also having trouble resolving -- Was it two council meetings ago that we looked at those, and was it three papers, or four papers, that came out that indicated like changes in the size of mahi in kind of the North Carolina and South Carolina area, and so I don't know how to resolve that information with the MSE results, because it doesn't seem to be reflected in there.

Part of me thinks that those papers are getting to the kind of the more localized issues, and kind of how we can change it, but I agree. Unless the MSE can really kind of help us with the stock that we're managing, I'm just -- I'm having a hard time figuring out kind of how to help them run this, but what we're hearing in Florida is pretty much the same thing that we heard before.

I would say concerns, and otherwise people like the regulations we put in place in state waters, but there are others who are saying like we still need to change size limits, you know, in other states going north, still change the vessel limits, still come down at least a little bit, even if it doesn't match Florida all the way, but still come down a little bit on the vessel limit.

John said earlier that people hadn't been seeing larger mahi, and it depends on the year, I would say, and so I think that the larger mahi are coming through in certain times of year, and more so in some years than others, and it just kind of depends on the year, but what we're hearing, kind of like what Tom is saying -- You know, what they're hearing is kind of the same, and what we're hearing in Florida is pretty much the same.

MS. MARHEFKA: I think my question, Jessica, that I'm trying to figure out is that's what they're wanting, but now we have this model that says, if we do it, it's still not going to matter, and how are we going to decide, as a body, to balance sort of perception versus reality versus somewhere in between?

MS. MCCAWLEY: Yes, and I guess that's why I was asking those questions early in the presentation about kind of what is the role of this body, because like -- I mean, I'm sorry, and I hate to keep using the spiny lobster example, but we are managing this population, and we're doing things like managing the number of shorts used for baiting, and all sorts of other things, the way the traps are done, but yet our recruits are 100 percent coming from the Caribbean.

I mean, it just doesn't -- We cannot affect that at all, in any way, and so it's a similar situation, yet we have a massive management structure for the spiny lobster fishery, but we're 100 percent dependent upon how these Caribbean countries are managing them, and then, likewise, our recruits are ending up down there, and so they're dependent upon the U.S., and so it comes back to the mandates, to me, in Magnuson and how you carry that out through this body, because I had the same concerns with spiny lobster.

MS. MARHEFKA: Cassidy.

DR. PETERSON: I see John's hand, and I'm thinking -- So we have some more slides to go through that speak a little bit to the issue of regional management objectives, and how we're calculating that, and I think that will help answer some of the questions that I've heard in this

discussion, and so I'm wondering if it's appropriate to move to that, and I'll go ahead and let John chime in there, too.

DR. WALTER: You know, this tool we have, it's value is to really address the things that keep you up at night, and, for me, the point about the localized impacts is one of the things I'm very concerned about. I mean, obviously, if you fish a pallet with mahi under it, and take them all, the next day that pallet might be empty, and so you've localized depleted under that pallet.

The model right now has fish moving very quickly, and, in the Gulf Stream, they're moving seventy-two miles a day by standing still, and so their mahi move very fast, just because of where they live, in addition to what they move, but one of the robustness tests, and, to use a jargon, and I'll put a dollar in the jargon jar, are those things that are potentially not part of the reference grid, but are the things that are maybe hypotheses that you might be worried about.

What if the management procedure doesn't work, and one of those robustness tests is if mahi move less, or if there's higher viscosity, so that maybe there is more potential for localized depletion, which means that, if you catch them all on Saturday, on Sunday, Monday, Tuesday, are they not there, and I think that robustness test, to me, is really important, because I want to see the results that we haven't done yet for some of this on the basis of that.

I think that's a key thing that we would like to bring forward, once we get them done, to be able to say do the results that we saw in Amendment 3 still hold, and are there situations that might happen if there is greater potential for localized impacts, and I think we should get that done in the next couple of weeks to be able to present through the group, because remember the goal is to take some multiple conversations with the council and the SSC on this as it goes to completion, so that you can see here's the initial ones, and then could you do better, and but what about this, because that's really the kind of things that need to go into the decision-making process, I think. Thanks.

MS. MARHEFKA: All right, and so we're going to go back to Cassidy. They have a couple more slides, and we want -- Since Tom is on, we don't want to make him have to last through our lunch, and so what we're going to try to do is finish their presentation and look at their other action items. To the extent that we need more discussion on this, some of that discussion may have to happen after lunch, but let's at least let them get through the rest of the presentation.

DR. PETERSON: Thanks for the discussion, and thank you, Chair, for your flexibility in letting us finish up really quick. I'll try and be quick, and so we talked a little bit already about this slide, about our management objectives. These are management objectives that we collected from stakeholders.

We went to Florida, South Carolina, and North Carolina. We went to Rhode Island, and we went to New York, and so we talked with stakeholders from all throughout the range to make sure that we were capturing all the regional desires from all of our stakeholders, and these also come from discussions in previous council meetings as well. The management objectives that we've highlighted here are status, yield, stability, catch rate, opportunity, and size of fish caught.

We can measure management procedure performance based on how they behave, how they maximize these management objectives, and this plot is just a sort of preliminary quiz that we asked our small stakeholder working group to rank which objectives are the most important, and

we will highlight also that we can calculate metrics over different ranges of time, and so, if we're only interested in near-term performance, we can look at that, or we can look at a longer time horizon, but now we need to sort of operationalize these management objectives. We need to sort of cover how we're going to calculate them, and so, quickly, we'll go through these six items to talk about how we're going to do that.

Stock status is probability of overfishing, probability of overfished, and so those are our two quantitative performance metrics that we're going to calculate to capture whether we are meeting stock status objectives, and so we're asking for a P^* , and apologies that on the right here this is backwards. It's probability of overfishing, but we can calculate that.

We can also calculate the probability of not being overfished, and this plot just sort of shows a demonstration of what that looks like with the shaded confidence bound. Anything that goes below one, the percentage of time that these runs go below one, would be probability that biomass falls below BMSY. Anything above it is acceptable. We're not overfished, and so we can go ahead and calculate what that percentage looks like, and, in these examples, it's very, very high.

We want to maximize yield, and remember this is by fleet, or by area, and so we can calculate that, and so we've been calculating yield by fleet, and so this accounts for the regional differences between the north and the south, and we have the opportunity to sort of maximize in different ways, or, you know, prioritize objectives differently by region, if that's needed, and so we've showed you the landings by fleet, and in these line plots, as well as in these plots, and so we'll go ahead and capture that by fleet, to make sure that we're meeting those objectives.

Tom talked a little bit about maintaining stability and regulations when we talked about the constant exploitation rate, and the constant exploitation rate where you can only adjust your annual catch limit by a maximum of 10 percent every year, and you can see, in this plot, this shows landings.

The blue line is the median. That's not what we expect each run to look like, and so these black thin lines are representatives of what sort of two realizations of these simulations could look like. It's going to be a little bit more variable, and so we can actually quantify that. We can calculate how variable from year-to-year management regulations are, and so that's just shown here on the right, and so you can see that, when we're instituting stability measures, our variability in rulemaking is reduced.

We also talked about catch rate. This is something that's really important to our stakeholders, and so we are calculating relative catch rate, and so this is catch rate relative to that, which was observed in 2022. Basically, we want that to go up. Opportunity, we want to make sure we minimize the probability of a fishery closure, or having to build in accountability measures, and so we're going to go ahead and calculate the proportion of years in which landings meet the ACL by sector, and, of course, we're also interested in maximizing the size of fish that are caught by fleet, and so this is something that we're also looking into.

This is relative average length, and we do see that, with some of these different measures, there is a little bit of an increase in length of catch observed in select fleets, and so, with that, we have our last sort of action items, and I think John is going to go ahead and take this slide quickly, before we hop off.

DR. WALTER: Thanks, and so one of the things that -- We really won't be able to do justice to this, but there is definitely a lot of questions about how this fits into our standard advice framework, and how the SSC is going to interpret this relative to how they've usually interpreted stock assessments, and I think that the punchline is that the SSC has often determined a P^* based on scientific uncertainty.

Within the MSE framework, it's a lot easier for that to be interpreted solely as a probability of overfishing, so that it's a risk decision that the council can then say that's fully within our purview. Scientific uncertainty is dealt with in the suite of operating models in the MSE, and all we have to define is what probability of overfishing we think we can handle, and, in this case, that P^* within the MSE would be say a 45 percent, 40, 40 or 45, up to 50 percent probability of overfishing that the council would decide upon, and then we would tune the manager procedure to achieve that, and, thereby, it would then be achieving that probability, meeting the objectives, the Magnuson objectives.

Then that 50 percent probability would define the OFL. Something less than that would then define the potential for an ABC, and I think that's kind of, in a nutshell, how we think that would work through.

We're going to continue conversations with the SSC on how to really make that happen quantitatively, but I think, from the standpoint of what we would be asking this council, is for their decision on risk for the stock, and you might say, at least based on this biology, that we could probably take a bit more of an aggressive approach, because it is a stock that's highly productive, and a lot of that productivity we see is from outside this area. Then the other ones, in terms of the proposed performance metrics, we have action items on are these what you want to see, are there tweaks to them, and are there any additional ones? Thanks.

MS. MARHEFKA: All right, and so thoughts on what we're being asked here. Are you all comfortable with P^* of 40 percent? Are you comfortable with the performance metrics, and do you want any other performance metrics? Judd.

DR. CURTIS: Just to speak to the stock risk ratings and your ABC control a little bit to this, that helps frame the P^* approaches, and so, right now, having gone through the stock risk ratings during the initial development of that process, you all selected a medium stock risk rating for dolphin at the time. This was, you know, in 2020, or 2019, or something like that.

Then, based on the current biomass levels, right, those get coupled with the stock risk ratings to develop that P^* . If the council decides that the biomass rating, and I guess that is somewhat variable, depending on which metrics you're using, right, and, if it's a moderate biomass rating, then you would have -- Coupled with the medium stock risk rating, that P^* would equal 40 percent. If you agreed it was a high biomass status right now, that would bump up to 45 percent, and so I think that is something the SSC could discuss as well, and provide some recommendations based on some additional information that we might receive.

MS. MARHEFKA: All right. Andy, and then I have Carolyn.

MR. STRELCHECK: Yes, and I guess I want to caveat this that I probably wouldn't typically say this for any other species, but I feel like this is a case where you could, obviously, look at a higher risk rating, right, and in part because of the status of the stock currently, but also I think because we have such a small portion of the overall fishing mortality that's outside our control, and so, yes, I recognize the probability is based on the stock as a whole, but, you know, from our vantage point, I think we can be more aggressive, at least in how we think about it, and look at, obviously, the benefits and tradeoffs of that.

MS. MARHEFKA: I agree. Thanks. Carolyn.

DR. BELCHER: You know, I just want to appreciate Judd coming up, because that's the one thing that I was -- When I saw the percentage, I'm like, okay, there's more inferred with P^* risk, and P^* kind of co-relate, with one another, but there's a very different formulation to a P^* . It's not just us picking a number, and so I was appreciative that Judd explained that.

MS. MARHEFKA: So, knowing that the SSC is going to have this discussion at their next meeting, do we want to sort of keep it where it is right now, get their advice, and determine if we need to think about it more broadly? Do we want to add Andy's suggestion of a model? I guess it would be modeling a less conservative P^* . Okay. I see Jessica say yes, and so I believe that that was 45 percent that Judd said was our high-risk number.

All right. Does anyone have any comments on the proposed performance metrics, or any additional performance metrics? I'm seeing thumbs-up from around the table, and everyone looks comfortable with where those are. I think where that leaves us, and, John Hadley, please correct me if I'm wrong, but I personally don't feel like we finished our conversation on sort of where we're ultimately going with mahi, and how we'll use this, whether or not we'll use this MSE to get there, and sort of the implications for Reg Amendment 3, but I think that's more of a management discussion, and we don't necessarily need to keep Tom on the line for that.

I think Cassidy is going to be here anyway if we have questions, and so it would be my suggestion that we break for lunch, and then, after lunch, we sort of delve into that, finishing that discussion, and see if there's anything else we want them to add into the model, because we've had time to think about it, and then sort of the interplay between those questions and where we want to go with Reg Amendment 3, and does that sound like a good idea? So, with that said, I'm going to hand it back to Madam Chairman.

MS. MURPHEY: All right. Thanks, Kerry. We're just a hair over time. Is everybody still good with getting back here at 1:30. Okay. Well, let's just break for lunch, and we'll see everybody at 1:30.

(Whereupon, a recess was taken.)

MS. MARHEFKA: Okay, and so, where we left off, I think we had adequately answered the action items, or at least adequately as we could answer the action items on the last slide, which was related to P^* and performance metrics, but we, I think, might need to have a little more discussion on the first action item that Cassidy presented to us, which was, you know, how do you feel about the management procedures that were included here, and we have options to add any management procedures, take any of them away, or just say that we're happy with the management

procedures that were presented in this version of the MSE, which were all coming out of Reg Amendment 3, and so, at this point, I think what I'm looking for is for anyone to speak up if they want to add or subtract any management measures, and I see Charlie has a question.

MR. PHILLIPS: Thank you, Madam Chair. If possible, I would like maybe some clarification from John on what our paths forward might be --

MS. MARHEFKA: (Ms. Marhefka's comment is not audible on the recording.)

MR. PHILLIPS: John Carmichael. Sorry. On what our paths forward might be, and the pros and cons of each, and then do we need to keep -- If we don't use MSE, is there a potential that we could use those resources, or the Science Center could use those resources, for something else, since we seem to be resource tight in many places, and so I would kind of like to know what my options are. Thanks.

MR. CARMICHAEL: I can give you, I guess, my thoughts there. You know, to some extent, you can easily use the MSE, because it's showing that you have a stock that's not overfished and not overfishing, and so we could potentially call that using the ESE, to a large extent, and I think it also shows you that at least the things you've done in Reg 3, which then probably transfers over to the things likely to be done in 3, you don't see that you're going to have any -- Certainly any negative impacts on the stock, and so I think that certainly gives you some confidence, or maybe say low risk, that the things that you're looking at are not going to be negative biologically. You know, maybe it opens the door for you to consider more social and economic things, and then more like the regional stuff that you might like to achieve out of the fishery.

Then I think the MSE is certainly useful for keeping tabs on the stock as it goes forward, to make sure that we are staying not overfished and not overfishing, and then, to me, the question sort of comes, you know, to what extent can the MSE help you with some of the fine-scale regional concerns that you have, and that might be where it's helpful, but that --

You know, I'm not exactly sure how usefully it would be there, just given the resolution, and like, you know, thinking about the map, you know, Florida, south Florida, is with the whole across the Caribbean, and so, you know, how much is that going to reflect what's going on up and down our coast if you try to do some of the things where, well, if we just catch this here, can we get more of what people want over in this other area, and so, yes, but, you know, maybe you don't need to go down a path of like a whole management procedure component of the MSE at this point in time, but I think that doesn't detract from the fact that this is a really awesome tool, but, yes, like you're saying, right, is it worth the cost-benefit of continuing to apply this tool like every three years to evaluate some of these things, giving the big picture that it shows you.

MS. MARHEFKA: I just want to make sure that I'm understanding. Probably no matter what we -- This is also the mechanism through which we are going to get an ABC, and therefore establish our ACLs, correct, hopefully, which I was saying confuses me sometimes, because that's not what's happening with the snapper grouper ones, and I don't think the wreckfish one, and so sometimes it helps me to remember which is doing which.

I guess my question is, regardless of what we as a body decide to -- If we decide to use it for management analysis or not, I'm guessing that this is the mechanism that you're going to use from

the Science Center to give us our ABC, and is that correct? You're not going to go back to one of the older, less appropriate stock assessment methodologies, correct? John, I'm looking at you, and so go ahead.

DR. WALTER: Well, I think our recommendation would be to move to something like this, rather than an average over many years ago for an ABC, and I would hope that the SSC would also see that as now that this is -- You know, we've got this, and that that would be the recommendation, and so yes.

MR. CARMICHAEL: Just, right, as John put it, you know, to clarify, the SSC will give you the ABC, and we're hoping that they would be content in using a tool like this to do that, and I think, you know, remember, as John kind of said earlier, it's a three-year average of some period of years. You could look at different years, and get different outcomes, and, you know, it certainly would say that there certainly doesn't seem to be justification, from a stock sustainability thing, to potentially pick more recent years, with a lower ACL, because this doesn't support that at all. It's just, you know, they're sort of fine where they are, and maybe they maintain the status quo, and I don't know, but it certainly, I think, takes fears away from saying, oh, we should reduce the ACL, because the stock's doing great.

MS. MARHEFKA: So, to summarize what I think I heard, it's that this council could either say, yes, we're going to use the MSE for management advice, and then to make management decisions, as far as size limits and vessel limits and blah, blah, blah using this tool. This council could say we want to -- This tool is hopefully what's going to be used to give us our ABC, but we're not -- We don't have any interest in changing any of our management measures at this time, and so we're not going to proceed with that part of it, the management procedures, and I guess is there a world in which this council says no MSE whatsoever? Are those the three sort of boxes it falls, and I'm not suggesting that we would say that. I just want to make sure I understand the scope of what we need to decide today.

MR. CARMICHAEL: I'll try on that, and, John, jump in. John Walter, if I'm mistaking this, but I hope the council doesn't do the last one, because I think this gives us the basis for the stock status, and so you have that. The question, to me, is really -- I guess it's more of timing, right? Like are you at a place now where you feel like you need a frequent management cycle on dolphin, or do you need, you know, the adaptive ACL approach now, you know, which would be sort of, you know, continuing to use the MSE in its full way, and try to affect some of those, you know, one-and-a-half increases, 1.5 times increases, in the ACL that Tom was mentioning that shows you how, you know, yield could go up, and maybe F would get closer to FMSY.

You may feel like that's not appropriate, and you're content to, you know, use the MSE, to the extent it can inform Amendment 3 and what you do with that, if you choose to make any changes in the fishery, and use the MSE to keep tabs on this stock every three to five years, which I would look to the center to say what do they think is an appropriate window, with their resource capabilities to update this, because I think probably not more than five, certainly.

Then I would say that, to me, the MSE, the advanced functionality of it, like on this screen, is on the table until we see maybe there's a need, because the stock starts to decline, and something could happen on the international arena that landings go up, and we do see the stock start to decline, and we pay those consequences.

You know, see if that happens, and then see if this does leverage the greater international interest by, you know, getting ahead of it and showing MSE can be done, as John mentioned, as well, and so it would be more -- This, to me, is just more sort of tabled, until such time it seems to be worth the cost-benefit, particularly considering the agency's resource situation. Does that make sense to you?

MS. MARHEFKA: John Walter, go ahead.

DR. WALTER: One of the things, in terms of the resource, we have already paid for the work, and so the resources are spent. We have the time, and so it is, you know, probably something that we can certainly do. I think maybe a -- We do have a timeline there for trying to get this wrapped up, which is not too far in the future, and so, in terms of our remaining staff time, Cassidy's time on this, we should be able to finish it up.

There are some things on the back-end of it, but one of the -- An option could be roll the Amendment 3 recommendations into a suite of management procedures. The management procedure, the no action alternative, is continue with the ABC advice as it stands, with sub ones being the Amendment 3, and then another one could be -- You know, another alternative would be MP 1, 2, or 3, which would be some variation on some of the things that might achieve some of the other objectives. It could probably be structured fairly similarly, and rolled in together with that, and would be, I think, how I would see it come into a conclusion.

MS. MARHEFKA: I'm looking at Charlie, wondering if that gets at the question that kicked this discussion off.

MR. PHILLIPS: It's clear as mud.

MS. MARHEFKA: Okay. So, with that -- Andy, please.

MR. STRELCHECK: I just wanted to kind of second John's recommendation, John Walter's recommendation. I think that makes sense, and I guess the other way I'm looking at this is so today I feel like it was a little bit of a breakthrough with regard to how we were understanding MSE, and so I appreciate Cassidy and Tom.

I also see this as a much easier example to learn about MSE, and understand it, and I kind of equate it a little bit to like interim assessments in the Gulf, where we just do a health check, right, and so it's just kind of we're checking in, and we're learning from this, and we're benefiting from the results, and, when we get into a little bit more complex MSEs, that have stickier issues, hopefully it will benefit us with regard to the outcomes of this MSE and what we've learned from it, and so thank you for that.

MS. MARHEFKA: Okay, and so hopefully that helps our discussion. The questions are pretty simple up there. I mean, do we agree to explore adaptive ACL-based management procedure, which is the way I understand it, sort of this three to five-year cycle of coming to the ACL, or am I misunderstanding? Go ahead.

MR. CARMICHAEL: I think that refers to where you would have the ACL changing on a regular basis following an index, as opposed to more you have the ABC, you have the ACL now in place, as you have for many years, and so, to me, that's the part where, if you start doing that, well, then you start having more frequent changes, and I think about not just the center resources to run this, which I think is probably the small part, but it's the resources of implementing the changes, and running them through the management process, and, you know, we see what we're dealing with with regs and such today.

MS. MARHEFKA: Carolyn.

DR. BELCHER: I'm just going to piggyback off of John, because I was going to try to reason through where I thought about it, and then just see if other people are like, no, you're way out in the wrong part of the town with this, but so, what John was saying of what we know right now about where the removals are relative to the ACL, an adaptive approach seems kind of overkill, right, because they're not close to it, and you don't need to be kind of bouncing around to mitigate for it.

If there's concerns about the amount of fishing pressure increasing over time, an exploitation-rate-based management procedure wouldn't necessarily be a bad thing, because you're getting at least an idea, and a pulse, on what's happening if effort goes up, or there's some dynamic that's going on with that, and so at least you're being mindful of what potentially is pushing towards your ACL.

Then I think the static tactical management measures, it's -- We talked about it a little bit. We know what is in the context of 3. It's really not moving the needle much, but, based on the other conversations we've had around the table relative to regional differences and things like that, I don't know that that falls under static, but that's kind of, you know, the thing that I see with that, and then I think, the management cycle, that's, again, back to resources or whatever, and then I think somewhat about the life history of the animal, and is three years too frequent, or not frequent enough? I mean, if they're pretty much living only three to five years, it may not be a bad way, and I don't know.

MS. MARHEFKA: That's really helpful, and so I guess then what I'm looking for are reactions to what Carolyn just walked us through, because it helped me a lot, and is there anyone who feels differently about how Carolyn -- Put it this way, and can we substitute Carolyn's view on things for the view of this committee, because I think she summed it up very well, and I'm seeing heads-up around the table, and I'm not seeing any disagreements. Cassidy, do you feel like that -- You were able to capture that?

DR. PETERSON: Yes. Thanks. I would love a little bit more on the exploitation rate component, because the adaptive management procedure is kind of linked to the exploitation rate-based linkage of adapting the ACL to the index, and so we can certainly explore things where we basically say - - We can sort of monitor in the indicator and say, as long as it doesn't vary so much, then we keep everything the same, and is that sort of what you're thinking with that approach?

DR. BELCHER: Yes, because it's more -- Again, it's within the context of dolphin, and not a bigger-picture MSE, because I understand the need, when you don't know what's going on, things that are close, where an ACL is kind of needing to be nimble. In this situation, I'm just kind of like is -- Again, I don't know the time and all that involved in it, but what I'm kind of seeing is

we're not in any danger of hitting the ACL right now, and so, if that's something that's time consuming, for very little gain, at this point it might not be worth it, but, within the context of a different species, that may be a different conversation.

MS. MARHEFKA: Cassidy, does that address -- So do you feel like you have what you need on those two action items, to the best that we're able to provide ability?

DR. PETERSON: Yes.

MS. MARHEFKA: Okay. John, please.

MR. CARMICHAEL: Yes, and then I guess a question to me on the timing, and can you all update this -- Like, you know, assume we have a constant ACL, essentially, and you look at the static measures to support the actions of Amendment 3, and then, going forward, like checking are things still cruising along nicely, is a three-year basis reasonable for you all to update it, and, you know, I think this really reflects the age of these fish, right? They're pretty young. Five years might be too long for dolphin, and so is a three-year window to come back and get us a check on dolphin, and how things are going, reasonable?

DR. PETERSON: Yes, and so when -- In the context of an adaptive management procedure, the management cycle is how often you would update the ACL. You would typically be monitoring the inputs to the ACL every year, or every management cycle, to make sure that those aren't straying into unreasonable places. That's the exceptional circumstances provisions.

When we're thinking about management cycle, that's sort of what we're thinking, how frequently you would update the ACL, in the context of an adaptive management procedure. That's a little bit shorter than we would typically think of for the purposes of a complete MSE review, or revision, where you can incorporate new data, and new information, and refit the models, and re-tune your management procedures, and so I just want to make sure I'm understanding correctly. Are we thinking three years as like an exceptional circumstances check, to make sure that everything is still performing as intended. or are we thinking of every three years as a full MSE review, because I think that's a very, very different answer.

MS. MARHEFKA: John Carmichael.

MR. CARMICHAEL: I'm thinking three years as basically a stock status check, and so kind of adapting the MSE, but this is our -- If this survives the SSC, and becomes our stock status determination method, then three years to check the status, and then, if there's signs of trouble, then the council would then initiate an action to deal with that at that point. Now, also, if it's feasible to monitor like the index on an annual basis, and report that out to the council, and then if, during a three-year window, there are signs of trouble, then I think certainly the council would like to be aware of that and consider acting sooner.

DR. PETERSON: Okay, and so maybe I'm still a little bit confused. I don't know if -- I don't know if John is understanding better than me, but I think every three years for a full MSE review would probably -- I don't think we would have the capacity for that, and so, by status check, if we're thinking in terms of like Andy brought up the idea of the interim approaches, we could use that as a status check.

That would be very similar to what we would do for exceptional circumstances checks, and we could do that every year, but then it wouldn't necessarily give us stock status information without the full MSE review. It would just be monitoring an indicator to make sure that it's still within a reasonable expectation of what was simulation tested within the management strategy evaluation.

MS. MARHEFKA: I have hands going up everywhere. I have John Walter, and then C.J., and then Carolyn, but I just want to ask, and is it sort of like, if you're monitoring that one indicator, and you bring it to us and say, hey, this one indicator is outside of the range, then we as a body could use our informed judgment to go, oh, it's because XYZ, and there was a storm, or market prices, or something like that, and then go back and try to say we're concerned about this, or we're not concerned, and let's see what happens next year kind of thing.

DR. PETERSON: Yes. Absolutely, and so that's the crux of exceptional circumstances. We just highlight where the indicator is beyond what was tested, and then we bring it to the council for you all to decide what reaction should occur.

MS. MARHEFKA: Gosh, I think I might be starting to get it. John Walter, and then C.J., and then Carolyn.

DR. WALTER: Yes, and it wouldn't be a full status assessment, or stock assessment, which would pull in all the information. We would just look at the barometer and say, oh, based on the barometer, we seem to be within the appropriate temperature range, or, if we're outside, then exactly that process would then be triggered to say why are we outside. Thanks.

MS. MARHEFKA: Perfect. C.J.

DR. SWEETMAN: Yes, and this is all coming to a head here, and so I think you're starting to get it there, right, and so like, based on what I've heard at the table today, you know, it does sound like you guys are all more looking for the exceptional circumstances, to see if there's any changes, and then if the council needs to make a change, and not a full-on MSE review, like you guys would have to do this all over again, right, and so I just wanted to point that out, but my question, Cassidy, and I think you touched on it, and so like, if you were doing an exceptional circumstances, how long would that take? You know, is it just a quick plug-and-play with updated data, and then it's something that can be done like that?

DR. PETERSON: So usually the exceptional circumstance provisions are centered around the type of management procedure that you implement, and so, if we were using sort of the exploitation rate-based monitoring approach, where, you know, we're monitoring the behavior of the indicator, or the index of abundance in this case, we would be updating the index every year, or every, you know, management cycle, and making sure that the updated value of that indicator is within the bounds of what was simulation tested, so we're confident that the management procedure, or the management that's in place, is still performing as we expected, and then -- So it's just as simple as updating an index in that case.

If it was a more involved management procedure, you could also monitor things like average lengths, or whatever else is feeding into the management procedure, but, in our case, if we're

thinking about monitoring based on exploitation rate-based metrics, it would just be updating an index.

MS. MARHEFKA: Carolyn.

DR. BELCHER: Yes, I was thinking it's one of those things that it may be being a little bit adaptable to start with on how much time -- Like when you want it, and like I think the obvious full, of let's go back through and do stock status, and let's talk about something that's reasonable, when we think about how we do cycles on other species, right, because this is kind of one of those ones between shrimp, where we wouldn't do it, and something for like a shark, which lives a lot more years, and you need a lot more time to see recovery, and so figuring out where that is, and maybe go a little bit longer than you think, and, if you need to do it, then we could always change it.

MS. MARHEFKA: I think that's a great way to look at it, and I keep thinking like the biology of the species is fast, but the need isn't fast right now, right, and so it's like finding that middle ground, which is what you were talking about. Cassidy, now I'm doing an indicator check on you. Do you feel like you are within the bounds of what you need, that you needed from us for this meeting?

DR. PETERSON: Yes, and we can, you know, keep using the tool to test out the different vessel limits and size limits and look at regional-specific results. I don't expect them to change much, and I know, earlier in the discussion there -- Like John highlighted the idea of having adaptive management procedures sort of also on the table as when we come forward, and I just want to double check that that's still desired, or if that's not desired.

MS. MARHEFKA: I can't answer that, but John put his hand up. I said I can't. No, and I said I can't answer that.

MR. CARMICHAEL: Hold that for a second, and my question was is the barometer the pelagic longline?

DR. PETERSON: Yes. We have a winter pelagic longline logbook index that we used.

MR. CARMICHAEL: Yes, and then probably for John, to put your Magic 8 Ball on how this will be viewed there at the agency for stock status, but, as long as the barometer stays within expected bounds, can we be reasonably safe in assuming that the stock status is where we want it to be, where we're not overfished and not overfishing? I'm just thinking about, you know, we don't want to have this go from status known to status unknown, flip-flopping like that.

DR. WALTER: So we didn't build the MSE to derive stock status particularly, but it's an intriguing concept of whether you can get that barometer check, and I think it's really a desirable thing, and what I'm going to take away from this is there's a strong desire to get that check-up routinely, and there's a strong desire to try to get that out of this process, as much as it can be.

My only caveat to that is, since we're probably not modeling the entire population, and maybe we've got the Western Atlantic, one could say maybe you're missing fish off of Brazil, or you're missing part of the population off Brazil, and we don't have the stock structure necessarily well-defined to say we have a unit stock. Is it probably a pretty darn good indicator of status? Probably,

and I think that's what I would say, is it's better than the assessment that was done in 1999, the Prager production model, which is what stock status is based on, and so it's definitely more current than the twenty-six-year-old status determination, and so I think that there's probably definitely room to work there, and we'll see if we can kind of build that in a little more formally. Thanks.

MS. MARHEFKA: Carolyn, I think you are going to speak to the adaptive management procedures?

DR. BELCHER: Yes, and I guess the question I have is that -- Is it something that you can build in as a tool in the toolbox of the MSE, knowing right now we don't have a need for it, right? The exploitation is probably telling us more than an ACL adaptation is going to be at this point in time, but, when things start converging in a way that you need to start thinking about it, knowing it's available, I think that's the bigger difference, is we don't really need it now, but, in twenty or thirty years, if the fishery changes, maybe, you know, and I think that's the only thing, is just not knowing how you build that in.

DR. PETERSON: Thanks. To be clear, it's already built in, and so, the examples that Tom walked through, those are examples of adaptive control rules, and, as you could see, there was some tradeoff in catch rate versus landings, and we can -- You know, it's already built in, and so we can just test out different configurations of what an adaptive control rule might look like, and we can make them, you know, somewhat extreme, and like Tom presented some extreme examples to show those tradeoffs, and we can present you with those tradeoffs. If you see, you know, this one metric increases our catch rate, and we would rather do that, then we could put it forward as an option on the table.

DR. BELCHER: Then maybe that's a potential added level of check, as opposed to doing a full MSE ten years out or whatever. Again, let's find out if we need to be in an adaptive mode at some time window, and then, if everything's still chugging along, and we're not coming close, and things are kind of staying at the low level, you kind of work within that framework, and then you don't have to keep going up to the full if you don't have reasons to assume you need a full. Does that make sense?

It's almost like there's an intermediate step in it. Like the exploitation is kind of what is helping us get the picture. Every five years, we might do an adaptive check to see if we need to move to an adaptive plane, and, if things are still chugging along, and we don't need to do anything else, but then, at some other time point, there's a full MSE, ten years or fifteen years, and I'm just throwing numbers out, but maybe that kind of gives you an intermediate step, and I don't know.

DR. PETERSON: I think I get what you're saying, and we can absolutely do that. Part of the exceptional circumstances checks that we'll do every year, the barometer checks every year, that will -- You know, if we ever do stray into exceptional circumstances, one of your recommendations is the council can say we need to do -- We need to move up the MSE review, and redo the MSE review, and that's absolutely on the table.

I think I'm just suggesting, and I see John's hand up, and so he's going to come and save me, but the only thing that I'm suggesting here is that, when we put forward management alternatives, we could put forward some that are adaptive and some that are not adaptive, and then that, you know, gives you the ability to choose if that's not --

MS. MARHEFKA: I'm going to let Carolyn, to that, and then John.

DR. BELCHER: Yes, and so, to that, I could say, in the current status that we're at, I don't think adaptive is really anything that we need to investigate at this time point. Down the road, again, we might, but right now I don't see that that's where it would suit a good use of your time.

MS. MARHEFKA: John Walter, did you want to speak?

DR. WALTER: Yes, and Cassidy needs no saving from me. I'm just going to bring up a different -- A point on how -- Why there might be a benefit to adaptive, and I'm going to replay the 2015 scenario where the commercial fishery hit its limit and was closed. That is where an adaptive strategy would have probably said, you know, there's an abundance of dolphin, and that was one of the peaks of both the recreational commercial fisheries.

That's probably not a situation that needed a closure. That's where the adaptive might avoid that. Now, the point about -- I think the can we do this in a soft acceptance of it, rather than adopt the full MP, versus use it as an indicator, I think, if we've still got this in our back pocket several years from now, if mahi come screaming back into our fishery, which we hope they do, where the commercial fishery might actually hit that limit, we would then --

The agency is supposed to evaluate was that limit hit because of circumstances that might not be a problem with the fishery, in terms of overharvest, or just an extreme abundance of fish, in which case we would have that indicator there to tell us that, but the benefit of adopting it as the actual management is that then you don't need to do that after the fact, that you actually have an idea of what might be coming in, and that's kind of an -- There's an expectation that that's going to happen.

Then the one other thing that I would say is that a lot of these things that we're bringing up are situations where you don't have to make the decision now, and it's a lot better to see it, rather than us tell you what might happen, because I don't know, and so we -- As Cassidy said, we build in the comparison between the options of -- Obviously, the status quo, the no action alternative, is always on the table. That is the default on any action.

Then could you do better is the question, and, if you can do better, is there a reason to move to an adaptive one, because it's better in some way, but you don't need to choose that, and I think all we're saying is, I guess, do we proceed forward with doing those, continue those calculations to the end of this, or not, but I think, Carolyn, your points are well taken. I think you'll have those two options, and you'll be able to see which one works best.

MS. MARHEFKA: Yes, and that's helpful, because that does change my mind, sort of, or I wasn't thinking about it correctly, because, especially with mahi, you know, there's still so much we don't understand about when they're going to show up, and why they show up, and things like that, and to artificially constrain any sector, when it's not biologically necessary, why would we do it, and, if we have a model that can sort of demonstrate that we're safe to do it, I like the idea of it, and it doesn't sound like -- It's already in there, and so why not, and so you're just looking for our blessing to carry on and include those in there, include that option in there. Carolyn, knowing all of that, does that change how you feel?

DR. BELCHER: I mean, it's exactly what I'm saying. It's just an issue of turn it on or turn it off if you don't need it. That was my only point.

MS. MARHEFKA: Then I think we're good. Does that answer that for you? Do you have everything you need?

DR. PETERSON: Yes.

MS. MARHEFKA: Thank you for being patient with us. You're an excellent teacher, I have to say. Very, very, very good. Hold on. Mike has a question.

MR. PIERDINOCK: Thank you. Getting back to the model, and I'm just curious, as an indicator -- I mean, I know, up in our neck of the woods, temperature is the major item that indicates whether you're going to even have them present in our waters, and so I believe the black sea bass, scup, summer flounder models include temperature, and I don't know how that works within that model, and whether there's any potential then, or need to then, model that with mahi, to try to assess the distribution of them based on temperature. That's one question.

Another thing, just to ask, with the exceptional circumstance, I'm assuming you're going to -- You'll come back to this body with some different examples and definitions, because going through the MP process and, you know, in other stocks, sometimes the interpretation of what is an exceptional circumstance is different, and so that would be good, if you were able to come back and have that up for discussion. Thank you.

DR. PETERSON: Very good questions. Exceptional circumstances, yes. Typically, in our experience with ICCAT, typically those come right after finalizing a management procedure, and implementing a management procedure, and we will -- I mean, depending -- It's going to be dependent on what management procedure is chosen, what constitutes exceptional circumstances, but we absolutely, yes, will come back, and you will sign-off on what constitutes exceptional circumstances.

With respect to temperature, we have considered the idea of using an environmental index as part of the indicator. The problem is that that indicator is representative of local availability, and not necessarily total abundance, and linking that to a stock parameter has proved to be challenging, but we do have robustness scenarios where we simulate shifts in availability, or catchability, essentially, where it's lower -- Catchability is going down in the southern region, and it's going up in the northern region, and so we will have those results to share.

MS. MARHEFKA: All right. Last call for Cassidy, and then we're going to set her free. I see none. Now you can really go.

DR. PETERSON: Thank you so much.

MS. MARHEFKA: Thank you, Cassidy. All right, and so we have one more topic on our agenda, and that is to discuss our path forward with Regulatory Amendment 3, and, to guide us through that, I'm going to hand it over to John Hadley.

MR. HADLEY: All right. Thank you very much, and so what I have in front of you is a decision document that was included in your briefing materials, and what I intend to do here is go over just -- You know, it's been a while since the council really had a chance to discuss this in-depth, and so, to remind everybody what is currently in Regulatory Amendment 3, kind of bringing you up-to-speed, and reminding you of some of the recent management changes, and recommendations from your AP.

Then I'll go -- Then I'll kind of turn it over to you guys after I go -- I'll go through the different actions very quickly, sort of as an overview, but, after that, I'll turn it over to you as the committee to discuss how you want to move forward, and, specifically, do you want to pick up work on this amendment again.

With that said, you know, as little bit of background, and a refresher, as some of you may recall, at the March 2022 meeting, this is really when this amendment got rolling, and underway, and this action, or this amendment, includes actions that consider extending the applicable size limit for dolphin beyond the North Carolina-South Carolina border and modifying the daily bag limit and vessel limit for dolphin, and so looking at modifying recreational retention limits and potentially removing or reducing captain and crew bag limits.

This amendment made it through approval for scoping, and, as part of scoping, and during that approval, the MSE, the management strategy evaluation, came into the picture, and so, as part of the scoping process, there were dolphin MSE stakeholder workshops held up and down the coast, and that was part of the scoping process, intended to be part of the scoping process, and gathering public input on development of this amendment.

It's been on hold since that time, since June 2022. The council has discussed it a few times, but really not necessarily in-depth, and so that's kind of the status of those discussions is kind of where -- It's frozen in time, so to speak, in that 2022 timeframe.

As far as the recent management actions, I wanted to remind everyone that, you know, these are sort of recent at this point, but, in 2022, Dolphin Wahoo Amendment 10 went into place. It was sort of a large overhaul of the Dolphin Wahoo Fishery Management Plan, revising sector ACLs, sector allocations, but it did drop the recreational vessel limit from sixty fish to fifty-four fish.

In about the same timeframe, implemented in May 2022, FWC implemented change to dolphin regulations applicable to Atlantic state waters, and so, in that case, FWC implemented a five-fish-per-person recreational limit, reduced the private recreational limit from sixty fish to thirty fish, removed the vessel limit for for-hire vessels, and so the bag limit is really what is restrictive on for-hire trips, and clarified that captain and crew are prohibited from retaining a bag limit of dolphin, and so, you know, that's all brought up to -- That's all mentioned to bring up the note that there's some inconsistency between federal and state waters off of Florida right now on the Atlantic side.

One other item I wanted to remind you of that the Dolphin Wahoo AP has discussed this amendment. They discussed it sort of in its initial phase in 2022, and they discussed it again more recently at their meeting in the spring of 2025. They did pass two motions that look at the size limit and the vessel limits for dolphin.

The motion, the first motion, essentially endorses a twenty-inch fork length minimum size limit from Florida through Maine, and so essentially extending that size limit through the management jurisdiction, with the implementation of sort of a little bit of an allowance there, and so, when the AP discussed this, the allowance would be one fish between eighteen and twenty inches could be kept for private recreational vessels, and up to three fish between eighteen and twenty inches could be kept for for-hire vessels.

Then the other action that the AP passed was looking at vessel limits, and the AP passed a motion that was in support of a thirty-fish vessel limit for private recreational vessels, and then essentially a limit for onboard charter vessels that could be up to forty-eight fish, which would be inclusive of captain and crew bag limits, and so a reduction in the limit that currently stands, but different limits onboard private vessels and for-hire vessels.

I'm happy to answer any questions, and I'm going to get into -- I'm going to provide a refresher on the actions in the amendment, specifically in the range of alternatives, but I just wanted to pause really quickly here before I get into that, if there any questions on sort of the background information and what led up to the meeting today.

MS. MARHEFKA: Any questions? I have one if no one else. John, the Dolphin Wahoo Advisory Panel has not seen any iteration of what we saw from the MSE today. In other words, I'm thinking about the stuff that they showed where they plugged in the measures from Reg Amendment 3 that showed, you know, sort of the amount of change that would result from those. They've not seen anything like that prior to those recommendations, and is that correct?

MR. HADLEY: That's correct. They did not -- They did not have that information available when they discussed these motions.

MS. MARHEFKA: Any other questions? Charlie.

MR. PHILLIPS: So these AP recommendations are from 2023, or when?

MR. HADLEY: 2025. Spring 2025.

MR. PHILLIPS: Okay. Just checking.

MS. MARHEFKA: All right. Other questions for John before we move on to what we need to do this meeting? Carry on.

MR. HADLEY: All right, and so I'll switch gears here, and, you know, very quickly go over the draft purpose and need and then the actions. You see the purpose there is to extend the applicable geographic range to the minimum size limit and modify the recreational retention limits for dolphin, and the need is to provide increased conservation benefits to the dolphin fishery in the Atlantic.

The draft actions that were included in Regulatory Amendment 3, there are four of them in total. Again, I'm going to go through these at a fairly high level, just because I want to give everyone a picture of, you know, what is included in Regulatory Amendment 3, and so Draft Action 1 focuses on potentially extending the geographic range of the minimum size limit for dolphin, and this

would apply to both the commercial and recreational sectors, and so, currently, it's in place from Florida through South Carolina.

There's different alternatives there that would extend it up through North Carolina, up through North Carolina and the Mid-Atlantic, and then North Carolina all the way through New England, and so the whole -- Alternative 4 there would be the whole management jurisdiction of the fishery management plan, and so the east coast of the U.S.

MS. MARHEFKA: Andy.

MR. STRELCHECK: Maybe before we get too far past the purpose and need, if we could go back up to the purpose and need. To me, this really is kind of dead on arrival, and it's not the same purpose and need that we had based on the MSE, right, and so I wanted to just have a brief discussion around that. I mean, there's certainly other ways we could frame the purpose and need in terms of equity, in terms of size limit regulations along the Eastern seaboard, but it does not appear that this is going to provide major conservation benefits, and so I just wanted to note that.

MS. MARHEFKA: Thanks for that. I was thinking the same thing, and trying to figure out the appropriate order in which to tackle this, and so I want to take that onboard, and come back to it once we go through the regulations, because I think that will let us know -- The actions that were proposed in the thing, and I think that'll give us more meat to talk about this with.

MR. HADLEY: All right, and so we will come back to the purpose and need after we run through the actions. Draft Action 2, modify the daily recreational bag limit for dolphin, and there's a range there of two to ten fish, and it's broken up by mode for the recreational sector, and so two to ten fish onboard private vessels, two to ten fish onboard charter vessels, and two to ten fish onboard headboat vessels.

The next action looks at modifying the recreational vessel limit for dolphin, and there's a range of twelve to fifty-four fish, and, again, this is broken up based on mode for the recreational sector, and so it would be twelve to fifty-four fish onboard private vessels, charter vessels, or headboat vessels, and you can see that's the difference there in the different alternatives. Additionally, based on previous committee guidance, there would be options added where this could be applicable specifically off of Florida only, or it would be applicable for the entire Atlantic region.

The next action looks at modifying captain and crew daily recreational bag limits, and there are other than the no -- Well, currently, recreational captain and crew bag limits are allowed, and Alternative 2 would essentially remove captain crew bag limits throughout the Atlantic. Alternative 3 would do so, but specifically focused off of Florida, and so that's really a high-level overview of the actions.

Really quickly, I'll get into potential timing. If you did want to take up work on this amendment again, we're probably looking at about four meetings or so to get it in shape, where it would be ready for -- To get it into shape where it would be ready for a final vote, and so you would be looking at -- You know, assuming work started, you know, and you gave the go-ahead for staff to start working on this again, you would be looking at a public hearing document in December, and a potential final vote on it this time next year, and so the June 2027 meeting. With that, I'll turn it

over to the committee. I don't know if we want to have a general discussion, or hop up to the purpose and need.

MS. MARHEFKA: I think the -- For me, I would approach it by just -- Now that we have this new information that we saw today, having the discussion about whether or not we want the staff to take this amendment back up, in which case then we'll go look at the purpose and need and everything else, but, if there is a consensus that we're not ready to move, then I don't see the need to look at those, is how I see it, and so I'm looking for -- Dewey.

MR. HEMILRIGHT: So, according to John, coming back for a vote to the council, if it's chose to go on, would be this time next year. All right, and then so you vote on it, and so it hangs out for a month, and then it goes to SERO, or goes up the chain of command, or wherever it's going, and so that's another six or eight months, and so it's -- That's enough.

MS. MARHEFKA: Trish.

MS. MURPHEY: I mean, I'm kind of where you are. It seems that, with what that MSE has demonstrated so far, I don't think we need to move forward with this. I don't know how -- I mean, there's some Florida-only things in there, and I'll leave it to Florida to address that, but I think, as far as -- I mean, it looks like we're doing -- It's going -- It's doing fine, and so I'm not sure there's a need to make any changes, but I know there's some pieces in there directly for Florida, and so I'll defer to Florida on that side, but I'm good with not moving forward with it at this point.

MS. MARHEFKA: Tom.

MR. ROLLER: Thank you for that, Trish. I'm in the same boat. Given what we saw in the MSE, and the fact that the actions we take really aren't moving any sort of availability, you know, towards us, right, and, I mean, maybe there's some very net -- What we learned was the stock is fine. It's just the availability may be elsewhere, right, and so much of the discussion we had is like what can we do in our region.

When I look at this amendment, I don't see anything that's going to benefit our region in terms of conservation. I see potential impacts to the North Carolina for-hire fleet, and maybe North Carolina fishermen, but I don't see impacts to any other state, and so, if this is the way we're going to proceed, I don't really see a need to go forward with this at any given time, or right now I mean.

MS. MARHEFKA: Thanks, Tom, and so let me reiterate what I'm hearing. I've heard right now support for not moving forward with this regulatory amendment. I'm still looking for other opinions. I see Jessica has her hand raised. Eventually, this will need a motion on how we want to carry forward. Jessica.

MS. MCCAWLEY: Yes, and I'm in the opposite boat. I would still like to see some version of this move forward. Yes, you could just do it for federal waters off of Florida, but I just think about -- Like I brought up earlier those other peer-reviewed articles that we saw maybe two meetings ago, or maybe three meetings ago, that we're kind of getting into size limit changes, and so, yes, and this is why I brought up some of these questions earlier about what could we really do, and it seemed like John Walter was suggesting there were some things that we could still do here that may have an impact to the U.S. portion of the stock.

I mean, I feel like I'm in the minority, but this is why I was asking some of these questions earlier in the process about kind of what is our role, even as this committee, about what to do about Atlantic, U.S. Atlantic, coast-wide dolphin, is what I'm saying.

MS. MARHEFKA: Anyone else care to weigh-in? I'm going to need a motion. We're going to have to come to some sort of decision on this today, so staff knows what to do. Carolyn.

DR. BELCHER: I would like to hear from our northern constituent down at the end, or I guess he's not there now.

MS. MARHEFKA: I think he had to leave.

DR. BELCHER: Shoot, because I was curious what the thoughts are about some of these things extending up the coast, and the impacts to them, I mean, because it's easy for us to kind of talk about how it impacts us, but --

MS. MARHEFKA: If I recall correctly, and, Cassidy, if you can hear what I'm saying, and run up here if I'm wrong, but, if I recall correctly, the one place there was an impact to catches was one of the management procedures from Regulatory Amendment 3 to the most northern portion, or the most southern -- See, and that's why -- Cassidy is indicating that I am wrong, and it's actually the most southern. Thank you. Trish.

MS. MURPHEY: Just remembering a few comments he did say, I don't think -- It did not sound like he was supportive of the size limit up in his area anyway, because they do -- They are rare catch, when they do catch them, and it's a big deal when they do, and so I do remember that statement.

MS. MARHEFKA: Jessica.

MS. MCCAWLEY: Yes, and I would also like to hear what the AP has to say, like you were suggesting, after getting this presentation, or a similar type presentation, and what would their suggestion be, because all we have are those motions from a few AP meetings ago, or whenever they met the last time, which wasn't super recent, and I think it was 2025, but, yes, and I'll come back. I keep bringing us back to the spiny lobster example, because I feel like it's relevant here, that we have like tons of very specific regulations on spiny lobster, even though our lobster that are in Florida are spawned in the Caribbean.

MS. MARHEFKA: Thank you. Point taken. Tom, and then Dewey.

MR. ROLLER: I mean, dolphin move a lot though, a little bit more than spiny lobster, and am I right? When I think about this, I just think about the previous conversations that we had, and, when we debated this amendment, you know, three or four years ago, and the conversations before I was a council member in the last amendment, is what it came down to was -- I understand that there remains a lot of concern in Florida, and I'm not going to say there's not concerns in my state.

The question is how we can impact those, right, and, so when I look at this, I wonder -- You know, what it came down to is this idea of dropping it to a thirty-fish bag limit in Florida, and, really, my

understanding is it's really a zero percent reduction in catch, correct, but it's a reduction in catch to the North Carolina for-hire fleet, which is a small component of this fishery, and so, if we're going to have a discussion on how we make conservation benefits in our little section, maybe we need to have a discussion about having equal reductions in each state, and so, if we do want to have some conservation measures, maybe that means Florida has to take a real big hit.

Does that make sense, what I'm saying? Like if thirty reduces the catch in North Carolina a little bit, but doesn't reduce it in Florida, maybe we have to look at actually making reductions where we catch those fish. Otherwise, what's the point of what we're doing?

MS. MARHEFKA: I have Dewey, then Andy.

MR. HEMILRIGHT: I, a couple of years ago, talked with some folks off Delaware that were catching eight to twelve-inch fish around some lobster pot buoys, or sea bass pot buoys, and they were just catching and releasing, and so he said a lot of them, you know, that summer, and so, you know, if a twenty-inch fish gets up there off of Marthas Vineyard, or somewhere like that, I mean, do we know the biology of where it actually hatched at?

Did it go -- I don't know this answer, but did it go from Key West, at a certain size, and go all the way up there off Marthas Vineyard and stay twenty inches the whole time? I think that there's other things happening further up the way. Where do you get an eight to ten-inch mahi come from, and so the biological parts of it, but I do think that twenty-inch size limit, or something like that, potentially has effect for folks north of --

Up there to the northern part, if I understood some of their comments that they sent in and different things like that, and that was my understanding, and so I just think that there's other biological things besides the general thing of -- I mean, you know, how does the fish get this size, and how does it get all the way up there, and where does it come from, and I don't know that answer, but it's just an observation on the water.

MS. MARHEFKA: Thanks, Dewey. Andy, and then Carolyn.

MR. STRELCHECK: Yes, and, I mean, I'm certainly going to recommend that we not proceed with working on this amendment right now, and let me just kind of talk through the rationale, right, and so, in my view, there are some benefits of things we could work on, one of which would be kind of consistent regulations with Florida, right, but we don't have really, to me, any strong justification to even implement more restrictive regulations here on this stock.

We have a biomass that's well above BMSY, and we have analyses now that are showing that a lot of the -- Well, all of the things in Amendment 3 here really will have a very *de minimis*, or minimal, impact, obviously, on the stock. Even if we took action, we have, you know, an executive order, you know, focusing on deregulation, and this would be regulatory in nature, and so I see the benefit of let's continue to work with the MSE, some of the various management measures that are being considered in the MSE.

We can always come back to this if things change, but, at this point, given other workload, and other priorities, the black sea bass and red snapper stock assessments looming, I don't see a lot of added value for staff to work on this in the short-term.

MS. MARHEFKA: All right. I have Carolyn, then Trish, then Tom.

DR. BELCHER: I was going to suggest would it be worth it, especially because you brought the idea of it going to the AP, to kind of help inform the AP's guidance and judgment, and we're not fully through the MSE yet, and so we would almost be taking it to them prematurely. We're talking about asking for some other things to be implemented, and so I feel like, because there isn't a sense of urgency, at least kind of putting it off until we can kind of get a little bit more idea if there's localized things that we can look at that may or may not improve our overall picture, based on timing, availabilities, whatever, and maybe it would be good to wait a little bit longer.

MS. MARHEFKA: I'm going to -- Real quick, I'm going to go to John, because I think it's to that point.

MR. HADLEY: Yes, and, to that point, I just want to mention we were planning on having a spring meeting next year for the AP, thinking that the MSE would work its way through the review process, through the council process, and then come back to the AP, and so I just wanted to throw that out there. That would be the next planned meeting for the Dolphin Wahoo AP.

MS. MARHEFKA: Thanks, John. Trish.

MS. MURPHEY: I would like to -- Can I go ahead and make a motion?

MS. MARHEFKA: (Ms. Marhefka's comment is not audible on the recording.)

MS. MURPHEY: Okay. **I would like to -- Somebody can help me word this if they want, but I make a motion to not begin work on this FMP, on Dolphin Regulatory Amendment 3. Do I need to say anything about a timing, or we continue to monitor, and how about that? I'll just leave it, keep it simple, to not continue working on Regulatory Amendment 3 at this time.** That sounds good.

MS. MARHEFKA: All right, and so we have a motion by Trish, and a second by Tom. Any discussion? Tom.

MR. ROLLER: I think the rationale before this motion was made was sufficient for this action, particularly being that we need to work our way through the MSE review, and we can also take that to the AP, and we'll hear what they have to say, and we can continue talking about this fishery.

MS. MARHEFKA: Any other discussion? **I know that we're not unanimous about this, and so I think I'm going to have to ask for hands for this vote. All those in favor, raise your hand. That's nine in favor. All those opposed, raise your hand. Any abstentions? The motion carries, nine in favor, one against, and one abstention.**

I believe that that concludes the business of this committee, or is there any other business to come before this committee at this time? All right. I think that concludes this committee, and I'll hand things back to you, Madam Chair.

(Whereupon, the meeting adjourned on June 11, 2026.)

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Certified By: _____ Date: _____

Transcribed By
Amanda Thomas
July 8, 2026

DW Thurs. 6/11/24

	Committee	Name	State	Affiliation	Seat
1	Dolphin Wahoo	Kerry Marhefka (Chair)	SC		At-Large
2	Dolphin Wahoo	Tom Roller (Vice-Chair)	NC		At-Large
3	Dolphin Wahoo	Amy Dukes	SC	SC DNR Marine Resources Division	State Agency
4	Dolphin Wahoo	Trish Murphey	NC	NC Division of Marine Fisheries	State Agency
5	Dolphin Wahoo	Jessica McCawley	FL	Florida Fish and Wildlife Conservation Commission	State Agency
6	Dolphin Wahoo	Robert Beal	VA	Atlantic States Marine Fisheries Commission	ASMFC
7	Dolphin Wahoo	Dr. Carolyn Belcher	GA	GA DNR Coastal Resources Division	State Agency
8	Dolphin Wahoo	Gary Borland	SC		Obligatory
9	Dolphin Wahoo	Judy Helmey	GA		Obligatory
10	Dolphin Wahoo	Francis (Dewey) Hemilright	NC		Obligatory
11	Dolphin Wahoo	James Hull Jr.	FL		Obligatory
12	Dolphin Wahoo	Lt. Tom Pease	FL	Seventh Coast Guard District	USCG
13	Dolphin Wahoo	Charlie Phillips	GA		At-Large
14	Dolphin Wahoo	Robert Spottswood Jr.	FL		At-Large
15	Dolphin Wahoo	Andy Strelcheck	FL	NOAA Fisheries Southeast Region	NOAA Fisheries
16	Dolphin Wahoo	Mike Pierdinock			New England Representative

John Watter CT Sweetman
 Shep Brimes
 Sonny Grinn
 Rick DeVictor
 Mireal Reichart
 Cassidy Peterson

DW Thurs 6/11/24

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June 2026 Council

Attendee Report: Meeting

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Webinar ID	Actual Start Date/Time	Duration	# Registered
942-313-427	06/11/2026 07:45 AM EDT	8 hours 54 minutes	246

Staff Details

Attended	Interest Rating	Last Name	First Name
Yes	Not applicable for staff	Council	South Atlantic

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Bernier	Quinn
Beyer	George
Bianchi	Alan
Boots	Benjamin
Bradshaw	Christopher
Brouwer	Myra
Brown	Hunter
Bubley	Walter
Bunting	Matthew
Byrd	Julia
Carruthers	Tom
Cermak	Bridget
Clawson	Jessica
Cody	Richard
Collier	Chip
Crispe	Miriam
Curtis	Judd
Curtis	Christina
DeVictor	Rick

Dobbs	Jeffrey
Dukes	Amy
Favale	Julianne
Flemming	Robert
Flowers	Jared
Floyd	Brad
Foss	Kristin
Friedrich	Tony
Gervasi	Carissa
Gloeckner	David
Griner	Tim
HEMILRIGHT	DEWEY
Hackney	Heather
Hallas	sara
Helmey	Judy
Horstead	Adrian
Howington	Kathleen
Huber	Jeanette
Hull	Jimmy
Iberle	Allie
Iverson	Kim
Jacoski	Greg
Karnauskas	Mandy
Kersting	Anne
Kittle	Christine
Kittle	christine
Klasnick	01Kelly
Klibansky	Lara
Knowlton	Kathy
Larkin	Michael
Lazarre	Dominique
Lee	Jennifer
Lee	Max
Levy	Mara
Lou	Jenny
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Mackesey	Brendan
Malinowski	Richard
Marhefka	Kerry
Marinko	Jeff
Masi	Michelle
McMahan	Trevor
McPherson	Matthew
Meehan	Sean

Mehta	Nikhil
Merrifield	Mike
Moller	Alexandra
Moore	Jeff
Moss	david
Murphey	Trish
Neidig	Carole
Newman	Thomas
Norcross	Jennifer
Offner	Tia
Oliver	Ashley
Ott	Emily
PRENTICE	CHRIS
Package-Ward	Christina
Phillips	Charlie
Pike	Hannah
Porch	Clay
Ramsay	Chloe
Records	David
Reichert	Marcel
Reynolds	Kris
Robertson	Charlie
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SEWARD	MCLEAN
Salmon	Brandi
Schlick	CJ
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Smart	Tracey
Spurgin	Kali
Starling	Savannah
Stemle	Adam
Stephen	Jessica
Stephens	Haley
Stevens	Molly
Sweetman	CJ
Talton	Trista
Thomas	Suzanna
Turley	Brendan
Vaz	Ana
Vecchio	Julie
Walia	Matt

Walsh	Jason
Walter	John
Wamer	David
White	Geoff
Williamson	Veronica
Withers	Meg
Woodstock	Matt
adisa	sylvia
evans	joseph
gwin	earl sonny
oden	jeff
reese	dylan
sandorf	scott
vara	mary
zales	bob
Aines	Alex
Alhale	Sydney
Atkinson	Seth
Batsavage	Chris
Beal	Bob
Bertoline	Sue
Blough	Heather
Blum	Catherine
Bogdan	Jennifer
Bonura	Vincent
Borland	Gary
Brantley	William
Bremer	Nik
Brogan	Gib
Bruger	Catherine
Califf	Julie
Callaway	Lillie
Cheshire	Rob
Cox	Jack
Crosson	Scott
Dash	Mark
DiJohnson	Alex
Drexler	Michael
DuBeck	Guy
Dubniczki	Hayden
Dyar	Ben
Emory	Meaghan
Farrell	Delaney
Figueroa	Alena

Franco	Dawn
Freeman	Chase
Gahm	Meghan
Gardner	David
Gore	Karla
Graham	William
Gray	Alisha
Griffin	Aimee
Haddad	Nick
Hadley	John
Harrison	Alana
Hart	Hannah
Haymans	Doug
Hilliard	Bob
Hubbard	Nolan
Hutt	Clifford
Hyman	Alexander
Jones	Christopher
Keppler	Blaik
Kersting	Anne
Kinman	Charles
Krebs	David
L	M
L	Michael
LaVine	Britni
Lavine	Craig
Law	Alexander
Lazo	Sarah
Lazo	Sarah
Leach	Scott
Lima	Anthony
Lloyd	Victor
Locke	Charles
MCGOVERN	Jack
Mackesey	Brendan
Marks	Rick
Mathis Jr	Robert
McWaters	Mark
Mcclees	Matt
Mehlhorn	Anna
Muffley	Brandon
Neer	Julie
Nicholson	Shaun
O'Donnell	Kelli

Owens	Marina
O'Meally	Conor
Palmrose	Kristin
Parsell	Steven
Pease	Thomas
Perkinson	Matt
Peterson	Cassidy
Rathke	David
Redd Jr	Larry
Remsberg	Loren
Riley	Richard
Rose	Tyler James
Rule	Erica
SCOTT	TARA
Sartwell	Tim
Scalise	Timothy
Schmidtke	Michael
Soltanoff	Carrie
Stasser	Katie
Stephenson	Sarah
Sweeney Tookes	Jennifer
Sweeney Tookes	Jennifer
Taylor	Alexandria
Tenore	PARIS
Treece	Andrea
Walsh	Mick
Walsh	Michelle
Westcott	Lauren
Whaley	Dave
Whitmer	Morgan
Wilke	Kate
Williams	Erik
Willingham	Darrin
Wilms	Sean
Wilms	Olivia
Woodward	Spud
Wynn	Chris
Zalys	Todd
Zapf	Daniel
bonura	Vincent
spottswood	000Robert
zurbrick	james