

**PROCEEDINGS OF THE  
ATLANTIC STATES MARINE FISHERIES COMMISSION  
SCIAENIDS MANAGEMENT BOARD**

**Webinar**

**October 3, 2024**

**Approved February 4, 2025**

**TABLE OF CONTENTS**

Call to Order, Chair Doug Haymans..... 1

Approval of Agenda ..... 1

Approval of Proceedings ..... 1

Public Comment ..... 1

Risk and Uncertainty Tool..... 1

Discuss Recommendations on Inputs to the Risk and Uncertainty Tool for Red Drum ..... 13

Other Business..... 19

**INDEX OF MOTIONS**

1. **Approval of Agenda** by consent (Page 1).
2. **Approval of Proceedings** of August 6, 2024 by consent (Page 1).
3. **Move to adjourn** by consent (Page 19).

**ATTENDANCE**

**Board Members**

Jeff Brust, NJ, proxy for J. Cimino (AA)	Ben Dyar, SC, proxy for Sen. Cromer (LA)
Adam Nowalsky, NJ, proxy for Sen. Gopal (GA)	Doug Haymans, GA (AA)
John Clark, DE (AA)	Spud Woodward, GA (GA)
Roy Miller, DE (GA)	Carolyn Belcher, GA, proxy for Rep. Rhodes (LA)
Lynn Fegley, MD (AA)	Erika Burgess, FL, proxy for J. McCawley (AA)
David Sikorski, MD, proxy for Del. Stein (LA)	Gary Jennings, FL (GA)
Ethan Simpson, VA, proxy for J. Green (AA)	Ron Owens, PRFC
Chris Batsavage, NC, proxy for K. Rawls (AA)	Andy Strelcheck, NMFS
Chad Thomas, NC, proxy for Rep. Wray (LA)	Jack McGovern, NMFS

**(AA = Administrative Appointee; GA = Governor Appointee; LA = Legislative Appointee)**

**Staff**

Robert Beal	Tina Berger	Jainita Patel
Toni Kerns	Tracey Bauer	Katie Drew

The Sciaenids Management Board of the Atlantic States Marine Fisheries Commission convened via webinar; Thursday, October 3, 2024, and was called to order at 9:00 a.m. by Chairman Doug Haymans.

### **CALL TO ORDER**

CHAIR DOUG HAYMANS: It is nine o'clock, and I'll call the Sciaenids Management Board meeting to order. Welcome and good morning to everyone. For our friends on the call who may have experienced some wind and rain this week, I hope you have fared well and are recovering quickly.

### **APPROVAL OF AGENDA**

CHAIR HAYMANS: First order of business is Approval of the Agenda. We are primarily here today to listen to the Dr. Jason McNamee show with Risk and Uncertainty and then some discussion about red drum in that. Are there any additional items to be added to the agenda? Hearing none; we'll consider the agenda approved as is.

### **APPROVAL OF PROCEEDINGS**

CHAIR HAYMANS: We also received a copy of the proceedings from this past August. Does anybody have any additions or corrections to the proceedings? Hearing none; we'll accept the proceedings as presented.

### **PUBLIC COMMENT**

CHAIR HAYMANS: Next on the agenda is the public comment opportunity. I can't see hands, so Tracey handles all of this. Tracey, are there any members of the public who would like to comment on anything outside of the agenda?

MS. TRACEY BAUER: I currently see no hands.

CHAIR HAYMANS: Excellent, I love it moving along smoothly.

### **RISK AND UNCERTAINTY TOOL**

CHAIR HAYMANS: Okay, so next Dr. McNamee is going to provide us with a Review of Risk and Uncertainty, and then Jainita is going to follow with

a discussion on red drum inputs to that Risk and Uncertainty Tool, and that should take us about an hour and a half to two hours, so get your coffee and sit back, relax and Jason, it's all yours.

DR. JASON McNAMEE: Thank you very much, Mr. Chair. Good morning, everyone, and thanks for making some space for us today to talk to you a little bit about the risk and uncertainty work that we will be undergoing with red drum, as that discussion comes out. Just a quick little background, talking a little bit about where we're at with the Risk and Uncertainty Decision Tool and how this will kind of play out for the red drum.

The Risk and Uncertainty Decision Tool incorporates a variety of information related to risk and uncertainty, and so there are these technical inputs that are in the tool, and we will go through those in great detail here as we're going through the slides. Those are the technical inputs. But to go along with that, and this is actually the real policy part of the tool are what we call weights. What the weights do is it gives more or less importance to the different technical inputs that are in the Decision Tool. We kind of marry these two things together and we'll talk about what the output represents here in a bit. We take this weighted input; this weighted technical input and it gives us in the end a probability of achieving some management target. An example would be you have some probability of achieving your F target.

We can then take that recommended probability and we can use that with projections to develop management options, in this really kind of transparent and informed way. The graphic at the bottom of the slide here just represents the process, a kind of really simplified version of it. You've got the Board, top left-hand side there, the Board is going to be responsible for setting the weights, because it is your policy that we're implementing here.

That is where we're going to spend our time on talking about today. The Board sets up the weighting, the technical folks, both the economic and social science folks, along with the fishery's

technical folks and the Advisory Panels, they provide input into the technical inputs. The Board can also adjust those if warranted, if somebody really objects to how something was characterized by the technical folks, they have that control.

But the idea is that information generally isn't controversial, it's coming out of the assessment. I mean it might be controversial but it's coming out of the assessment. It's a number that gets kind of plugged in. When we get into the social science and the economic stuff, there may be a little bit more to think about there.

But long story short, the technical inputs will be put in by your technical folks. Those get married with the weighting, run through the Decision Tool, out comes your recommended probability to then be a kind of little feedback loop on the left-hand side of the slide there, just indicates that this process is dynamic and it can evolve over time.

We have the weighting, those are the focus for today's discussion, it's that red box there on the left-hand side of that same graphic. The idea will be that you all will take a survey, it's going to be sent out, we'll talk some more about that here in a bit. You'll get a survey, you are going to take that survey, and we are going to synthesize that and bring it forward at the annual meeting for you all to look at.

The technical input part of it, this is changes like the current status of a component of the biology, the ecology, the fishery. Again, these are scored by the Technical Committee or the Committee for Economic and Social Science, and then there is additional Board and Advisory Panel input as needed. One way to think about this is a stock status technical input would be the probability that overfishing is occurring, so that was just one vision.

Then another example is a management uncertainty technical input could be a score of, since it is going to be like on a Likert score or Likert scale type of a thing. For management uncertainty we could put in a score of 5, which means there is a

lot of management uncertainty, and that would be due to something like illegal fishing activities.

I'm not saying this is the case for red drum, we're just giving you an example of what these different components mean. Those are the technical inputs, and then the weightings are how important each of the technical inputs are to the Board in the context of your risk consideration. This is your policy. Based on the Board preferences, and as an example, if the Board considered stock status to be twice as important as management uncertainty, you could weight the stock status component twice as much as the management uncertainty component.

You get to implement the things that you feel are most important for this specific fishery. This is just another graphic, and this is actually important, because this is what is unique about our process relative to what you may have experienced with some of the federal risk policy processes. In general, I don't know that this is universally true, but in general the federal risk policies tend to only add a buffer, so add precaution onto the management approach.

The one that we have built allows you to go in both directions, so you can get actually less precautionary if you want, based on some pieces of information. Generally speaking, I'll describe the graphic here. At the top you see this continuum that goes from the left to the right, but it pivots off of that central dot there.

I'm looking at the arrows up at the top. If you're moving to the left, and you're looking down at the slide, that is moving in the direction of being more precautionary. I don't know if precautionary is a word, so more cautious. If you move to the right of the dot when you're looking down at the slide, that is being less cautious, more risk from the past.

The middle is the default, which, just to keep things simple here we'll call that at 50 percent. Often that is kind of like our starting point, in fact Magnuson, which we're not bound by here, but in the Magnuson context, and you may be familiar with this from your federal interaction. It can't be less

than, you can't have less than 50 percent probability of achieving your target, and usually that is your starting point. We'll use that as our starting point here as well.

Then if you look at the colored arrows as you go down the list, those are the different technical input, and you can see most of them would push you in the direction of being more cautious with your management. However, you see at the very bottom some of the socioeconomic elements that are in here, and there are four in total, two for commercial, two for recreational.

A component of those pushes you in the other direction. In other words, you could end up in a situation where you would be less cautious than 50 percent if you had high risk to fishing communities, for instance, or high economic impact. This is pretty unique with the process that we have created here.

Just by way of an example here, let's say again that up at the top there you have more precautionary, you have less precautionary. The default not in the middle anymore, it's kind of moved over to the right, and that is just so we could fit stuff on here. But let's say you had, we're talking about two things here, management uncertainty and model uncertainty, so two things here.

If they were both equally weighted for these two things, they would push us equally to the left here to being in the more precautionary direction there. You can see the light blue and the dark blue arrows are the same size. That would be an equal weighting situation. But if you click one more forward here, and then one more. In this case, if we wanted to, if we put twice the weight on the model uncertainty part, if we thought that was really important. What you see is that the management uncertainty would push us in the same amount as before, but now the model uncertainty would push us twice as far over to the left. Again, things can go in the opposite direction as well in some circumstances.

Here is a little bit about the Weighting Input Process. We're going to review the components of

the Decision Tool one by one. I won't dwell on them, but it's just a chance for you to see each of the components and ask questions if you would like. But here is our rubric that we'll use. We're going to review the type of information that is used for the technical input, and then we'll answer any Board questions about that component, so that is going to be in the presentation today.

Following that you will get the survey that I mentioned earlier in the presentation, and we'll talk more about what that entails here in a minute. Each poll question, or in this case it will be a survey question, it will ask the Board members to rate the importance of that particular component.

For instance, we'll be asking you explicitly to rate the importance of management uncertainty as one of their components. You'll be doing that relative to the other components of the Decision Tool. As an example, if you would like all, if you think they are all important and all equally important, there is an opportunity within the survey to answer the survey questions with equally important, and it shows up on our scale as the Number 3 choice in the middle there.

Then we're going to take all of your scores across the Board, we're going to average them, and that is going to produce our preliminary weight. This is just an overview of all of the components, you can kind of see them in a table format. We have them broken up here into categories, so we've got stock status, kind of your standard SSB and F threshold target stuff.

Then we have additional types of uncertainty like model uncertainty, and those are the featured model diagnostics and things like that. We have management uncertainty, how good are we at actually managing the fishery, and that environmental uncertainty, how susceptible is this particular species to the environment and changes in the environment.

This is another really nice part of our process is we are explicitly incorporating climate issues into this process. You know we talk about those things a lot,

but they are not really built in, in a way that is really robust at this point. Here is a situation where we can explicitly build in climate change effects for instance, into our process. Not only climate change effects, but we've got an additional risk here, and that is the ecosystem or trophic importance of the particular species that we're working with.

That is another one that is kind of unique to what we're doing here. Then finally we have short term and long-term socioeconomic effect for both commercial and recreational fisheries, again, another really nice and unique part of the tool that we've developed. Here is the part where I'm going to start going one-by-one through the different components here. Now for the red drum situation you have two stocks. The way the survey is split up is you'll have, what is it, it's New Jersey through North Carolina as one set of questions, and then South Carolina through Florida as the second set of questions. It's kind of like double duty for you folks in answering these questions. I don't know if there is uniqueness to the different stock areas, but we've provided you with that flexibility to kind of build that.

If there are differences between the two stock areas you can build that into the way that you do the weightings, which is kind of cool. But I don't have that so we don't have to do that for this part, so just keep that in mind. In the survey you will see the ability to answer for both stock units, but not two in my presentation. I'm just kind of going through kind of a bare bone's component.

What I'm going to do is I'm going to stop after each slide here, and just see if folks have any questions, and so I'm hoping, you know Tracey or somebody can help me. I can't see the hands, so I'm hoping somebody else can help with that part, and I'm happy to answer any questions. The first is stock status.

The technical component here is, is the stock below the biomass threshold, so this is the threshold question, and so the technical input for this will be the probability from the stock assessment if the stock is below the biomass threshold. This is

biomass, this is threshold. The weighting question that we'll see in the survey is, relative to the other components of the Decision Tool, how important is whether or not the stock is below the biomass threshold to you?

Then you can see the scale there. Just to reemphasize, to indicate that you would like all of the components to be weighted equally, you could put in a score of 3, but then actually there is an additional work element for you all in the survey, and that is the additional note there. We're asking you why you scored that particular input in the way that you did. Tracey or Jainita could correct me if I'm wrong on this, but I think if you don't feel like writing you don't have to fill those parts out if you don't want.

But it is helpful if you will at least offer ones where you really thought about it, because it's going to help us improve this and make sure that we're asking the questions in the right way, or giving the right background information for you. You know if you will take the time to offer a couple of thoughts in those spots, we would appreciate it. First, I'll pause for questions on this one, although I think it's pretty straightforward.

MS. BAUER: Yes, I'm currently seeing no questions.

DR. McNAMEE: Okay, moving forward here. The next technical component is, is the stock below the biomass target? The last slide was about the threshold, here we're talking about the target. The technical input is the probability from the stock assessment that the stock is below the biomass target. The question that you'll get is relative to the other components of the Decision Tool, how important is whether or not the stock is below the biomass target to you, and it's the same scale as the last slide. We'll pause there, see if there are any questions.

MS. BAUER: I am seeing no questions at the moment.

DR. McNAMEE: Moving on, next is about fishing mortality, same structure here. Maybe I'll go

threshold to target and then to questions. Here is about fishing mortality, is it above the threshold? The technical input will be the probability from the assessment that fishing mortality is above the threshold.

The question again relative to the other components of the Decision Tool. How important is whether or not the fishing mortality is above the threshold, same scale as before. Next slide, the same thing for the target, all of the same information here. But in this case, it will be the technical input as the probability from the assessment that the fishing mortality is above the target, as opposed to the threshold. Any question on the fishing mortality one?

MS. TONI KERNS: Hey, Jason, it's Toni. Just a quick, not necessarily for the fishing mortality, but I just want to make sure I'm remembering this correctly, because I did get a question. Everybody gets to, each Commissioner gets to fill out their own questionnaire, right, or the overall process, or is it by state?

DR. McNAMEE: No, I think, well, Tracey and/or Jainita or Katie can correct me if I'm wrong, but I think everybody is going to get the survey and individually take the survey, so it will be by Board member. It should only be Board members.

MS. KERNS: Right, right, right, okay, thank you. I should say full Board members like all the partners. Anybody that is on the Board gets to take it.

DR. McNAMEE: Yes, exactly.

MS. KERNS: Andy had his hand up as well.

MR. ANDY STRELCHECK: Yes, for clarity with the biomass and fishing mortality question. The presumption here is that this question, for example, fishing mortality would be above the target but below the threshold so in between the two. Is that correct, or are you just saying above the target could be a little soft?

DR. McNAMEE: In the case of fishing mortality, you are going from the bottom up, right? You've got your target first and then your threshold. You've got an opportunity to, you know if you are okay with it being above the target but not the threshold you could weight it accordingly. If it's above the threshold that might give you more concern, so you might weight that one higher than the target. Yes, you've got both questions.

MS. BAUER: Erika has her hand raised.

MS. ERIKA BURGESS: Jason, is this intended to be generic for the Risk and Uncertainty Tool or is this supposed to be specific to red fish? The reason why I'm asking is, the Board does not set thresholds and targets for F for red fish. Can you help me apply this to this specific fishery?

DR. McNAMEE: Yes, so I will answer your first question. It is specific to red drum, so that is how this is built. The tool itself, the questions are the same across species, but how you weight the tools, and obviously how the technical inputs get done are specific to the species. I'm looking for help from Tracey or Jainita or Katie with respect to how this applies to red drum, whether maybe it's only the threshold for this one. I'm not sure how that is set up.

DR. KATIE DREW: I was just going to say, great question. I think at this point, you know we are collecting this information from more of a theoretical standpoint about how you feel about the red drum fishery and these factors, and the tool is designed that if a factor does not apply, we can remove that or zero that out from the tool.

For example, if we do not have a fishing mortality target or threshold, that will be removed from the final score. You know you guys can still put that information in to say, it would be important for me to consider how high, you know where that F is, if we had that information. But since we don't, we'll remove that from the tool, but we'll just sort of have that information going forward.

For example, if we are able to develop a model that does have an F target and an F threshold, then we can have that sort of weighting information to go forward with. But at this point, you know if we're missing a specific component of that tool, it would be removed or zeroed out. For example, in this case, are we missing a target? Are we missing a threshold? We can fold that maybe into model uncertainty or management uncertainty if we would like.

But we can zero those out or similarly, if you have a species that does not have a commercial fishery, you could remove that socioeconomic component, et cetera. We'll go through and fill everything out, but the parts of it that do not specifically apply to the species that you're working on, in this case red drum, will be sort of zeroed out and removed from the tool, and not count for that probability in the end. But we're still interested in collecting this information in a standardized way.

DR. McNAMEE: Does that make sense, Erika?

MS. BURGESS: I appreciate the explanation, thank you.

DR. McNAMEE: Any other hands?

MS. BAUER: I'm seeing no other hands.

DR. McNAMEE: Now we're moving on to model uncertainty. The technical component here is how much model uncertainty is there with input for the qualitative score, based on information such as these kinds of assessment diagnostic means like retrospective patterns, sensitivity runs, model fits, things like that.

Then the technical folks will be populating that technical input, but what we're looking for from the Board is for you to weight how important this aspect is to you. The question that you'll get is relative to the other components of the Decision Tool, how important is model uncertainty, same scale that you've been looking at all along, so pause for questions on that one.

MS. BAUER: I am seeing no raised hands.

DR. McNAMEE: If you think of something after, like no problem if you want to bounce back. I'll keep this moving here for now. The next is management uncertainty. The technical component here is how much management uncertainty is there for this fishery. The technical input will be a qualitative score based on information such as past management performance, if there is a lot of illegal fishing activity on this particular fishery, our ability to regulate removals.

You can think about something that has a high recreational component to it. You might have more uncertainty in that if they've had a high commercial component, less uncertainty about that kind of thing, our ability to monitor the fishery compliance, those sorts of thing. That is the technical input there.

The question will be, how important is management uncertainty within this fishery in the grand scheme of all of these things that we're looking at, same scale that we've been looking at all along. We'll pause for questions on management uncertainty. While you're thinking, this is one of the ones that I think the Advisory Panel could be really helpful on, kind of giving insight into those on the Board, members know this really well also.

MS. BAUER: I am seeing no hands.

DR. McNAMEE: Environmental uncertainty, so the component here is how much environmental uncertainty is there for this fishery? The technical input is a qualitative score based on information such as environmental drivers of recruitment, habitat loss, climate change vulnerability, predator/prey dependence and natural mortality if it's not accounted for in the assessment model. You know something like if we think natural mortality is changing a lot over time that is not accounted for in the assessment model. That is the technical input for this one.

The question is, how important is environmental uncertainty for this fishery. If you think we've got

big swings in recruitment going on, those are the types of things that are really hard to capture with an assessment model, if there is some external driver of that. This gives you an opportunity if that is important in this fishery, you can weight this accordingly, and the scale is the same as you have been looking at all along, so I'll pause for questions.

MS. BAUER: Seeing no raised hand.

DR. McNAMEE: Ecosystem trophic importance, here I built this off of the tautog example that we did, and I left the tautog in there, sorry. How important is, not tautog but red drum, to the ecosystem or other key species? Maybe the responses are kind of similar for these, I don't know. The technical input here is a qualitative score based on red drums. I could have sworn I fixed that, on red drum's role in maintaining other key species in the ecosystem.

In other words, other important fish species or threatened or endangered species, things like that. Is this species important to the ecosystem services or ecosystem function? That is this particular element about an ecosystem different than the possible cut. How important is ecosystem or trophic importance for red drum is the question, and the scale is the same that we've been looking at. Any questions?

MS. BAUER: Seeing no raised hands.

DR. McNAMEE: We have now, we're moving into the socioeconomic criteria, and there are four of these. You've got two for recreational, two for commercial. We broke them up, and this is based on the advice from the Committee for Economic and Social Science, when we kind of ran all of this stuff by them.

You have both short term and long-term effects for each of the rec and the commercial fisheries. This first one is the short-term commercial. Maybe I'll kind of go commercial and then I'll go through rec. This is short-term commercial. The technical input is it's a score based on total ex-vessel value, community dependence, a community dependence

indicator, the scale of the potential management change, in other words the percent change to harvest, produced by the other components of the Decision Tool, and the anticipated effect on the community.

It's sort of a synthetic score that is going to be based on a number of these criteria, and these all came from our economic and social science experts. Typically, a harvest reduction, if that is what is required, has a negative effect in the short term. Typically, what you would do with this one, as you populate it with information is it would be pushing back against the more precautionary management approach.

It would be trying to mitigate some of the pain to the community by making things less precautionary, so pushing back with direction. The question here is how important are short term socioeconomic effects on commercial fishery, same scale. Flip to the next slide, I think this will be a long-term commercial and socioeconomic impact. This one, that is the question, what is the long-term socio and economic effect of the proposed management change on the commercial fishery?

Again, you'll have the synthetic score based on ex-vessel value, community dependence, the scale of the management change and the anticipated effect on the community. Typically, a harvest reduction will have a long-term positive effect on the population. Meaning if you withhold harvest now, the population will be bigger in the future. That is kind of the concept there.

This typically adds to the recommended probability, or it makes you more cautious in your management. The weighting question here is how important are long-term socioeconomic effects on the commercial fishery. That is the approach here is you have a short-term, that kind of immediate team, and then you have a longer term. You take a little pain in the short term and things will get better in the future is kind of the concept. Both of those are in the tool, and it allows you to weight those things. Any questions on those?

MS. BAUER: Doug has his hand raised.

CHAIR HAYMANS: Jason, I think I heard you say this really early on, but in the southern region, where there is no commercial fishery, this question will not be in the survey, correct?

DR. McNAMEE: Yes, I think that is a good question, and thank you for that. That is what Katie, I think it was Katie I was talking before. That is what she indicated is, we'll have you go through and kind of work through all of these, but when there is no commercial component here, we can sort of remove those. That is a nice thing about the approach we're using is there is a palliative component where you can ask in general or remove them and the tool still works. Yes, Doug, we remove if there is no commercial fishery.

CHAIR HAYMANS: Thank you, and the second part of that question then is for the northern region. There is only one state I think that has a commercial fishery, North Carolina, I think, so how is it affected by the fact that there is only one state out of seven that have a commercial fishery yet?

DR. McNAMEE: Good question. That is actually the nice aspect of the two stock units being broken out, so you'll be able to answer them separately in the survey, so that is one attribute. Then yes, it comes down to, I would think the way the Board members can think about it is, you know if the commercial fishery, I don't know much about this fishery.

If it's one state and it's really small, maybe that is how you kind of score these things with that in mind. Maybe it's more important that you think about the long term than the short term, seeing as how you know the fishery is so small. However, the folks in that particular state might feel differently about that, right, it's their folks and they will have that direct interaction with those folks.

They might populate that, because maybe it's a really small community and it will have really detrimental effects for that. They can populate that. Their position will be to upweight that. In the end we'll have a preliminary weighting, but you're

going to review that as a Board, and if that one, say ranks or scaled really low, as far as a weighting, they could plead their case to the rest of the Board and make an adjustment there, there in that final vetting of the weightings.

MS. BAUER: Ethan had his hand up for a second.

MR. ETHAN SIMPSON: If it does make you feel better, Virginia does also have a commercial fishery for red drum, and between North Carolina and Virginia, being the two states that primarily participate in this fishery in general on the northern stock. Both of them do have commercial fisheries, and this is relatively small in the grand scheme of things, but an active commercial fishery for both states.

DR. McNAMEE: Right, right, so that is perfect and you all have that insight and can make those weightings accordingly.

MS. BAUER: Ben Dyer has his hand up.

MR. BEN DYER: This is more sort of not specific to red drum, but kind of looking at this tool moving forward, and just kind of thinking steps down the road if we utilize it further. I'm calling up and looking at these socioeconomic criteria in the Excel Spreadsheet Risk and Uncertainty Tool, and it looks like they have actually set thresholds for where that very low, low moderate, depending on ex-vessel value but it's for coastwide, or regionwide I would assume. We're looking at this when we're filling this out as individual management, we're kind of, this is more or a question I guess than a statement. We're looking at this from the whole stock, and it says coastwide, and then actually the community dependence is a percentage of the top ten communities for that region or coastwide.

We would need to know what those top ten communities are for that region, and what percentages that is in ranking. Would that be the same for everybody if we're looking at it coastwide? If it is a percentage of the top ten communities coastwide, would that be the same across the

Board, or do we look at this more individually state-specific and how it affects us individually?

DR. McNAMEE: That's a great question. I think when, first I'll start by saying that these criteria that I put together, they were looking in the macro lens, they were looking across everything. I'll look for some help, as far as exactly how it was approached for red drum specifically, but I think the answer to Doug's question a moment ago is relevant here again.

Remember, this is about the weighting, not necessarily the technical input. You know regardless of how the technical input gets populated, if you think it's important for Virginia, you would upweight one of these or both of them or whatever. That would just give those elements more weight in the overall tool. The actual technical inputs, I'm going to phone a friend on this one and see if Tracey, Jainita or Katie wants to weigh in on how it was populated for red drum. I'm not hearing anything.

DR. DREW: I'm going to say this. Generally, I'll make a comment here and then I'll look to Jainita, who coordinated with the CESS on this. This was done on a regional basis, so we have a score for the northern region and a score for the southern region, I believe. It is kind of like you could have, obviously you can have a situation where, as we were saying before, the community, if it's a small community, a small overall regional or coastwide, the community dependence could be low, et cetera.

The effect of that sort of larger scale could be small, but what is going to upweight it or down weight it is the part that the Board is filling out, in terms of how important it is. I think as you go through this you don't at this point need to worry about what the technical input is, and we are presenting you with sort of, you guys at this point don't know what the results of the stock assessment are.

You don't know how these things have been weighted, and we kind of want to get your opinion, I would say like in a vacuum almost, about like not thinking about what the final answer is, but just

thinking about how these things relate to each other, and what is most important when you make a management decision, in terms of what level of risk you are willing to accept, et cetera.

But we will have the chance to go back at the Board meeting to look at both the weightings, and then to look at these kinds of socioeconomic factors, where as we've discussed in other cases. It can be hard to come up with a hard number on some of these questions, because we don't have the socioeconomic data that we have doesn't fully capture everything that is important about that species, or it doesn't fully capture the real economic value or impact on the community. Just because we're still trying to improve our socioeconomic data. As you go through, and if you look at the score that the CESS has provided, this is an area where the management board will have an opportunity down the road to kind of comment on and modify both the technical input and the weightings.

I guess in the short term you don't necessarily need to worry about what the exact score is or how that was done for this survey. We'll cover all of that at the Board meeting later this month, and give you guys a chance to weigh in on it at that point if that helps. I don't know if Jainita has anything to add, in terms of what the CESS specifically was looking at for red drum.

MS. JAINITA PATEL: That's a great question. As you all have noticed, this tool has a lot of big parts. We have the TC; we have the CESS and then we have you all. The CESS is or the Committee on Economics and Social Science's role is sort of twofold. They first assess both stocks, sort of without the idea of management change in mind, or without the idea of just like sort of ranking the socioeconomics based on community dependence, and recreational dependence and things like that.

After those factors are independently assessed, if management action is anticipated, they will then go back and sort of discuss amongst themselves what factors to consider, in terms of long term and short-term change. We are still in that process, so we

don't have all the factors laid out at the moment, which is why we will be revisiting this tool and the report that comes out of this tool at the Board meeting, and probably at one meeting after that as well, just to give the other Committees time to sort of lay out their reasoning and determine what factors they want to include to specifically calibrate this tool for red drum, if that helps.

DR. McNAMEE: Any questions?

MS. BAUER: I see no other hands raised.

DR. McNAMEE: Let's move on to recreational. Same kind of structure here. You've got your short term, socioeconomic effects of some proposed management action on the recreational fishery. Here are the technical inputs, again we'll do kind of a score based on a number of factors, based on total directed trips, community dependence, the scale again, so that is similar to the commercial runs, a scale of the actual change, and the effect on the community.

Same thing here, where the short-term affects tend to be ones that we want to push back and being less precautionary. You know if we're going to have this kind of short-term ping if it's a negative outcome from the stock assessment information. Same thing here, I'll have you flip to the next slide. Long term as well, again it's another synthetic score. It's based again on the same criteria, so the directed trips, dependence of the community. They are like a recreational, like a party and charter group that is super dependent on this particular fishery, that kind of thing.

Scale of the change and community effect. Same exact concept as for the commercial sector, but you can think about it in the context of the recreational sector. Here it sounds like from earlier questions that there is a lot more recreational users of this resource than commercial. You get a chance to sort of parse these things out, which I think is helpful, gives you some flexibility to deal with the nuances of the fishery. Questions on the recreational stuff?

MS. BAUER: Spud Woodward has his hand raised.

MR. A. G. "SPUD" WOODWARD: Kind of following up on what Doug was talking about. You know while we do not have a directed commercial fishery, in terms of harvest or sale in the south region, we do have a for-hire sector that is highly dependent on access and opportunity to red drum. Would it be possible, and you mentioned the word parse.

Instead of having the commercial sector input in this, we have a separate one for for-hire component of the recreational sector and for private recreational, because I think the responses might be different, in terms of how this weighting is. It may or may not, but I think that would be a useful separation, at least for the south region.

DR. McNAMEE: That is an awesome insight here. I think we will definitely log that comment. But I'll note that the current tool lumped in for-hire with the recreational sector. I think in the short term here, the way to approach this per your comment would be to just consider that, even though you think there might be differences between private and for-hire.

If you think it can be bad, like really bad for the for-hire, then to apply it in that way, you know across the entire recreational sector. It's not, you know I think your questions, I mean really you would want to treat them separate, and so we'll think on that. But right now, there is only the kind of single recreational, well the two recreational components. Those recreational components are supposed to encompass for-hire as well.

MR. WOODWARD: Okay, thanks.

DR. McNAMEE: Other questions?

MS. BAUER: No other hands raised.

DR. McNAMEE: I'll look to the next slide, which I think might be it. Yes, so next step. You all will take the online survey with the questions that we just walked through, and remember that sort of split into these two stock components. We will then after you all take them, we're going to take those scores, we're going to average them up and we will

produce these preliminary weightings, and we will review those with you at the annual meeting.

You can approve those, make adjustments, you know whatever you want to do as a Board. Then we're going to compile the preliminary Risk and Uncertainty Report with the technical inputs from the Technical Committee, the CESS and then we'll kind of put those all together for you again, and we'll have you review those at the annual meeting.

Between now and the annual meeting there will be a bunch of work by you and folks behind the scenes here, and then you'll have a bunch of stuff to look at, at the annual meeting. That I believe is it. Flip to the next slide just to confirm, exactly. Happy to circle back on anything and take any other questions that may have popped into your head as we've been going along.

MS. BAUER: John Clark has his hand raised.

MR. JOHN CLARK: Thanks for the presentation, Jay. Just curious for a state. If you don't really have an opinion about some of these, is it best not to answer the survey at all? I mean Delaware, to even call us a minor factor in the red drum fishery is kind of overstating it. I mean we get a few caught each year recreationally, but that is about it.

Just wondering what has more of an effect on the survey? I mean would you want somebody in a state that really is not a factor in this to answer all these questions? Do you just put equal weighting for everything or is it best just to leave some of these blank, or to say, you know, I'm not answering this survey because I just really don't have an opinion on these?

DR. McNAMEE: It's a great question, John. I won't tell you what to do, of course, but I will offer you some advice. I think you have a couple of options there. The kind of "do no harm" version of this would be to just kind of score everything equally, so that you would fill it out as equal importance for all of these things. If you don't know, for instance, because you don't have a good sense of that because you don't have a big fishery in your state or

whatever. That is one option. I think maybe I should have started like that.

I am pretty sure we let all of the Board members, this is your policy, so we want all of the Board members to weigh in, in some fashion. One way is to just equally weight them, and that will kind of a "do no harm" approach to it, and the other way you could do it is to say, maybe you don't have a vested interest in the socioeconomic stuff.

But you learned a thing or two about stock assessments and biology and those sorts of things over the years, and so you might want to upweight those components relative to the socioeconomic ones, or something like that. I think you've got a couple of options there, but we really would like all of the Board members to weigh in, because it is a Board policy. That is what this is supposed to represent.

MS. PATEL: I'm sorry, Jay, can I jump in here just to maybe add one more thing to answer John's question? One thing that I don't think was apparent from this is that there is an NA option on the survey. If there is something that you really like not sure how it applies, or you are just not quite certain how to answer it, because you don't have any experience with say the northern stock, if you're working out of Georgia, right?

If you do end up picking that NA option, we would encourage you to pick a score from 1 to 5, but if you are just really unsure and you picked that NA option, it will just give more weight to the scores of the other folks that scored that question. In a sense, like your vote will be counted by just giving more credence to other people's opinion for that question. That is also another option you can take if you don't want to hit equally likely throughout for those questions. Just something to keep in mind.

MR. CLARK: Thanks, that is really helpful. Thank you.

DR. McNAMEE: Yes, sorry, I didn't realize there was an NA.

MS. BAUER: Chris Batsavage.

MR. CHRIS BATSAVAGE: I guess this question goes to the situation Erika asked about where we don't have maybe overfished and overfishing determinations for a stock, and if there isn't those Risk and Uncertainty factors just don't work into the final assessment here. But we do have, at least in the past had other ways of measuring some kind of stock status.

Like there is escapement into the adult populations, and that is not asked for here. I guess my question is, if we don't have overfished and overfishing determinations for a particular stock, how does that impact the overall Risk and Uncertainty score without the stock status methods here?

DR. McNAMEE: Thanks for the question, Chris. I think we've sort of talked about this in the context of like data limited species. That is on the radar. We've not really set those. We thought about it a lot. I think in this case we were thinking we were going to have concentrated information from an assessment, so that is kind of the approach here.

However, yes maybe some component is missing. We indicated that in the end, you know you can think, maybe in the future you will have an assessment. I think you should think like longer term with this stuff, so if it were available how would you feel about it? Kind of score it in that way, but if it doesn't currently exist, we can drop those out.

We talked about that part already. But I know I'm sort of dancing around your question a little bit, trying to think of a good answer. But I think you know in a situation like that, I think we need to think about it a little differently for like a data limited situation and you know I think we will go back and think more about that, and offer some guidance on those situations. But you know, Jainita, Katie, Tracey. If anybody wants to jump in, I just don't know this fishery really well, so that is why I'm kind of hesitant with the wording.

MS. BAUER: Yes, I can jump in here really quick, and this is going back to Erika's question earlier. But Amendment 2 for red drum does include an overfishing definition, both target and threshold. We will – technically in our document there isn't any spawning stock biomass reference points, but in this upcoming assessment we will be proposing some. I would include more information in the e-mail we sent out, but at least for definitely overfishing, and that is in Amendment 2 if that helps at all.

DR. DREW: Yes, and just to, I think build on what Jay was saying, which is that we envision this as like, this is sort of like the first part of a larger Risk and Uncertainty Policy, where what we're ranking and then what comes out of this is really only applicable when we have a stock assessment model. Essentially that can be projections. What comes out of this will be the probability that our management actions will strive to achieve, which means that basically when you're setting a quota you are going to set it that has a specific X percent probability of achieving your F target, or we're going to have a rebuilding plan that has an X percent probability of rebuilding by this year. That X percent probability is what is coming out of this tool. Obviously, if we don't have a model that can do projections or can predict our probability of rebuilding, what comes out of this tool is not really going to be useful.

I mean we would have it, but it is not something that we could then apply. If we get to a situation where we are for some of our species, where we have a formal model that can do projections, this tool is not really super helpful, and we need to develop that data limited side of this tool a little more in depth.

I think as you guys are going through, you know whether this tool is useful or not will depend on the results of the stock assessment, which you guys haven't seen yet, and so you know, we don't want to spoil that surprise or we don't want you guys to be thinking necessarily about what are the results, what is coming, what is our stock status, et cetera. We want you to be thinking about this more

abstractly, high level. What are the important factors for making management decision? Then, depending on the results of the stock assessment, in terms of what models were approved. We'll be able to use this tool or not use this tool, depending on those outcomes, which will all be discussed in October. I think at this point, you know as we go through and rank this, think about it more theoretically and abstractly, and then we'll be able to translate that into a more concrete result, once we have the full picture available for everybody, if that helps.

CHAIR HAYMANS: Okay, thank you for that. Anybody else before we move to the next topic?

MS. BAUER: I am not seeing any other hands.

CHAIR HAYMANS: Okay, Tracey, I have 10:10. I appreciate that momentary break. By ten o'clock in the morning I've had three cups of coffee. I need to make room for the fourth.

#### **DISCUSS RECOMMENDATIONS ON INPUTS TO THE RISK AND UNCERTAINTY TOOL FOR RED DRUM**

CHAIR HAYMANS: I'm good to proceed if you guys are.

MS. BAUER: Sounds good. I'm going to switch over the screen to the survey, and Jainita is going to walk us through what the SurveyMonkey survey looks like.

MS. PATEL: While Tracey pulls that up, hi everyone, thank you all for joining us this morning, and thank you to Jay for that really great breakdown of what the Risk and Uncertainty sort of Policy and Tool cover and look like. The second part of this meeting is going to be twofold. I wanted to both give you all a chance to look at the survey, so it does not take you by surprise when you open that link.

You know just to go over, if you have any questions about the way things are worded or formatted, and in addition to that, as we go through this I would like to give you all an opportunity to talk to your fellow Board members about potential things to

consider, based on your experience and based on things that are specific to your state or to your stock that you might want to bring to the attention of your other members, as they are going through the survey. For example, when we get to the part about ecosystem importance or trophic importance and know something for those species that might be a factor, either climate change, and species distribution, it sort of impacts each state differently. But if that is something that you feel strongly about, or you think that your fellow Board members should consider, please feel free to hop in and let them know, so that they can also consider it when filling out the survey.

That being said, I know that we just threw a lot of information at you over the last hour, and you might need time to digest this. If you can't think of anything that you would like to bring to the attention of the Board, you can feel free to just sort of listen, and we will be reviewing all of your inputs as a group together during the annual meeting.

At that point you will have the Technical Committee's inputs as well as the Socioeconomic inputs as well. At that point, depending on what the scores are, as a group we can discuss the weightings and see if you would like to make any changes after you have all of the information from the other committees, and see the results of the survey.

With that in mind, I will pause at the end of each section, just to give you all a chance to comment if you have any thoughts that are specific to red drum when it comes to that component. Looking at the survey here. This is just sort of the home page. It kind of reiterates a lot of the information that Jay already talked about.

It also gives an overview of sort of, you know if you rank certain aspects higher than the other, what that will mean for the precautionary approach that you may want to take in the future. One other thing, sorry before I begin, is that it was brought to my attention a couple days ago that when it comes to the Commission's Risk and Uncertainty Policy, a lot of the Councils also have a risk policy and for the

most part for the Councils at least, those policies are fairly binding.

As of right now, because red drum is sort of the first species that we are running through this fully, you know management action is anticipated for this species. We are sort of taking this as a trial approach. We sort of wanted to see what you all's thoughts were on the process, after we run through the weightings, and get all the inputs from the different committees, and see what that final probability is.

As of right now that probability is going to be a recommendation to help inform management decision if it is not currently binding. But with that in mind, we would like you to take this survey as if it were, just to give us a better sense of how well this process works, and how useful it will be for you all.

With that in mind, going through the first page of this. We sort of have a breakdown of what Jay already told us, and then at the bottom there is a note that this will be filled out for both the northern stock and the southern stock, so New Jersey through North Carolina and then South Carolina to Florida.

In the beginning it will just have your name and your e-mail to index. The first aspect of this is stock status, and I feel like we talked about this a little bit during Jay's presentation. But as we scroll through this you will notice that the first part of this section asks about New Jersey to North Carolina as it relates to biomass, as well as fishing mortality. You have an option to give your reasoning for what your ranking was, in terms of importance. This reasoning is optional, but I would highly recommend that you all fill it out, even if you are uncertain about the exact motivations behind why you picked a certain ranking for that factor.

I just think that it will be really helpful when writing the report at the end of, you know after we have a probability there will be a report that has all the justifications by the TC and the CESS, as well as you all, to give a better idea of all of the reasoning that

went into that final probability. Having that would be extremely helpful.

Yes, you have your five options and you have NA, and Tracey you can scroll down so the Board can see the rest of this page, where it also talks about the southern stock in the second half of this page. With that in mind, does anyone have anything that they would sort of like to put on the table immediately for red drum when it comes to these two?

I know we haven't seen the stock assessment yet, but if there is anything that you would like your fellow Board members to keep in mind when ranking for fishing mortality and biomass. I do not see any hands. We can always go back to different portions of the survey if anyone thinks of anything later on. Definitely don't be shy, feel free to chime in.

This is model uncertainty. Again, this is sort of related to the stock assessment, but I've looked at the factors that were listed in Jay's presentation, so you have them as a reference. You have retrospective patterning, sensitivity runs, model fits, and things like that. You also have a copy of the tool that was handed out in meeting materials, so feel free to use that as a reference as well.

If you're wondering some examples that the TC or the CESS used in potentially determining their inputs. You can sort of see what types of things to consider when ranking the importance or when giving your weightings for model uncertainty. As with the first part of the tool we have New Jersey to North Carolina, so the northern stock, reasoning for that as well as the model uncertainty for the southern stock and for your reasoning for that.

Does anyone have any thoughts about model uncertainty or things that you would like to put on the table for the Board to consider for red drum when filling in their weightings for this? I know we have some members of the TC on the call as well, so if any of you would like to maybe chime in, that would also, I mean feel free.

Okay, I'm not seeing any hands that is totally fine. Like I said, we will be reviewing a lot of this as a group at the annual meeting as well. This is the management uncertainty portion. Again, I have listed some of the factors that you might want to include when you are thinking about your weightings for each of these questions.

Then for the first part of this we have New Jersey to North Carolina, northern stock, as well as for your reasoning for management uncertainty or your ranking of management uncertainty for that stock. Then we have South Carolina to Florida or the southern stock, and you have your five options as well as NA. Like I said earlier, if you end up picking NA, like I said we strongly encourage you to pick 1 through 5, but if you're really not sure, vote for NA, and it will just give your other Board members a little bit more weight in their responses for this. Then of course you have your box to give your reasoning for this. Is there anything, you know either for the northern stock or for the southern stock, in terms of management, that anyone would like to chime in about that is either state specific or stock specific that you would like your fellow Board members to consider, when adding their weightings for this? I see a hand. Chris.

MR. BATSAVAGE: Thanks, Jainita. Specific to the northern stock, in terms of recreational catch estimates, although red drum are covered pretty well by MRIP in states where there are big fisheries and they are commonly caught. As you know, they are found all the way up to New Jersey, and probably starting to be found in relatively larger numbers, or more available at least, with warmer water temps.

Even though the MRIP estimates that you see are relatively low and sporadic, there could be more catches actually occurring, they just aren't captured through MRIP, because it would probably at this point be a rare even species. I think states in the northern region, I guess Board members in general, so let's keep management uncertainty in mind, as far as recreational catch estimates of red drum, because I think once you get north of Virginia, I

don't know how well MRIP is characterizing the recreational catch that is occurring there.

MS. PATEL: Yes, thanks, Chris, that is an excellent point. Does anyone have anything else; you know either for the northern or for the southern stock that they would like to address, in terms of management uncertainty? Okay, I am not seeing any hands. Moving right along then, so environmental uncertainty. Again, this was a hot topic amongst the TC when we ended up talking about this, just because there are quite a few things to consider here.

But as with the other portions of the tool, I've sort of given you a few things to consider in the top text there. But after reading through that, scroll down and you will see the Option to rank environmental uncertainty for New Jersey to North Carolina, and then your reasoning, and then as well for the southern stock, South Carolina to Florida, and give your reasoning for that as well. I see a few hands here. I think I saw Erika first, and then Chris. Go ahead, Erika.

MS. BURGESS: I'm not sure whether this falls under the management or assessment, and I'm sorry, I had to step away during the assessment, so I couldn't determine then. But I think overall, with this stock of fish and this fishery, it is a different and unique, based in the fact that for most of us the fishery is operating and targeting and retaining only juveniles in the fishery, and the spawning stock is essentially off the table for harvest.

We don't really have a good understanding or a good way to understand what spawning stock biomass is. There is no good survey to monitor that, or to develop a reliable estimate of what that is. That provides some level of management uncertainty, but also definitely assessment uncertainty as well. For those of you who are less familiar with the fishery, if you're up north, that is something to keep in mind that this fishery primarily is targeting subadults.

MS. PATEL: Thank you, Erika, Chris.

MR. BATSAVAGE: Regarding the environmental uncertainty, we have a juvenile survey for red drum that is used in the northern region stock assessment. It's only in North Carolina, but it applies to the whole stock. We've noticed, or we've seen over the years that year class strength is definitely driven by environmental conditions. This might be maybe oversimplifying it, but it seems like when we have hurricanes either hit or come very close to North Carolina, we get good recruitment classes of red drum following that up and this is sporadic.

You can get good year classes; you get bad year classes. That is probably why red drum live to be 60 years old up here. But I think that is just something to keep in mind, as far as the environmental uncertainty questions here, is there definitely appears to be a link with year class strength and environmental conditions for drum, at least for the northern stock.

MS. PATEL: All good things to consider for both the northern and the southern stock, when it comes to management and environmental uncertainty. Does anyone have any other comments, or any other things to consider, when it comes to the uncertainties we've covered so far, model, management or environmental? Okay, not seeing any, so we can go to the next page then.

Okay, so we have ecosystem and trophic importance as well. Again, we have some of the factors listed here as things to consider in the top text there. Things like role in maintaining other key species, importance, threat to other species, and then importance to ecosystem functions in general. If you scroll down, we can see we have a New Jersey to North Carolina questions, and then the southern stock, South Carolina to Florida.

Does anyone have anything about potentially the biology or the trophic importance of the species that they would like the rest of the Board to consider? Okay, not seeing any hands. I think we can move on to socioeconomics. The way that this is set up for this survey is that it first is going to ask you about the short-term socioeconomic

considerations for both the commercial and the recreational fishery.

Then after that it will ask you about the long-term considerations. I don't know why it's squished up there, but it does in that block of text there are factors to consider when it comes to socioeconomic considerations. Just as a reminder that we're technically not rating the impact of management change on socioeconomics, but more so rating the economic impact of being more precautionary when making any long-term changes.

Don't think of like specific management actions, but if we are being more precautionary, how would that impact both the socio and the economic aspects of that stock above that region. For the first part of short-term socioeconomics, we have recreational changes to the northern stock, and then the second question is commercial changes to the northern stock.

Then I, just to reduce the amount of writing you have to have, I sort of made one box for the northern stock recreational and commercial reasoning, and you can, you know depending on how important a commercial fishery is to your state or to your region, you can always sort of outline or give more reasoning for one or the other, depending on the situation there. Similarly, we have the same question of recreational and commercial for short term change from South Carolina to Florida, and a box at the bottom that allows you to give your reasoning for that as well. Again, this is just for short term. Does anyone have anything they would like to speak on for the, I guess socio. Let's go through long-term changes first, and then we can ask if anyone has any things to consider for the socioeconomics. Yes, very similar here, some factors to think about for the long-term socioeconomic impact.

Again, very similar questions, just with a little bit of a longer timeline in mind. We have the northern stocks recreational importance first, and then the commercial importance for the northern stock, as well as for your reasoning. Then at the bottom we

have the same questions present for the southern stock. I see a hand from Spud, go ahead, Spud.

MR. WOODWARD: I think it's worth mentioning, and it's applicable, I guess to both stocks, and that is as I mentioned earlier, you know the importance of this fish for the for-hire sector has grown, and it's grown in importance for the part of the recreational sector. Some of this due to the fact that as access and opportunity on some of the offshore species has changed and continue to change, due to restrictions in harvest.

We've seen effort shifting to the inshore fishing, and so it is becoming much more important economically to all the businesses that support recreational fishing, whether it be for-hire or the private recreational sector. Sort of the context for how we evaluate the impacts on management action is changing, and probably will continue to change in the long term, as these other restrictions in access and opportunity are made manifest.

MS. PATEL: Does anyone have any other things that they would like to put on the table for the Board to consider for socioeconomics, both short term and long term? Okay, I'm not seeing any other hands. Does anyone have any other, I guess general thoughts, when filling this out for red drum. If there is anything that you are not quite sure where it fits, in terms of uncertainty, but you would still like to present it? Doug, go ahead.

CHAIR HAYMANS: There are some really general questions from the survey to make sure we're all clear. Southern region answers southern questions, northern region answers northern questions, not all of the survey, correct?

MS. PATEL: Great question. You know, Katie, feel free to jump in, because Katie and Jay were the original creators of this tool. But according to my understanding, it is best if all Board members fill out the entire survey to the best of their ability. That being said, you do have that NA option that you can use, if you are definitely, like if you have no idea how to answer a question or if you don't know if

there is anyone that you can consult to answer your question, I would suggest that you pick that.

CHAIR HAYMANS: Yes, I know you're cutting in and out.

MS. PATEL: If it's not a stock that you work on and you would just like to hand it off to your other Board member who have this, I'm sorry, can you hear me?

CHAIR HAYMANS: Well, you were cutting in and out, I missed a few words.

DR. DREW: I think just to add on to that. I think you can think of this as what we're really trying to get at is, if you were at the Board and re really trying to get at is, if you were at the Board and you are making a management decision, and there is sort of like two quota options on the table. What are you thinking about when you are deciding on a management action like that?

If you're in the south you are still going to have to vote for something to happen in the north, and vice versa. You are thinking about what is management uncertainty? What is stock status? How precautionary should we be, versus how conscious of socioeconomic impacts should we be, when we are making these decisions?

Part of the goal of this tool is just to get these thoughts and that whole process out of your brains and onto the paper, and into a more transparent process. It's true that in the south, you know you may not have as much understanding or don't fully grasp the nuances of the northern ecosystem or the northern fishery, but presumably you're still going to be balancing these factors when you're thinking about what is the right management choice for that region.

The Board is voting as a group on these final management actions, and so we're trying to get you to articulate how are you weighing socioeconomic factors versus stock status, versus sources of uncertainty, when you're deciding on a final management action, so that we can sort of quantify

that better and make this a more transparent process.

For sure the NA option is there if you feel like you need to use it. That kind of like, it's all equally important to me option is there if you need to use it for each region. But I think you guys probably do have more thoughts than you realize about what is important when making a management decision for both regions.

Even if you're not specifically from one region or the other, I guess that is the mindset that we would like you to go into with this. For sure, again, we are doing this a little bit in isolation, to kind of get your thoughts out, and then we'll have a larger discussion about it, and refine these weightings at the next Board meeting. Hopefully that helps.

CHAIR HAYMANS: It does, and I appreciate your thorough answer. I think that the results of this survey will be food for good discussion regarding the decisions we've made in the most recent meeting. This will help us decide how we move forward when we manage each other's fisheries. I can't find the words right now, but thank you for that answer.

MS. PATEL: Yes, and thank you, Katie for stepping in. I'm not quite sure what happened to my microphone there, but that was a great and very thorough answer. I see another hand, Erika.

MS. BURGESS: Yes, this is on the same topic, and I appreciate Katie's answer. But I have to say, I feel slightly uncomfortable about what staff is asking the Board members to do. Four of those, at least four of the FWC's approach to participation in ASMFC is kind of hands off when stocks don't cross our lines. I feel like this is asking us to go a different direction.

I prefer to have more Board discussion on our comfort with doing it, and whether our actual interest is to just respond to the survey for the stocks in our area or the stock in our area. I would love to hear other Board members thoughts.

MS. PATEL: Chris, go ahead.

MR. BATSAVAGE: Yes, just speaking for myself, I plan on answering the survey question for both stocks. I am more familiar with the northern stock, so I will probably take advantage of the NA button for a couple of the questions for the southern stock. I mean, I kind of view this as some other species that have a wide range.

But we have management decisions to make for a particular region that for North Carolina may not be, but we all vote as a Board for that, so it makes sense for the entire Board to fill out this survey to the best of their ability for both stocks, regardless of what state they are in.

MS. PATEL: Andy, go ahead.

MR. STRELCHECK: Yes, and I would take a similar approach, but there are certainly going to be things that I will probably list as NA. I guess I'm thinking of this, yes there are differences in the stock, so I'm not real familiar with the northern portion of the stock, but the choices for kind of deciding risk and how we would consider that may likely be fairly similar from one region to the next, with some obvious deviations in the fisheries where I don't have obviously solid understanding on the information.

MS. PATEL: Would anyone else like to speak to Erika's question? Go ahead, Doug, sorry I didn't see that.

CHAIR HAYMANS: I'm sorry, my hand was still raised from the last time. But I guess we are going to have a discussion at probably Executive Committee or Policy Board over topics that may touch this. We'll hold all this discussion until then. But it is discussion, and I hope that everybody kind of comes ready for that.

MS. PATEL: Okay, does anyone have any last comments before we sort of wrap up this portion of the meeting? Erika, is your hand still raised from last time, or would you like to speak? Oh, okay, thank you. All right, so in that case, I don't see any

other hands. This survey, one thing to note that we learned with the TC, is that if you hit done it will not let you refill out the survey, you get one link.

When you sit down to do this, I would recommend either just keeping it open in a tab, and you know you can take as long as you need, but if you hit done just either reach out to me or Tracey, and we can send you a new link, just because it will not let you go back and change your answers after a certain point. Just something to keep in mind, but other than that, unless Katie or Tracey, unless you have any other comments that sort of wraps up what I had in mind for the discussion and the survey review portion of this meeting.

CHAIR HAYMANS: Thank you very much, Jainita, that was great. Tracey, do you see any other hands or anybody else who has comments?

MS. BAUER: There are no other hands raised.

#### **OTHER BUSINESS**

CHAIR HAYMANS: Is there any other business then to come before the Board, anybody anything else? Okay, well thank you all for your time this morning. Thank you to Jason and Jainita for your presentations, and I'll look forward to receiving the survey and seeing the results. Everybody, have a great day.

(Whereupon the meeting adjourned at 10:30 a.m. on Thursday, October 3, 2024.)