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National Oceanic and Atmospheric Administration (NOAA)

National Marine Fisheries Service (NMFS)

Atlantic Highly Migratory Species Advisory Panel

Virtual Public Meeting

Friday, February 11, 2022

The Panel met via webinar at 9:00 a.m. EST, Bennett Brooks facilitating.

Members Present:

Jason Adriance, Louisiana Department of Natural Resources

Charlie Bergman

Peter Chaibongsai, The Billfish Foundation

Demian Chapman, Mote Marine Lab

Daniel Coffey, Harte Research Institute for Gulf of Mexico Studies

Dustin Colson Leaning, Atlantic States Marine Fisheries Commission

Marcus Drymon, Mississippi-Alabama Sea Grant - State Rep for Alabama

Yamitza Rodriguez Ferrer, Puerto Rico DNER, Recreational and Sport Fisheries Division

Sonja Fordham, Shark Advocates International

Kristin Foss, Florida Fish and Wildlife Conservation Commission

Bryan Frazier, South Carolina Department of Natural Resources

Steven Getto, American Bluefin Tuna Association

Willy Goldsmith, American Saltwater Guides Association

Dewey Hemilright, Mid-Atlantic Fishery Management Council

Evan Hipsley, Jr., International Game Fish Tournament Observers, Inc.

Russell Hudson, Directed Sustainable Fisheries, Inc.

James Hull, Hull Seafood

Bob Humphrey, Sport-Ventures Charters and Casco Bay Bluefin Bonanza

Jeff Kneebone, New England Aquarium

Robert "Fly" Navarro, Fly Zone Fishing

Jeff Oden, F/V Sea Bound

Michael Pierdinock, CPF Charters "Perseverance"; Recreational Fishing Alliance

George Purmont

Mark Sampson, Ocean City Charterboat Captains Association

Martin Scanlon, F/V Provider II

Perry Trial, Texas Parks and Wildlife Department

Rick Weber, South Jersey Marina

Alan Weiss, Blue Water Fishing Tackle Co.

Katie Westfall, Environmental Defense Fund

Angel Willey, Maryland Department of Natural Resources

NOAA NMFS Staff Present:

- Heather Baertlein, Atlantic Highly Migratory Species Management Division
- Randy Blankinship, Division Chief, Atlantic Highly Migratory Species Management Division
- Karyl Brewster-Geisz, HQ Fish Branch Chief, Atlantic Highly Migratory Species Management Division
- Craig Cockrell, Atlantic Highly Migratory Species Management Division
- Pete Cooper, Branch Chief, Atlantic Highly Migratory Species Management Division
- Dan Crear, Atlantic Highly Migratory Species Management Division
- Becky Curtis, Atlantic Highly Migratory Species Management Division
- Tobey Curtis, Atlantic Highly Migratory
 Species Management Division
- Guy Dubeck, Atlantic Highly Migratory Species Management Division
- Ben Duffin, Atlantic Highly Migratory Species Management Division
- Steve Durkee, Atlantic Highly Migratory Species Management Division
- Cliff Hutt, Atlantic Highly Migratory Species Management Division
- Sarah McLaughlin, Atlantic Highly Migratory Species Management Division
- Ian Miller, Atlantic Highly Migratory Species Management Division
- Larry Redd, Jr., Atlantic Highly Migratory Species Management Division
- Carrie Soltanoff, Atlantic Highly Migratory

Species Management Division Matt Van Kleunen, Atlantic Highly Migratory Species Management Division Nick Velseboer, Atlantic Highly Migratory Species Management Division Jenni Wallace, Atlantic Migratory Highly Species Management Division Megan Walline, NOAA General Counsel Migratory Tom Warren, Atlantic Highly Species Management Division Jackie Wilson, Atlantic Migratory Highly Species Management Division

Southeast Fisheries Science Center Staff Present:

Craig Brown Enric Cortes Dean Courtney Xinsheng Zhang

Proceedings

(9:04 a.m.)

Welcome/Introductions

Mr. Brooks: All right. So I think at this point we should jump in. So let me just hand it off to Randy to do a welcome from the HMS team, and then we'll jump in. Randy?

Mr. Blankinship: Yes, good morning, everybody. Glad to be with you this morning, this Friday morning, hope you all are well. We are having a very brief, short, mini-Advisory Panel meeting specifically on supplemental Amendment 14, which is out. And we'll have a presentation and discussion about that momentarily.

In particular, as I extend a welcome to you all this morning, I want to especially welcome our new Advisory Panel members, and Bennett will be mentioning you folks further by name, and doing so in just a little bit.

For those new AP members, we usually have an HMS management 101 orientation, and we will plan to hold that orientation prior to the spring AP meeting. So, we're not doing it for this short meeting, but be aware of that, and hopefully we'll get a chance to touch base with you all new members. Anybody else that wants to attend, as far as other members, go before the spring meeting.

And speaking of the spring meeting, we have tentatively planned for those dates to be May 18th, through the 20th. So, once again, for the spring AP meeting, the tentative dates are May 18 through 20. So, if you would, please hold those dates on your calendars, and we'll send out a save the date email soon about that. And while today we will be focusing on draft supplemental Amendment 14, I do want to provide a quick update on a couple of topics of interest.

And we don't have presentations on these topics, and don't intend to have an open AP discussion about them during this meeting, but I do want to share them with you. And I am going to share my screen, at least so you'll see a visual representation about what I'm talking about. Hopefully this will come across here soon. All right, can you verify you can see that Bennett?

Mr. Brooks: Yeah, I am seeing it Randy.

Mr. Blankinship: All right, very good. So, on a couple of topics here, I wanted to just update folks, and let you know that related to some proposed rules that will be coming out soon, two of them relate to implementation of 2021 **ICCAT** recommendations. One of them will be implementation of the new bluefin tuna and northern albacore quotas, so that will be one proposed rule that will be coming out later this spring.

And then also the shortfin mako implementation of the no-retention provision in that recommendation from ICCAT, and that will be coming out a little bit later this spring. For these, we are working on these rulemakings, and intend to implement them by the ICCAT entry into force date, which is in mid-June, and until we have implementation of those new regulations, the current regulations remain in place, which is particularly relevant for shortfin mako, and our management measures that we currently have in place.

Also building off of implementation of the general category restricted fishing days that we used again -- it's not the first time that we used them, but we started using them again last year, we will have a proposed rule out shortly for the general category restricted fishing days for 2022. Also not a rulemaking, but another administrative thing that we have to worry about in the U.S. government is Paperwork Reduction Act requirements, and the collection of information.

We have a Federal Register notice out right now to request public comment on the renewal of one of those collections of information related to tournament registration, and recording, so this applies for some of you. And would bring this to your attention, and request that if you're interested in making any comments about the collection of information associated with that, for tournament registration reporting, you can follow in the link.

I think that's caught in the presentation on the web page, you can follow that link there. You could also just take the words that are in this bulleted item, and do a search in your web browser, and it should take you to the federal register, and others associated with that. Once again, I encourage you to make comment about that if you wish.

And then also I wanted to bring to your attention a couple of bluefin in-season actions, and one of them we rolled out yesterday, and there was an HMS news email notification that came out about this. And that is the general category January through March period fishery is going to close tonight at 11:30 p.m., and we anticipate based upon incoming data that that quota will be reached for the January through March time period.

So, be aware of that, and then also as a heads-up, the angling category southern area trophy fishery oftentimes closes right after we close the general category because of the nature of the landings and availability of fish. And so stay tuned for that potentially happening very soon. And that's it for those updates, and I'll turn it back over to you, Bennett.

Mr. Brooks: Great, thanks, Randy. So, let me just throw in a more official good morning to everyone. It's nice to hear you all, and eventually we'll maybe see many of you, and just continued thanks for adapting to this virtual format. We're all aching to be able to get back and have meetings together, and hopefully that'll happen in the nearer future.

But until then, thank you for accommodating and working through this.

As Randy said, this is going to be a shorter, more focused conversation today. We are really just honing in on one issue, the Shark ABC Control Rule, but before I get into the agenda and ground rules and stuff, I do want to acknowledge we have a number of new participants in the mix today, and I think we'll hold off on doing any sort of larger welcoming until we are in fact back together.

But I just wanted to note that we have several new members on the commercial fishing side. We have James Hull and Charlie Bergman. On the rec side we have Willy Goldsmith. On the academic side we've got Jeff Kneebone, Lisa Kerr, Daniel Coffey, and Demian Chapman. And then we have -- Walt Golet is not new to the AP, needless to say, but he is new to the seat that he's filling. He has shifted from the academic seat, and is taking the ICCAT Advisory Committee chair seat that has been held for many years by John Graves. So, Walt will be wearing a different hat, so when you are hearing from him keep that in mind.

So, anyway, to all of you, and those of you that are on the call today, thank you, it's good to have you in the mix, and we've got about, I think maybe a little bit more than half of the AP in the mix right now. I suspect a few more will join in as well, but we have a good cross section right now, so I think we're good to push forward.

And there was a question in the chat here, and I'm just repeating the dates for the May meeting, and those are May 18 to 20, so please do mark that down.

Ground Rules/Agenda

So, as I mentioned: today, short focused meeting. We really have one task in front of us, and that's to talk about draft Amendment 14, that is the Shark Acceptable Biological Catch Control Rule.

We'll have a short presentation from Guy, and create some room for clarifying questions, and then time for discussion and feedback. So, we'll probably spend a little bit more than an hour. We've set aside something like 75 minutes for that, and we'll use as much of that as we need. We will also have formal comment, as is our wont, starting at 10:30, so if there's any members of the public who want to be in the mix, that would be your moment.

Ground rules, our usual set of ground rules apply, so that's just ask one -- we need to hear from you all, as many of you as possible, so we know what you're thinking, hear your questions, get a chance for the HMS folks to hear your perspectives, but being focused in your time, and your comments is really helpful to make sure we can hear from everybody. Just a reminder, this is not a consensus seeking body.

I think all you AP members know that, but any members of the public, this is really a sounding board for the HMS staff, and they're not convened to give consensus advice. AP members are primary participants, so again, when we open it up for comments and questions, we'll be looking to the AP members, but Randy and staff, if there are others in the mix that are important to bring in, look to you to make that decision on the fly.

Just a couple of rules in virtual land here, you will be muted unless you are invited in. As we were doing before we started up here, if you want to get into the mix, please raise your virtual hand. If for some reason that doesn't work, just throw a note into the chat to all of us panelists, and we'll make sure to bring you in that way. After you speak, if you can lower your virtual hand, that is helpful; again, so we can know whose hands are still up.

I've just been told there is a little bit of a delay. The technology has changed a bit, so when there's a little bit of a lag between when I recognize you and when Matt will be able to bring you off mute, so

don't lose hope, just hang in there, and we'll get you off mute. If you are using the chat function, just so you know, AP members, that chat, you can chat. Any member of the HMS, you can chat all of us, sort of the HMS team or myself, or you can chat anyone of us. Your chats do not go out to the full AP. We really try to manage this meeting as if we were in person, and so we wouldn't be loud whispering around the table to all of us, we want to have a focused conversation, so we're trying to do similarly.

So, if you have something you want to share by chat, post it, and then if it's the kind of thing that's intended for everyone, we'll put it back out. If it's just intended for us, that's great too. In general, I think minimizing the use of the chat is a good thing, so we can all stay focused on the conversation. But I think there have been times where it's been super helpful, so just ask, or use your discretion.

I will run the queue of people when you get in just as I normally do, which is in general taking your hands in the order that they come up. But also deviating from that to make sure that we're getting in a good cross section of the different perspectives on the AP panel, and also bringing in some of the quieter voices. So, I try to use that discretion in a way that is balanced, but if you see me deviating from the queue, that is why.

If you have any tech issues, please chat or email Craig Cockrell or Pete Cooper, and they will handle that. Heather will be monitoring the chat, and so she'll be sort of flagging stuff for our attention.

Then, lastly, if it hasn't already started, I think we are recording this meeting, so please be aware of that. And that's all I have for ground rules and agenda.

So, let me just pause and see, does anyone have any questions about the agenda, or anything we're up to over the next couple hours? Marty, I think your hand is still up. Pete, I'm wondering, or Matt, if someone could throw in a message to Marty on how you lower the hand, because I think he's in by phone, so he might need a small tech assist there, that would be helpful.

Draft Amendment 14 - Shark ABC Control Rule

So, with that, I don't see any other hands, so let's push on. Again, the topic is draft Amendment 14, which is in particular focusing in on the Shark Acceptable Biological Catch Control Rule, the ABC Control Rule, as I'm sure it will be referred to for the rest of our time this morning. This is not new to the AP, we've talked about this before.

But there's a good deal of complexity here, and there was a lot of interest, and there was a need for a bit more discussion, and a bit more input, and so that's why we're having this kind of special edition AP meeting today. So, I'll hand it off to Guy here in a minute to walk us through the presentation, and just remind us about what this rule is, and how it's structured. And then we'll take some qualifying questions, and then open it up for discussion, and feedback.

So, I will hand it off to Guy, just note we have no formal break today. So, if at any point, because it's a short meeting, if you need a break, just feel free to take one as you need. Guy, over to you.

Mr. Dubeck: Good morning everybody, Guy DuBeck here with HMS. As Bennett mentioned, we're going to be talking about draft Amendment 14, the Shark ABC Control Rule. So, draft Amendment 14 along with supplemental documents, and still with tons of acronyms. I have compiled all of them in the presentation here to help reduce the wordy slides, and just want to highlight a few of them here for a point of reference quite often.

The first one is ABC, you can't start an ABC control rule without knowing what ABC stands for, and as Bennett mentioned, ABC is the acceptable biological catch. The next one is ACL, or the annual catch

limits. And we have the maximum fishing mortality threshold, or MFMT. And then the last one I'll probably mention a lot is the overfishing limit, or OFL.

So, brief reminder about draft Amendment 14 to everyone, if you remember we released the draft version, the framework action in September of 2020, and accepted comments through the end of December. We received ten written comments, along with numerous oral comments at various meetings. Since the end of the comment period, HMS, and the Southeast Fisheries Science Center has been hard at work trying to create the ABC Control Rule.

Then we released the ABC Control Rule in the draft supplemental document, along with all the details that folks wanted based on public comment. In draft Amendment 14 we had, again, this is a reminder for everyone, we had five different topics, and then multiple preferred options. The first topic was the ABC Control Rule, which we're going into more detail today, so I won't say much more.

Then we had the phase in ABC Control Rule with the third option to consider allowing this in the future. The ACL development had two preferred options, it was actively managing the sector ACLs. And then also we're removing the commercial quota linkages. And the carryover underharvested ACL, we prefer to allow carryover of the commercial quotas under certain circumstances.

And then lastly we preferred a management measure to compare fishing mortality to the OFL determined overfishing status. All these topics were discussed in draft Amendment 14, which we took comment on, and then for the rest of the presentation we plan to focus in on ABC Control Rule, and take comments on the preferred management option.

So, as kind of a refresher for the ABC Control Rule options, we have three options. A1 was to keep the

existing ABC methodology, where the OFL equals the ABC, which equals the TAC, which equals the sum of sector ACLs. Option A2 was to create a standardized, one size fits all ABC Control Rule. But the preferred option, which we're going to go into more detail today, was to adopt a tiered ABC Control Rule.

So, those are the options that we took on draft Amendment 14, and here are just some of the comments we received during the initial draft document that I wanted to share with folks. So, there was overall support for having the tiered ABC Control Rule, but some concern that we did not provide specific details. The control rule needs to account for the level of certainty in the data.

HMS needs to review the different council rules, and use an SSC to develop the tiers, and evaluate the data. There was opposition to the standardized, one size fits all, control rule option. And then based on these comments, and our work with the Southeast Fisheries Science Center, we created a tiered ABC Control Rule, and released that information as a supplemental document with all the specific details, and I'll go into detail now.

So, before we get into the ABC Control Rule, I wanted to include this reminder slide for everyone to know how to set the ABC. As you see in the figure, the red dot is the OFL, which is the annual catch that corresponds to the estimate of maximum fishing mortality threshold, or MFMT applied to the stock abundance. The blue dot, the one that's a little bit lower, is the ABC, and that is the annual catch limit based on the control rule.

And then the ABC cannot exceed the OFL. And then the buffer, the dotted lines, is scientific uncertainty, and risk policy described in the control rule. So, that was just kind of a reminder for everyone what we were talking about today. So, now we're going to get into calculating the scientific uncertainty. So, the scientific uncertainty calculation is going to be

based on the Ralston et al 2011 approach.

plan to conduct a meta-analysis across assessments for shark stocks that have been assessed multiple times, and we're talking about sandbar, blacktip, Atlantic sharpnose sharks. We would pool those uncertainty estimates together from those multiple analyses to create a sigma min After for the control rule. each accepted assessment, we'll also get an uncertainty estimate from that assessment.

The larger of the two values, whether it's the sigma min from this meta-analysis that I described, or the sigma from the current assessment, so the larger of the two values would be chosen to be more cautionary around the scientific uncertainty. That scientific uncertainty would then be used to calculate the buffer between the OFL, and the ABC.

So, in draft Amendment 14, we are kind of clarifying the risk policy, but not making any changes to the HMS risk policy. For most shark stocks, the policy to ensure 70-percent likelihood of success in ending, and preventing overfishing, rebuilding overfished stocks, and maintaining healthy stocks. This is since most stocks have low reproductive potential, are long lived, and have a slow population growth.

However, a range between 50 and 70-percent likelihood of success is also being considered depending on the stock, or relevant circumstances. Some of the circumstances that would be of concern regarding the model fit, or other scientific uncertainty, the last year of data used in the stock assessment, if it's several years old. Or changes in the fishery, how it's operated since the last year data used in the assessment.

So, now let's move on to the Shark ABC Control Rule. So, we considered elements from the Caribbean, and the Gulf Council individual rules, the tiers apply to stocks with a healthy status that are experiencing overfishing were on there, and we'll have four tiers in the ABC Control Rule. So, tier one

is going to be kind of data rich assessments.

Examples of shark stocks that could be assigned to those tiers, but we haven't made any determination yet, are blacktip, or smoothhound sharks in the Atlantic region. Tier two, for data moderate assessments, example stocks that could be assigned to those tiers are Atlantic sharpnose, or Gulf of Mexico smoothhound sharks. Tier three are going to be the data limited assessments.

As of right now, our look is that we don't have any stocks that fall into this tier. Tier four are no accepted assessments. So, for example sharks that could be assigned for this tier are kind of bull, spinner, or tiger sharks. However, some of these stocks, once they've been assessed, they could fall under some of these other tiers, tier two, tier three. And all other stocks will be handled outside the tiers, which I'll discuss at a later point.

So, let's discuss some of the details regarding the tiers within accepted assessments, which are tiers one through three. As you see in the table, we have the condition of use, and then determine the OFL, and determining the ABC for each one of the tiers. The tier one, or the data rich assessments with that full age structure, stock assessment, would have catch at age, or catch at length models with sufficient life history data to fully parameterize the population dynamics.

That includes, at a minimum, reliable time, series of catch, age composition, and index of abundance. The OFL, or its proxy is the annual catch that corresponds to the MFMT applied to the stock's abundance. So, the buffer between the OFL, and the ABC needs to account for the scientific uncertainty, and the HMS risk policy. As I mentioned earlier, after each tier one assessment, estimated scientific uncertainty from that assessment, or sigma is available.

And it would be compared to the sigma min from the Ralston approach. And then the larger of those two values would be chosen. The scientific uncertainty buffer would be lowest in tier one stocks. For tier two stocks, we're talking about data moderate assessments that include two of the three time series that I mentioned under tier one. The OFL, and the ABC would be determined in the same way.

However, the OFL reduction is likely greater than at tier one due to a little more scientific uncertainty. For tier three, the data limited does not contain as much time series data required in a tier one, or tier two, but given the data limited considerations, a higher level of uncertainty, or a multiple of the sigma, or sigma min would be used. And the process for calculating the ABC, and the OFL would be the same as tiers one, and two.

So, those are all the ones for tiers within accepted assessments. Moving onto tier four, which has no accepted stock assessment available. Therefore, data quality, and data availability has not been fully vetted through the stock assessment process that is subject to peer review. So, if the data has not been vetted, the figures needed to calculate the OFL are not available, and the OFL is unknown. In this case, the OFL proxy would be set equal to the mean reference period of catch multiplied by scalar, less than, or equal to three.

The specific scalar will be derived from characteristics such as life history, and productivity. The susceptibility to fishing pressure, or other appropriate considerations for the fishery for each shark stock. The ABC would then be set less than, or equal to 90 percent of the OFL proxy based on scientific uncertainty associated with the data of a particular shark stock, or stock complex.

So this is for the -- all of these are for the ABC Control Rule. Now, let's discuss shark stocks that are outside of the tier process. The first ones are stocks under a rebuilding plan. These stocks are overfished, so the ABC would be determined

consistent with the stock's rebuilding plan. Some of these species we're talking about are blacknose in the Atlantic region, sandbar, and scalloped hammerhead sharks.

For stocks assessed by ICCAT, it gets a little more complicated. ICCAT has adopted major measures for shark stocks that are caught, and associated with ICCAT fisheries, and for example those shark species we're talking about, we're talking about shortfin mako, oceanic whitetip, blue, and porbeagle sharks. So, under this scenario, under these ICCAT stocks, specifically if ICCAT recommendation provides a specific quota allocation to the U.S., then we would implement that allocation consistent with the Atlantic Tunas Convention Act.

And also considering consistency with the Magnuson-Stevens requirements. Otherwise, limits are needed for the fishery monitoring, or other purposes, a U.S. catch may be established using a reference period of U.S. catches as an OFL proxy. And then the last stocks that are outside the tier are the prohibited species. The ACL is equal to zero, as established in Amendment 3, and then clarified in Amendment 5B.

In addition, Amendment 14, we mention multiple times we're not considering any changes to this approach. So, that's all the things outside the tier process. After the AP meeting, we plan to hold one public webinar on February 23rd, and then the link here has all the webinar information for Amendment 14. So, after -- well here's kind of a time line for after the comment period closes on March 10th.

At that point we plan to start working on final Amendment 14, and hope to have that out sometime this fall. Then we begin the process of adjusting the shark quotas based on the framework actions in Amendment 14. So, as I mentioned, we're taking public comments through March 10th. After the meeting ends, you can submit comments through regulations.gov, and I also provide contact

information if you have more questions to myself, or to Karyl Brewster-Geisz. So, I just want to thank everyone for listening this morning, and I'll take any questions, or comments.

Mr. Brooks: Great, thanks Guy for walking us through that. So, what I would love to do is start with clarifying questions, just making sure people understand the rule, understand what Guy just walked through, and then once we've had a chance to just work through those, then open it up for any comments, and discussions. So, let's go first, any clarifying questions? And if you just sort of raise your virtual hand.

Karyl I see you've turned on your camera, so you are here as well to weigh in, thank you. I am refreshing, I thought I saw a hand, and then it went away. All right, Sonja, let's go to Sonja Fordham, and then we'll go to Alan Weiss. Sonja, clarifying questions.

Ms. Fordham: Thank you, good morning again. Yeah, clarifying question on one of the last slides. On the sharks applied to tier structure, you have a category called assessed by ICCAT, which actually used, among the examples, oceanic whitetip, so not all of those are really assessed by ICCAT. So, is it more like assessed, or managed? Actually there's some sort of management measure, and, or would it be the pelagic sharks considered under the new convention text, or do you have any clarification for the pelagic sharks that aren't really assessed?

And then also on that section, when you say catch limit may be -- sorry, if limits are needed. Do you mean according to ICCAT, or the U.S., or either? Yeah, that's it, thank you.

Mr. Brooks: Thanks.

Mr. Dubeck: Thanks, Sonja. So, the answer to that question, so if ICCAT does not provide a specific allocation, or quota to the U.S., then we would implement appropriate measures, and those could

be the recommendations that we've implemented in the past. And I did mention oceanic whitetip in there, it hasn't been assessed by ICCAT, but we've gotten recommendations from ICCAT to implement certain measures, so that's why I mention it.

And I assume in the future, since ICCAT is starting to assess more pelagic shark species, and more management measures for sharks that it's probably on the list around the corner.

Mr. Brooks: Thanks, Guy. Let's go to the next -- Karyl had something, yeah Karyl?

Ms. Brewster-Geisz: Sorry, I just wanted to clarify. So, Sonja, you are correct that it really is, could be assessed by ICCAT, some of those would be the shark species that are being considered under the convention. Then also you had asked about if limits are needed for the fishery monitoring, or other purposes, and yes, it could be needed from an ICCAT perspective, or needed from a U.S. perspective.

Mr. Brooks: Great, thanks Karyl. Next clarifying question, Alan Weiss, and then we'll go over to Mike Pierdinock, and Peter.

Mr. Weiss: Thanks, Bennett. I have a question in regard to some of the same stuff that Sonja asked about. Under the ICCAT paragraph, the second bullet point is very vague, and I'm not really understanding what's being contemplated there. If limits are needed for fishery monitoring, why would a limit be needed for monitoring the fishery?

Is there a limit to how high the people at the Center can count? I don't understand that. And then the vague, general or for other purposes, like what other purposes? As far as I know, the only reason to put in limits is for conservation purposes, so I don't know what these other purposes might be.

Mr. Brooks: All right, let's open this up for either Guy or Karyl to weigh in.

Mr. Dubeck: Yeah, so with this, we're trying to be ICCAT broad because Convention very amendments, and we're trying to be very inclusive everything. Because we have the ICCAT recommendations, and we're putting in major based on those, and these are measures conservation measures that need to be in place based on some of the recommendations. So, we're trying to be very all inclusive with this, because we don't want to -- we're not sure exactly how in the future how ICCAT is going to phrase some of these recommendations.

Ms. Brewster-Geisz: And just to expand upon what Guy is saying, Alan, if you remember there are some recommendations that ask us not to increase our effort, or not to increase our landings. That would be considered in if limits are needed for fishery monitoring, or other purposes. Just to give you an example of what we're thinking.

Mr. Weiss: So, to clarify further then, the word limits doesn't necessarily mean quotas, it means any kind of limitations, whether it's size limitations, or effort limitations, or any other limit.

Mr. Brooks: Heads are nodding as you're saying that Alan, yes.

Mr. Weiss: Thank you.

Mr. Brooks: Great, let's bring in Mike Pierdinock.

Mr. Pierdinock: Thank you, Guy, for your presentation. Can you go to the slide which provides the tier details for a tiered approach? My question has to do with the fact that you have an approach for different tiers to come up with the quotas, or ABCs, or so on. And with the HMS regulated species, if you went down that list, which ones would be considered data rich, and which ones would be considered data poor?

Just trying to get an idea of where our regulated sharks fall within the criteria that's put together

here, thank you.

Mr. Dubeck: Yeah, thank you. So, I mentioned a few species during the presentation. Again, we haven't gone through this, and assigned each one to a tier, none of that has been determined. But some of the ones that we were thinking would be more of the data rich would be the blacktip shark stocks, or the Atlantic smoothhound sharks. The data moderate assessments, a few of those might be the Atlantic sharpnose, and then the Gulf of Mexico smoothhound sharks.

Based on our initial look with the Science Center, there's no stocks that seem to be data limited that would have accepted assessments. And then the ones that were under tier four, the no accepted assessments, you have a lot more of the unknown shark stocks. So, you have kind of a bull, spinner, tiger sharks that would fall under that. But once those are assessed, and those that are scheduled to be assessed in SEDAR in 2024, they might be in the different tiers, either two, three, or one, depending on what the assessment says.

Mr. Brooks: Great, does that help? You can take Mike back off mute.

Mr. Pierdinock: Thank you, that did help. Just a quick question, maybe you could -- I'm not sure if you've gone to this point, but if you looked at three, if you looked at mako, if you look at great whites, and if you looked at -- what's the other one? Porbeagles, if you looked at those three, where would they fall within those tiers? I'm just curious of those three.

Mr. Dubeck: So, as I mentioned --

Mr. Brooks: If you can do that on the fly.

Mr. Dubeck: Yeah, as I mentioned, those would be outside the tier process. So, great white sharks are prohibited species, so ACL is set to zero, and then porbeagle, and make would be under the ICCAT

based on their assessments.

Mr. Pierdinock: Thank you.

Mr. Brooks: Thanks. Let's go to Peter Chaibongsai. And then there's a question in the chat, and then we'll go to Rick Weber. But Peter, you can take Peter off of mute.

Mr. Chaibongsai: Thank you, Guy, for the presentation. Actually I put my hand down because Mike asked a bunch of my questions that I wanted to ask, so thank you for clarifying Guy, and Mike, thank you as well.

Mr. Brooks: Okay, great, thanks. And before we go off to Rick Weber, there's a question in the chat here from Yamitza, it says what can we do in Puerto Rico? Our problem is always the same, jurisdiction, and enforcement.

Mr. Dubeck: So, as you mentioned there are issues between jurisdiction, and enforcement in Puerto Rico, however we do have the different permits. We have the small boat permit, and we'll start to collect data on some of the information that goes on in the fishery down there. So, hopefully in the future we have a better sense of the data, and the catch information to make some future major measures.

Mr. Brooks: Thank you. Let's bring in Rick Weber.

Mr. Weber: (Speaking off microphone) -- say what you want right now, but knowing the exceptions is really important to us. Karyl, early on while I was prepping for this, I stumbled across the transcript of 2019, it was before the convention was -- the amendment was approved, and you were saying there was not authority. Do you intend to follow those species that ICCAT picks up?

Let me ask the question even further. I don't know Magnuson well, so I don't know what Magnuson is forcing you to do. But I know that frequently we hear from you that we are compelled to do things

because of Magnuson. I would argue -- I don't like there where it says that if there is not a specific quota allocation, because if there is a stock-wide, basin-wide TAC that is not being exceeded, and the managers have determined that the stock-wide, basin-wide TAC is not being exceeded, there is no specific allocation.

But those people who are watching it are saying it's fine. And therefore under that circumstance, why should we use any historic reference points, and cap ourselves at our historic landing just because we haven't been handed a specific allocation? It feels like we will be handed the worst of whichever is the worst scenario.

If you have a TAC, you stick with the TAC. If you don't have a TAC, you stick with your historic landings. Which, help me out a little bit here guys.

Mr. Brooks: And with this, as we go to more speakers, let's shift into just kind of away from clarifying, and discussion as you've already sort of turned the corner Rick. Go ahead Karyl.

Ms. Brewster-Geisz: Thanks, Bennett. And Rick, you have hit the nail on the head, which is why that second bullet is so vague. If limits are needed, we may establish. It doesn't say we will establish, it's something that we would look at closely going back to Sonja's question about whether, or not it is an ICCAT requirement under ATCA, or a Magnuson requirement. It would be things that we would be looking at to get at those questions.

Mr. Weber: And I understand we will do what's needed. As always, I fear what we are compelled to do. Where someone says you haven't set an ACL for X species, and you are compelled. Are these actually outside of the tier structure legally? Is that what we're setting up? I want there to be sharks, at the end of the day, I want there to be sharks. I don't want fisheries management to turn into a legal competition of who can arm wrangle what thing. What we want is healthy fish.

Ms. Brewster-Geisz: Understood, I think we all want that. I will say that under Magnuson there is the exception for species that are managed internationally to not have an ACL.

Mr. Weber: All right, very good. And since ---

Mr. Brooks: Rick, we just lost you. Can we bring Rick back off mute, please?

Mr. Weber: Yeah, I said I'll just hit this very quickly. Following Mike's question on species, and the northeast species, everything in me wants to give you guys the latitude, and I like the concept of the tier structure. The tier structure gives you latitude. I think what you have heard based on the comments that we've read is uncertainty of where each person's favorite stock is going to end up.

There is an argument for a one, but it is the devil that we know, and we're all afraid of a three because right now it is the devil that we don't know. And so I'm hesitant of a three, even though you've spent a lot of time working on it, because there are uncertainties for us still in it. And there's going to be a lot of vagueness, and angst. I guess that's the word I'm looking for.

There's going to be angst until we see where all the species end up. So, possibly, I saw a comment about an SSC, or some such thing. I think the more daylight that you can put into this process as you are sorting out what species ends up where, that would be very, very helpful, and calming to a lot of angry people. Thank you.

Mr. Brooks: And again, Karyl or Guy, I don't know if there's anything to comment on there, but is there anything that you can share sort of about what that process of assigning species to tiers looks like, or could look like?

Mr. Dubeck: Well, so to Rick's point, when we do make the determinations, we're going to do another rulemaking, so there will be multiple steps during the process for public comment, and for us to have discussions, and public webinars to discuss these things in more detail where these species are going to be assigned to.

We're going to work with the Science Center to make the determinations which ones will fall under which tier. And then we'll determine what the OFLs, and ABCs would be. And then we'll do rulemaking, and with that process, there'll be major measures, and stuff that will involve more public comment, and discussions with the AP on that too. So, it's not going to be just us on the side, and the putting someone out.

We're going to have more discussions on this moving forward, when everything is in place.

Ms. Brewster-Geisz: Yeah, and just to be clear, which tier the species end up in is based on the data availability. It's whether or not they have all of the requirements in that model. So, whether it ends up in tier one, two, three, or four if there is no assessment. Or one of these outside the tier structures because they're overfished, or managed by ICAAT.

Where we have more of the flexibility comes in under that HMS risk policy, along with actually setting the quotas, or the ACLs. That's where more of the flexibility comes in.

Mr. Brooks: Thanks, Karyl. I've got a few more people in the queue now, so let me work through this. And Rick, I'll let you lower your hand. I think, Jason, you were next in the queue, so why don't we open up Jason Adriance's line?

Mr. Adriance: Thanks for the presentation Guy, I'm going to center my comments right now around tier four. And I'm glad you brought up bull sharks as an example. And my main concern is who will be choosing the reference period of catch? Because management, and quota linkages, recent history have driven the landings for that species, especially

down here in the northern Gulf.

And I can see where if you're using landings history, there's a potential to not be harvesting necessarily what that stock could handle, and then continuing what's occurring down here with, let's say our abundance of bulls, and blacktips. So, I think it's very key on how that reference period is decided, and the need to determine what is influenced by management, and what is influenced by what that stock can potentially handle.

And I think that goes to a lot of what we're hearing here. There's a lot of vagueness, and broadness here, and that scares me. It leaves a lot that can be done by the stroke of a pen behind a closed door. And that's my comment.

Mr. Brooks: Thanks, Jason. Dustin, and then --

Ms. Brewster-Geisz: Bennett?

Mr. Brooks: Yeah.

Ms. Brewster-Geisz: I did hear questions from Jason on who would --

Mr. Brooks: Yeah, go ahead.

Ms. Brewster-Geisz: The question I heard was who would be choosing the reference period. So, that would be something that in that follow on rulemaking, we would be putting out options Jason. This is what we're looking at, and why, or we could go with this group of viewers, and this is why. It wouldn't be necessarily done behind closed doors, and just signed, we would have public comment on that.

Mr. Brooks: Great. Thanks, Karyl. Let's bring Dustin Colson Leaning in, and then to Katie Westfall. Dustin, you should be able to speak.

Mr. Colson: Can you hear me?

Mr. Brooks: We got you.

Mr. Colson: Okay, perfect. Yeah, so I work for ASMFC; Bob Beal just has not yet sent the proxy letter in yet, but will be sending that very shortly. I just took over for Kirby Rootes-Murdy, so glad to be here, thanks for acknowledging my hand. So, yeah, I see on slide 13 that overfished stocks under a rebuilding plan fall outside of the tier structure. And then slide ten indicates that tiers don't apply to sharks, or stocks that are overfished.

So, how would a stock be managed if it is declared overfished, but a rebuilding plan has not been implemented yet? I know in other fish stocks, it can take up to two years to implement a rebuilding plan after being declared overfished, so how would overfished stocks be managed in that interim period?

Mr. Dubeck: The overfished stock would be managed outside the tier process. As I mentioned, some of the species for those, kind of like sandbar, and blacknose in the Atlantic, but under the ones that are applied into the tiers, those are the ones that are not overfished, but overfishing is experiencing. So, that's something that those stocks would stay underneath the tier.

But if there's a stock assessment that comes out, an accepted assessment, and determined that it's overfished, then we would take it out of the tier process, and establish ABC appropriate based on the stock's rebuilding plan. I think I addressed that.

Mr. Brooks: Does that clarify? Can you take Dustin off mute again? And Matt, maybe let's just leave the questioners off mute, just so we can have a little back, and forth as needed. There we go, Dustin, you're off, did that answer your question?

Mr. Colson: Maybe I'm getting too hung up on the details of what falls outside the tier. But if a rebuilding plan is not yet in place, and the stock is overfished, it wouldn't fall within the tier structure, but also there might be a period where there isn't a rebuilding plan, so what's dictating how that stock is

managed?

Ms. Brewster-Geisz: So, keep in mind, these are the ABC control rules to set the ABC. So, once a stock assessment is done, we would be making determinations about which tier, or outside the tier it would fall on, and taking action appropriately. So, until we take that final action, whatever is currently going on with the stock would continue going on unless it was so badly overfished that we needed to take emergency action.

In which case, even that emergency action would still fall into what is going to rebuild the stock under the results of the stock assessment.

Mr. Brooks: So, Karyl, if I'm hearing you right, Dustin is concerned there is sort of this grey period, a gap, and what you're saying is not really, because there's existing rules that are already in place, is that right?

Ms. Brewster-Geisz: Yeah, there are existing rules in place that we would maintain while we were working on putting in place the rebuilding plan. I'm hoping that helps Dustin.

Mr. Colson: Yeah, that helps. I just have been in a similar situation with bluefish very recently, so I was interested in how HMS would handle this, and I'm still learning things too, so thank you for indulging me.

Mr. Brooks: Thanks. And as folks come in here, if someone is talking -- Katie, you're next, after you ask your question, why don't you keep your line open, so if you have a follow up, or if we want to bounce something back at you, we don't have to bring you back off mute. So, let's bring Katie Westfall off mute, and see what your comment is. Katie, you're good.

Ms. Westfall: I agree with some of Jason's sentiment around this being vague, and it was encouraging to hear that there will be a lot of public

comment and public process around that. So, I'd really encourage a lot of transparency, and a lot of public process around some of these decisions as you work. Question focused on the ABC control rule.

I'm wondering if you can talk through how the agency is thinking about going from the ABC control rule to the ACL, and the management uncertainty, and the buffer there. And then I have a comment after that.

Mr. Brooks: So, how to go from the ABC control rule to the ACL.

Mr. Dubeck: So, once those are determined, the ABC is determined, and we figure out what each sector ACL would be, and as we mentioned in draft Amendment 14, we plan to actively manage the sector ACLs now in the near future. And with that, there would come accountability measures to ensure that the ACLs are not exceeded, and make sure that the ABC is not exceeded.

And of course the OFL is not exceeded. So, the answer is a buffer will be put in place to ensure that those are not exceeded. If they are, then the accountability measures will be put in place, whether to reduce quotas, or size limits, or what to ensure they are exceeded in the future.

Ms. Westfall: Got it, thank you. My last comment, I want to encourage the agency to really incorporate a way to explicitly consider climate impacts, either in the risk policy, or in the uncertainty calculation. Various species are going to be effected in significantly different ways, and I think it'll be really important to find a mechanism for the agency to be able to consider this as they're developing the ABC, and thinking through that uncertainty calculation on the scientific side. Thank you very much.

Mr. Dubeck: Thank you.

Mr. Brooks: Thanks, Katie. And Katie, and Dustin, I'll let you now lower your hands. And let's go to

Dewey Hemilright, and Alan Weiss. Dewey, hang on, I'll let you know when you're off mute. Okay, you're good Dewey, we got you.

Mr. Hemilright: Yeah, I would recommend a lot of sunshine on this issue as it's moving forward. I have a lot of questions based on experience over the last couple of years of dealing with how the ABC is set by the data of scientific uncertainty is addressed, and how the OFL comes out, particularly to be accounting of the recreational industry.

And I use that not to pick on recreational industry, but the methodology of accounting. That you're going to have to sit for an ABC, ACL, and an OFL is going to have to be based on MRIP, which has a lot of uncertainty, and you're going to have to set a season, or a bag limit. And then how are you going to constrain that catch to that season, and bag limit given the limitations of the 45-day window of reporting of the weight of MRIP estimates.

And learning, particularly to a species I'm dealing with in the South Atlantic about how it's almost impossible to constrain the catch based on MRIP, and exceeding the OFL, exceeding their ACL, and just how -- it's almost like two separate things here I'm asking questions about. One is particularly to constraining the catch using MRIP data, and it's constraining of the season.

And the other thing is shedding some light on these ABCs, and this process of the tiered, as I don't have a lot of faith in it going forward, unless there's a lot more put out there to the public, and more so than just a few public comments, it needs to be more forthcoming. So, that's kind of two things. The second part of that, it is based on the experience that I'm seeing with using MRIP data and its seasonality, and this limitation.

I don't see how you could constrain catch to an ACL based on that in my experience firsthand. Thank you.

Mr. Brooks: Thanks, Dewey. Guy, or Karyl, do you want to weigh in on that, particularly that last point?

Mr. Dubeck: So, thanks Dewey. So, as we talked about in draft Amendment 14, I'll bring it up in the slides again, we are planning to actively managem the sector ACLs. With those, we're going to put accountability measures in place, and what they are, or what they're going to be, or how it's going to be managed is still to be determined.

We're still going to, as you mentioned, we're going to try, and do as best transparency as we can, and kind of explain how we're getting to these where the stocks are for each tier, how the managers are going to put it in place, what the ABC, and OFL will be, and ensure transparency as best we can.

And for public comment, for folks to weigh in on whether they think these accountability measures are things that are an appropriate level to ensure that they're not exceeded. Yes, those recreational surveys are estimates, but since we know they are estimates, we will be building around some sort of uncertainty with those, and like I said, have accountability measures appropriate to ensure that they're not exceeded.

Mr. Brooks: Thanks, Guy. Let's go to Alan Weiss, and then we'll bring Peter back in, and Dewey I'll let you lower your hand back down.

Mr. Weiss: Thanks, Bennett. I have comments in two areas. One, fairly broad, which is this concept of accounting for uncertainty. There are multiple ways, and levels in which concerns are manifested in the uncertainty, and there are precautionary things done in the course of conducting stock assessments, in collecting data, and collecting data, in setting control rules, and in formulating management measures.

And the concern is that when you have multiple layers of precaution compounded on top of one

another, you can wind up way far away from where you really could be in terms of the yield for the fishery. And all the while that you're concerned with all these various areas of uncertainty, and levels of precaution, there's still National Standard 1, which requires you to maintain optimal yield on a continuing basis.

So, I understand that building in buffers in the control rule will necessarily, in most cases, move you off of that optimum yield number, or the best estimate of it that you have, but you have to be mindful I think, not to bake in so many different levels of precautionary processes in the whole thing that you end up further from that optimum yield number than you need to.

The second point that I want to make is to come back to slide 13, and the item I was asking about during the questions part of the session here, is that I think you're going to get a lot of push back on that second bullet point under the ICCAT paragraph. Although in the verbal discussion, it was said that the limits that are contemplated may be things other than quotas, the second part of that sentence does say a U.S. catch limit may be established.

So, that's a concern, and that's a problem, and I'll point out just a very recent experience that we've all had in regard to makos, where there was no specific quota allocation to the United States, but there was a rather draconian management measure that was agreed to at ICCAT. And I'm not talking about the most recent agreement, I'm talking about the previous one that did allow for some commercial landings, and some recreational catches on a very limited basis.

And the ICCAT measures that were implemented here were very successful in attaining the mortality reductions that were needed on the part of the United States. So, under what you would have on this slide, you would have the option to set a quota under that circumstance, but a quota really wasn't

necessary.

And I'm really not seeing -- if the thrust of this amendment is the control rule setting process, I don't see why you would want to kind of poke the hornet's nest with something like this, saying that you can establish quotas for species that ICCAT is dealing with if they don't issue a specific quota allocation. Thank you.

Mr. Brooks: Guy or Karyl, do either one of you want to weigh in on that?

Ms. Brewster-Geisz: Regarding the ICCAT, thank you Alan, we will definitely take your comments, and concerns into consideration. I am wondering if Dean wants to weigh in on Alan's concerns regarding uncertainty, and the compounding effect.

Mr. Brooks: Dean, I think -- Dean Courtney, if you're not off mute, maybe we can do that. Matt, if you're able to bring Dean off mute. There you go, Dean your mike is open.

Ms. Brewster-Geisz: Dean, we can't hear you if you're talking.

Mr. Brooks: All right, maybe someone can ping him. All right, let's keep pushing on. I'll just note in the chat, a comment from Sonja, seconding Katie's comment around climate change, and let me go back to the queue, and there's at least one person with a hand raised who is not an AP member, and you may have joined late, but right now the conversation is just among the advisory panel members.

And we will be going to public comment at 10:30, so if you're not an AP member, just hold on, and we'll get to you. Peter Chaibongsai, let's go back to you.

Mr. Chaibongsai: Thank you again, Bennett, and everybody. Just trying to essentially beat a dead horse kind of thing. Clearly uncertainty has been a

very big issue here, I think from all sides, and I think it's obviously a very big concern for us as well. I think Dewey brought up a really good point about essentially adding more -- I think as you said, sunshine, to the whole process.

And I think Guy, or Karyl, you were basically saying this is going to go through the traditional rulemaking, so there will be multiple processes to kind of take a look at, and you're going to be utilizing the best available science. But, I say big but, because we have seen historically that there's been a discrepancy between the best available science versus what we see observationally through people on the water as well.

So, I take -- while I understand you're going to utilize the best available science, I really would like to push for us to utilize, or you guys to utilize the SSC to minimize that uncertainty, and to get really more acceptance from not only our community, the recreational, but the other sectors as well. I think with that, I think that would garner a lot more support.

If we had, not just the transparency within the traditional rulemaking, but within utilizing the SSC as well. Thank you.

Mr. Brooks: Great, thanks Peter. Let me bring in -- yeah, go ahead.

Ms. Brewster-Geisz: Guy, did you want to answer this?

Mr. Dubeck: Yeah, you go.

Ms. Brewster-Geisz: So, we do not have an SSC, Peter. Under Magnuson, SSCs are just under councils, not under the HMS structure. So, we would be coordinating with the science center, and all that entails, and then working publicly through public comment periods, maybe scoping meetings to figure out all the rest.

Mr. Brooks: Thanks, Karyl. Guy, did you want to add anything else, or is that where you were going to go?

Mr. Dubeck: That's where I was going to go, yes.

Ms. Brewster-Geisz: Bennett, Enric has jumped in saying he could help explain the uncertainty, and the compounding issues.

Mr. Brooks: Great, could we bring Enric off of mute please? You can go ahead Enric.

Dr. Cortes: Hi.

Mr. Brooks: Morning.

Dr. Cortes: Good morning everybody. So, yeah, I'll try to tackle the question about the uncertainty. So, yeah, this uncertainty, the tiers are dictated by the availability of data in the tier structure that we're shown. So, essentially with the tier ones, we have the three main sources of data, we have catches, we have instances of abundance, and we have indications of shark compositions.

And the other tiers, like the tier two that they are modeled, you only have two of those. For the tier three, you only have one. For the tier four, well they haven't been assessed yet, so we don't know. But the idea is to have a bigger buffer with the higher the uncertainty in the data, and the uncertainty in the assessment.

So, that's why you have -- that relates to the sigmas, the sigmas that Guy showed in one of the slides. So, that sigma represents the uncertainty in the assessment. So, we have two quantities, we have the sigma, which we get from each assessment, or when we do projections with the assessment, and then we have the sigma mean.

The sigma mean, based on this Ralston approach, which is based on the Pacific Fishery Management Council is essentially to see how that uncertainty

varies from assessment to assessment. Because independent assessments may have different levels of uncertainty. So, that sigma mean measures the minimum level of uncertainty across assessments.

So, to be precautionary in this approach, what we proposed is to use the larger of the two values of uncertainty. The one coming from each specific assessment, or otherwise the sigma mean, which is pulled from the full assessments. So, that's the buffer that we apply to the OFL to get the ABC. But the thought is to have a larger buffer with the higher uncertainty we have, and the poorer the data streams we have. I don't know the exact answer to the question, but those are my thoughts.

Mr. Brooks: Thanks, Enric. Karyl, or Guy, do you want to fold in anything here, or should I just take the next person in queue? Next up, okay. All right, let's bring in Mike Pierdinock next, and then we'll go to Fly. Mike? Let me just -- we've got about ten minutes left before we need to go to public comment.

Mr. Pierdinock: Thank you, Bennett, I'd just like to add some additional thoughts consistent with what we've been hearing. MRIP's here to stay, what it is, is what it is. National Academy of Science has blessed it, blessed it again a little over a year ago, or a little less than a year ago. And between that, and the Large Pelagics Survey, the LPS does a credible job of fact checking the MRIP.

But what it is, is what it is. I think what you're hearing is that I know the concern of me, and many is that we have stocks that are not data poor, other examples that aren't HMS related, yet we have issues with ABCs, and OCLs, and so on associated with those stocks. So, so many of these shark related stocks are data poor that we're worried of where we're going to end up as a real result of such.

So, just wanted to add that to the discussion. That's the concerns of me, and many. Thank you.

Mr. Brooks: Thanks, Mike. All right, I think I've got three people left. Let's go to Fly, and then we'll go back to Dewey, and then back to Sonja. Fly? And Mike, if you can drop your hand again.

Mr. Navarro: Thank you very much for having me, and I thank you for the presentation so far. I've got two points I'd like to bring up. First of all, I'm going to have to concur with Mike, Peter, and Dewey. We definitely need more sunshine, more transparency. At the present time, the recreational community, pretty much everybody that I'm in contact with is not happy with the transparency of all of this data.

It really feels that the data that you guys are getting in is not concurrent with what everybody is seeing offshore. There definitely is what seems to be a lack of data, and a lack of data going into all this information. So, as we move forward, I know Karyl, you mentioned that there is no SSC, but if there's something that we can do to be able to provide more transparency for people to see where this data is coming from, and how these sharks are being put into their certain categories, it would be something that most everybody would like to see.

That's my one point, my second point is something that Guy mentioned. Guy mentioned some accountability measures for the recreational side designed to make sure that we don't over fish, and I'm all good with that, but my question is if we are included in that, shouldn't we be included in the carryover of unharvested quota? So, I don't know how you guys would like to address that.

Mr. Dubeck: Yeah, so right now, what we put in draft Amendment 14, right now we actively manage the commercial fishery and we know what those numbers are accurately with the dealers, and the landings. And as multiple folks have said, the recreational numbers are estimates. But as of right now, we would only once Amendment 14 is finalized we decide to go forward, we'd allow only for commercial fishery.

However, it doesn't mean in the future we can't consider that recreational carryover depending on what the reporting looks like, the certainty, and what the accountability measure would be in the future. That's something we could consider in the future.

Mr. Navarro: Okay, and again, I have to reiterate some more transparency on the agency, because I think this is not just a recreational question. I think this is definitely an overall, anybody that's out there fishing, the data that you guys are putting out does not carry over to what people are seeing offshore. So, thank you very much for your time.

Mr. Brooks: Thanks, Fly. Dewey, and then to Sonja, and then to public comment.

Mr. Hemilright: Yeah, can you go back to your slide, And uncertainty please? calculating uncertainty, that would come from the stock assessment, and that would go to the SSC, or whatever bodv to calculate that scientific uncertainty. And the only way to get away from scientific uncertainty is better data.

And given that these are data poor stocks, I don't see no new data, or no new surveys, or money spent to reduce this scientific uncertainty. And I bring back to where the scientific uncertainty, there's buffers that are sometimes -- if you have a 500,000 or 600,000 pound quota that a third, to half can be eaten up in scientific uncertainty.

As long as you have MRIP as your standard bar of accounting, you can have one, or two fish produce 100,000 metric tons that could cause the recreational industry to exceed the OFL, and therefore the stock would be overfished. I mean we're treading down, the way I can see that the scientific uncertainty in the buffers, particularly placed on the recreational industry, given the methodology of accounting, could really have short seasons.

And also if you're giving a -- how are you going to calculate, if you're giving a 500,000 pound quota, or 250,000 pound quota for recs for a particular species, how are you going to calculate how long that season is, and what the bag limit's going to be because of the way the MRIP is, and the data that's produced? So, there is a lot that -- the last couple of years I've educated myself with these scientific uncertainties, and buffers, and I see a nightmare that's going to happen here potentially.

And I would tread very slowly. And something else to talk about, while we're talking about the shark stocks, and all that, heck, there ain't no commercial fishermen left to go fishing for them. So, I see the scientific uncertainty here, there's going to be nobody left willing to go harvest these sharks. So, I just see a need for a lot of data here, and I'm skeptical of the forward progress without a lot of data just based on my experience of the unknowns, calculated and how it's to produce these uncertainties.

You've got to have better data to reduce these uncertainties, and I don't see that data being put into a survey, or different calculations. Thank you.

Mr. Brooks: Thanks, Dewey. Karyl, or Guy, do you want to jump into that before I go to our last comment here?

Ms. Brewster-Geisz: I'll ask Enric to jump in, but I do want to point out to Dewey that this scientific uncertainty comes into play when we're setting the ABC, and the ABC is for all of the fishery, not just recreational. I think the uncertainty you're talking about with the recreational, and MRIP comes more under our HMS risk policy, and how much risk we're willing to take that those recreational estimates are incorrect. But Enric, do you want to jump in more on that?

Mr. Brooks: And let me just note we need to be getting to public comment fairly soon here. Go ahead, Enric.

Dr. Cortes: Yeah, to the point of Dewey's, the sigma encapsulates the level of uncertainty in the assessment, which is also a result of the uncertainty in the data streams. Because we're talking about data here, but what data? There are many types of data, right? As I said we have mostly the catches, which we know are uncertain, because we do have very good data on landings, but we have estimates of commercial discards.

And then as Dewey rightly points out, we have the very uncertain estimates coming from MRIP, but that's taken into account to some extent in the computation of the sigma. Then we have other types of data, which are much better. We have good biological data generally speaking. The indices of abundance, we have some that are based on -- that are fishery dependent, and we have others that are fishery independent.

We have data from states, from academics, they vary in quality, but we have that information, and we do have some landing compositions as well. So, not all data are bad, but of course, there is always uncertainty, especially in the catches, I totally agree with Dewey. But that's a situation that we've had with sharks forever, because the amount of money that was dedicated to research has always been limited.

But in general, this is our best attempt to try and incorporate that scientific uncertainty. Then there is the other issue, as Karyl was pointing out, your risk policy, which is added to that.

Mr. Brooks: Thanks, Enric. Let me just bring in our last AP member before we shift to public comment, Sonja Fordham.

Ms. Fordham: I just had a few remaining -- I just asked questions before, so just some general comments really quickly. I do appreciate that this presentation, and efforts that went into it, and the time that you're giving to explain it to us all. I just want to briefly flag, it's probably a conversation for

another day, but that the conservation community still does have considerable concern about the insufficient controls associated for prohibited species when the ACL is set to zero.

And is pretty much unbearably exceeded, what happens then? But I think that's for another day. In general, I would say that I'm encouraged by the concept of buffers, and that NOAA's taking such a close look at risk, and factoring uncertainty, I really appreciate that. I can't actually frankly say that it's going to be fishes for us yet but I do think as a general rule, this is important.

I don't need to state the obvious, but sharks do, in this world, represent the ultimate case for the precautionary approach, and we have plenty of depleted shark populations still after decades of management to demonstrate that fact. And I can't help but think that if we had taken the scientist warning to take a precautionary approach to really slow growing species like make sharks.

Back when they gave them more than ten years ago, perhaps we could have avoided the situation we have today that has caused so much division in the broader community. I also just quickly wanted to remark that I like that the U.S. is still practicing, or embracing this policy of 70-percent chance of success for most stocks, and I just want to point out that this came up in ICCAT negotiations.

And I've seen other countries sort of be led by the U.S. in this regard, U.K., and Norway come to mind, but I think that demonstrates U.S. leadership on the world stage, which I really like to see, and that will be good for the international situation for sharks. And then last is just that I would hope that this tier system can really work to encourage everybody to get together, and strive to get the data improvements that we need for greater certainty. And that leads to benefits all around. That's it, thanks very much.

Mr. Brooks: Thanks, Sonja. Thanks, everybody, for

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the good and helpful comments and discussion here. I think everyone probably could recite with me the themes that emerged in this conversation, because we kept coming back to them. This question of uncertainty, I think I'm hearing sort of an uneasy sort of interest in the direction that the agency is going here, and that having latitude is good, but that uncertainty is disquieting.

And that then leads to the second big thing, which is transparency, transparency, transparency. There's a lot still to be worked out, and how that's done, it's going to be meaningful understanding what the tiers -- how species are going to be assigned to tiers, the reference period, a number of these pieces, very, very strong interest in that conversation going forward in a way that is as transparent, and inclusive as possible, and building on expertise.

A couple other themes that came in, just a couple of comments around somehow folding climate change impacts into the agency's thinking around this, and then a little bit of conversation around -- I'm not necessarily pulling in the same direction as some comments around buffers are good, but maybe overdone, maybe too many layers of precaution as well, others saying actually these buffers are, and this precautionary approach is key, and essential. Lots of other bits, and pieces here, but I think those are the main things to me.

Public Comment

So, thanks everyone for the conversation. At this point I would like to go to public comment. I know we had at least one non-AP member who had raised their hand earlier, and so I invite that person, and anyone else who is in the mix here today, who is not an AP member, and would like to weigh in, this would be the moment to do it.

So, if you could just raise your virtual hand, I'll waive you in, and I'll just ask you to -- when we open the mic, just start off with your name, and

affiliation, just so we all know who we're hearing from, and just obviously limit remarks to a minute, or two just so we can hear from others who may want to weigh in.

So, let's go to John DePersenaire, and apologies if I didn't get that last name quite right. But if we can take John off mute, that would be great. And if you are on the phone, please press star three, that will also raise your hand. So, if you're on the phone, press star three. And John, you should be available to speak. No, you're still on mute. Okay, John, your mic should be open.

Mr. DePersenaire: Morning.

Mr. Brooks: Good morning, we've got you.

Mr. DePersenaire: Okay, sorry about that.

Mr. Brooks: No problem.

Mr. DePersenaire: John DePersenaire, the Recreational Fishing Alliance. Thank you for the opportunity to make some comments this morning. I have a question, and I had a comment as well. The question revolves around not including the prohibited species in Amendment 14, and I know that there's been quite a lot of discussion, and concern about the process on how species move on that list, and move off that list.

I was just wondering if you could provide a little background for me, because I know I've missed probably a lot of discussions on why those particular species were not included in Amendment 14. And I guess just to give a comment, since climate change has been brought up today, I think it's just interesting from our perspective, I'm in South Jersey, and so it does seem that, at least from our perspective here, that climate change is having an impact on species, and it really seems that some of the shark, and skate, and ray species are kind of winning out.

We have spinners off of New Jersey, which we typically did not, other than in late August, and early September, now it's really common to see them April through late November. And I was just talking to a person who gillnets out of Barnegat Light, who was catching cownose rays in January in his monkfish gear, which is really unusual as well, they're typically not here until late May.

So, it really does seem that a lot of the elasmobranchs are potentially displacing some of the bony fish that we've typically had in our waters, and it just seems like those species have started to dominate our shelf waters here. So, I think that is something to take into consideration. It's not always -- I'm just pointing out that it seems that some shark species, some ray species are thriving in climate change.

Perhaps changing their distribution, but they're thriving in areas they haven't been before. In terms of the other comment I have, it was just in regards to uncertainty, and accountability, and the data concerns on the recreational side, and it's -- we have some of these species that are so -- that are not allowed to be targeted, or caught by recreational anglers now, and it's just important to point out that MRIP, the B2 is the most unreliable data.

We do get the best information from harvest, and that's typically the most accurate information that comes out of MRIP. So, it's kind of interesting that we're in this dilemma where we find ourselves with greater regulations, and prohibitions on shark species, and then we get into this concern, and debate about uncertainty on the recreational side.

And it's really just because MRIP is very bad at capturing those B2s. So, it's just something to keep in mind, not necessarily the fault of the angler, it's just a consequence of both the survey itself, the survey design, and really the regulations, which force us to discard so many sharks. So, I would like

a response I guess to my first part of my comment there, that question about the prohibited species, and I'll go back on mute. Thank you.

Mr. Brooks: Thanks, John. And Karyl, and Guy, I'm going to defer to you. I know typically in public comment we don't do it as sort of a Q and A back, and forth, I don't see any of your hands up right now. So, I defer to you as to whether you want to answer now, or sort of retell to John directly afterwards.

Ms. Brewster-Geisz: (Speaking off microphone) -fully answer that question, most of the species that
are prohibited right now have been prohibited since
2000, some I want to say 1997, Rusty I'm sure will
correct me if I'm wrong. Those species -- we can
add additional species, and we can take species off
the prohibited species list as we follow certain
criteria.

We are not doing that in Amendment 14, Amendment 14 is purely to set up the approach in order to set up quotas for the species that can be harvested. The quotas for species that are prohibited, those are zero, we don't want anyone fishing for those species, the ACL is set equal to zero, we're just not going to change that in Amendment 14. Changing what species are on the prohibited species list would be a different rulemaking.

Mr. Brooks: Thanks, Karyl. I'm not seeing any other hands at this point from members of the public, and we are just coming at the time to adjourn. So, yeah, Karyl.

Ms. Brewster-Geisz: So, Jason Adriance had additional questions that he sent to us, so I'm wondering if we have just a few minutes, if he could ask his question to the AP, and then maybe have Enric jump in, and respond to it.

Mr. Brooks: You bet, we have just a few minutes. Jason?

Mr. Adriance: Sure, thanks. My question related to the discussion of uncertainty, and the historical pooling of uncertainty, and I think if I heard correctly, the idea was to use that. And if that historical pooling is over the course of the assessments for that species, my question is why would you want to use that in cases where we know methods used previously may have been grossly uncertain, and surveys, and assessment methods have improved?

Why would you want to pool that estimate of uncertainty from processes that we know may have been less certain in the past, in to factor that in? And I had a second question sort of related to that, which was is there anything -- I know HMS does not have an SSC, but is there anything that prevents HMS from using the information that comes out of the science center in determining these things to potentially run it by one, or two of the different council SSCs just to get some comments, and some potential advice.

As these SSCs have spent countless hours discussing ABC control rules. So, I had sent that in an email, I didn't mean for it to get answered here, but if you can, great, thank you.

Mr. Brooks: Thanks, Jason. Karyl, or Guy, if you want to hop in quickly?

Ms. Brewster-Geisz: I think we wanted Enric to answer the question.

Mr. Brooks: Sorry, Enric? And Enric, I'll just ask you to be as brief as you can, just because we are at time.

Dr. Cortes: Sure, I will try to answer that. So, ideally Dean would have given you a better, more informed answer, but essentially for this Ralston approach, which was used in the Pacific, we evaluated assessments within the last 20 years, SEDAR assessments, and just a little before SEDAR. So, all had relatively recent, and similar data in

assessment methodologies. I mean, I understand your point that things get better with time, that's true, probably more from a statistical methodological point of view.

And the indices of abundance that we use get longer, so they could be considered to have more information. So, but that actually could be taken into account in methodology by giving more weight to more recent assessments, if that's what you chose to do. But the idea is that you don't focus only on an assessment that in the next assessment you have completely different results, or different levels of uncertainty.

So, this pooling gets at that, it's getting the whole composite view of the stock through time. And so yeah, that's essentially the main issue with using this methodology, not focusing on a single assessment. And so the other thing, maybe Karyl wants to answer that, but I can tell you yeah, we don't have an SSC, but we get our data vetted through -- well first of all we joined the SEDAR process back in 2006, right?

So we go through the same level of scrutiny, and more because we have an AP, or an assessment panel that guides us through the process. All our assessments are CIE reviewed by the Center for Independent Experts, so it's vetted, and we also get the best scientific information available, vetted internally through NOAA. So, while we don't have an SSC, we have different levels of scrutiny.

And like I said, we have CIE reviews for everything that we do. So, it's not that the process is not vetted.

Mr. Brooks: Thanks, Enric. Karyl, did you want to add anything to that?

Ms. Brewster-Geisz: No, I think Enric did a great job, thank you.

Mr. Brooks: Thanks, Enric.

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Mr. Blankinship: If I can, I'd like to just add a little bit for context to build off of that. Enric mentioned the best scientific information available in the process, and I'll take this opportunity to remind the AP members, and others listening, that we've been talking about the Atlantic HMS Best Scientific Information Available Framework, and drafting that over the last little more than a year.

And presented on that at the last couple of APs, specifically in September of 2021, we had a presentation about that, and obtained input from the AP about the outline of the process we're considering, and developing, designating best scientific information available, and we'll be looking to finalize that plan soon, and communicating back with the AP further about that. Thanks.

Adjourn

Mr. Brooks: Thanks, Randy. Well, I was going to call you back in anyway, because just before we wrap up here, I just want to thank everyone for a good conversation today, and again we'll be getting back together in May, and those dates are May 18, the potential likely dates, not yet firm, but save May 18 through 20 on your calendars, and I'll just thank you all for participating. And Randy, any final words from you before we close up here?

Mr. Blankinship: Just to say, to add my thanks as well, and thank you to Guy, and Karyl, and Enric, and others from the Science Center that had joined us in the background that you all didn't see, and for their support in working on the supplemental amendment. Thank you, everybody, for your input. It is very valuable, and we're going to take it certainly into serious consideration along with the other public input that we get during the comment period. And with that, I wish everybody a happy Valentine's Day on Monday.

Mr. Brooks: Great. Thanks, everybody, and I look forward to seeing you in a couple of months. Take care, bye.

(Whereupon, the above-entitled matter went off the record at $10:51 \ a.m.$)