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National Oceanic and Atmospheric Administration
(NOAA)

National Marine Fisheries Service (NMFS)

Marine Fisheries Advisory Committee (MAFAC)

Meeting

Thursday

May 12, 2022

The Marine Fisheries Advisory Committee met in the Sheraton Old San Juan, 100 Brumbaugh Street, San Juan, Puerto Rico, at 9:00 a.m., Chair, presiding.

Members Present:

Megan Davis, Ph.D., Chair; Research Professor, Aquaculture, Florida Atlantic University, Harbor Branch Oceanographic Institute

Kellie Ralston, Vice Chair; Southeast Fisheries Policy Director, American Sportfishing Association

Sebastian Belle, Executive Director, Maine Aquaculture Association

Roger Berkowitz, President, Massachusetts Seafood Collaborative

Thomas Fote, Retired, Recreational Fisherman
Natasha Hayden, Vice President of Lands and Natural Resources, Afognak Native Corporation

Donna Kalez, Owner and Manager, Dana Wharf Sportfishing and Whale Watching

Sara McDonald, Ph.D., Director of Conservation, South Carolina Aquarium

Donald McMahon, III, President, Pensacola Bay Oyster Co., LLC, Pensacola Bay Oyster Hatchery, LLC, and TORCH (The Oyster Restoration Company and Hatchery)

Meredith Moore, Director, Fish Conservation Program at Ocean Conservancy

Stefanie Moreland, Director of Government Relations and Seafood Sustainability, Trident Seafoods

Linda Odierno, Fish and Seafood Development Specialist

Jocelyn Runnebaum, Ph.D., Fisheries Project Manager, The Nature Conservancy

Ervin "Joe" Schumacker, Marine Scientist, Quinault Department of Fisheries, Quinault Indian Nation

Sarah Schumann, Fisherman; Owner/Principal Consultant, Shining Seas Fisheries Consulting, LLC

Patrick Sullivan, Ph.D., Professor Emeritus, Department of Natural Resources, Cornell University

Clayward Tam, Cooperative Fisheries
Research Coordinator, Pacific Islands
Fisheries Group

Matthew Upton, Attorney, United States
Seafood

Brett Veerhusen, Principal, Ocean Strategies

NMFS Staff Present

Janet Coit, Assistant Administrator, National
Marine Fisheries Service and Acting
Deputy NOAA Administrator (ex officio
member)

Jennifer Lukens, Director, Office of Policy and
Designated Federal Officer

Paul Doremus, Ph.D., Deputy Assistant
Administrator for Operations

Russ Dunn, Senior Recreational Fisheries
Advisor

Jon Hare, Director of Scientific Programs and
Chief Science Advisory (Acting)

Heidi Lovett, Alternate Designated Federal
Officer

Gabriela McMurtry, Fishery Policy Analyst

Also Present

Nelson Crespo, Chair, Puerto Rico District
Advisory Panel

Carlos Farchette, Caribbean Fishery
Management Council Member

Marcos Hanke, Chair, Caribbean Fishery
Management Council

Julian Magras, Chair, St. Thomas District
Advisory Panel

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Proceedings

(9:03 a.m.)

Protected Resources Subcommittee

Dr. McDonald: Hi, everybody. Welcome to the PR Subcommittee meeting. It's a fluid committee. I think we have like five registered members, quote-unquote. But anyone's welcome to join and come and go as they please. I'm going to be talking to or updating you guys on the most recent project that we're working on, and this is a survey of constituents about marine mammal deterrents.

If you could go to the next slide, please. Next slide - - oh, thank you. So just a little bit of background. In August 2020, the agency created a proposed rule for guidelines on how to safely deter marine mammals from interacting either with your gear, whether it's fishing gear, aquaculture pens or your waterfront property like docks or boats, and what these -- what this proposed rule does or these proposed guidelines do is they provide protection from liability if there's a take that results, meaning any act of pursuit, torment or annoyance that has the potential to injure or harass a marine mammal or marine mammal stock.

So what this didn't do, however, so they proposed - - it had a whole huge suite of deterrents in this proposed rule, but what it didn't do is offer any guidance on how effective these deterrents were. So they're saying, yeah, we're going to give you a free pass and, you know, not prosecute you if you do any of these things, but we have no idea if any of these actually are effective, do they actually work. And so that was sort of the starting point for us.

Next slide, please. Sorry, I'm driving my own computer and it's not working.

So, our goal was really to help the agency prioritize where to begin testing the effectiveness of these deterrents, because there are so many deterrents

that it's too overwhelming to figure out. So we're trying to help them prioritize what should they be testing first.

And so Pat came up with this great idea of generating a severity index using information and through surveying various stakeholders. The severity index includes things like impact, economic impacts, as well as hey, have you tried something and does it work, did it work? So these are three different bins of stakeholder groups, but it's really technically five, you know. So it's commercial, recreational and tribal fishermen, aquaculture operators and waterfront property owners.

Next slide, please. So the first thing that we started doing, and this was I think like late, like early fall all the way through. It took a while to generate these survey questions, we wanted to make sure that the survey was efficient. We don't want to have, you know, a burdensome, long survey. A lot of the questions or the early questions are the same across groups.

So in developing the survey, you know, it's what region are you in, those kind of things, what seasons, you know, is there a seasonality component. So we generated the survey questions and we tried to hone them down a little bit, and then we created a survey form and there's a link. We're going to in a minute go through the survey together, as different user groups.

One of the main things is, you know, someone could be -- a respondent could represent multiple stakeholder groups. So the person could be, you know, a waterfront property owner and a recreational fishermen. So we wanted to make sure that they had the ability to take the survey from those two different perspectives.

Next slide please, and there's a lot on this slide. So we have a lot of next steps. One of the first things we need to do is beta test the survey, both internally and externally, possible have some focus

groups. The Paperwork Reduction Act requires -- there's a requirement if we're going to distribute the survey on behalf of the agency, we have to jump through kind of a considerable number of hoops in order to do that, and it's a lengthy process. Could be six months, could be longer.

So it's something that Pat and Heidi and I are going to be, we're going to be -- possibly Gabriela. I don't know if you're going to be involved with this too, but we have to meet with some folks within the agency who have done this before, and then talk to Office of Management and Budget, because they're the ones who are the keepers of this process. Yeah, Heidi.

Ms. Lovett: Do you want explain PRA or do you want me to explain it just a little bit, in case people are unfamiliar?

Dr. McDonald: I think it would be better if you explained it. Thank you.

Ms. Lovett: So PRA does stand for the Paperwork Reduction Act, and essentially it is -- it's a rule that's all agencies have to abide by. The goal is to not overly burden the public, the U.S. citizens, with questions and surveys from government agencies. So OMB manages any survey that goes out on behalf of a federal agency.

That federal agency has to go through an approval process at OMB, and you have to justify why is this survey important, how are you going to use the data. You have to verify that the questions you're asking are not asked in any other survey because then that would be considered a burden if we're asking the public for information two or three times.

So because even though the agency itself is not doing the survey and we didn't instruct MAFAC to do a survey, MAFAC members came up with this idea on their own to gather information about deterrents. We still need to -- because they're doing it on behalf of their work for the agency, we have to meet these

requirements. So I just didn't know. Does anybody have any questions about that? Sure Brett.

Mr. Veerhusen: Have you -- I've had the fortunate experience of learning a little about the Paperwork Reduction Act while falling asleep, and it's pretty cumbersome and time-consuming and staff-constraining. Is there a way that you could go around that with a citizen science project to latch on your questions with some other efforts that are happening, and just acknowledge that the results were gathered from any other entity and then used for the purposes of this?

Ms. Lovett: Yeah. So we, we went down the path of informing ourselves better about where, what if we were required to use PRA, and actually the agency NOAA is seeking sort of general approval for citizen science projects. I did meet with people who are involved in that and asked if this kind of effort could be considered a citizen science project.

It didn't seem to meet their bar, but we haven't -- I'm still going to be poking a little bit around and seeing. So just so you know also, I think everybody who was involved has already stepped off the committee or retired off after six years. But MAFAC did do a survey in about maybe eight years ago, and it fell under the category of customer service.

We were asking the public, MAFAC was asking the public how they use information that comes from NOAA related to climate and who do they trust and what kind of information they want, and we got 800 responses, and we did get PRA approval for that, because it was sort of fast-tracked because of this sort of blanket approval that NOAA has.

So I am still going to inquire if this can be considered citizen science, but at the moment they don't consider it.

Mr. Veerhusen: And will the -- were you able to gather results on that nationwide or only through the Gulf and the East Coast through the like disaster

declaration? Will you be able to gather a sample size that is indicative of the entire, the entire --

Ms. Lovett: At the time, MAFAC felt that it was pretty, it was broad-based, and we did ask for, you know, people identify what region they were from, and we had 800 respondents from around the country, including the West Pacific Islands, Alaska, Caribbean region, at least a few I think. So not necessarily --

It was more of a qualitative-related assessment that MAFAC did, but we had a Presidential Fellow at NOAA in the Office of Science and Technology who actually dug into the data a little bit more. So it was very useful and did pull out quantitative information from it.

Mr. Veerhusen: As usual, you're on it. Thank you.

Dr. McDonald: And Brett thank you for that question, because at our most recent meeting, we actually discussed your very question of hey, can we get other people to represent us to -- and then we decided -- we ended up deciding against that because we were a little concerned about bias of whoever is distributing that, and also that how you're reaching out.

Which is one of our steps is we're trying to figure out how to best stratify and randomly sample, so that we actually have -- we can statistically analyze the information. I'd say we, you know I mean Pat, but you know. You're a statistician so, but we -- so these are some things that -- so this is just like kind of a handful of some of the questions. We're trying to figure out how do we distribute and identify respondents. How much is it going to cost?

We're also wondering about how open and transparent is it going to be? In other words, is it going to be subject to FOIA? So we have, we also need to determine if this information exists elsewhere, which is part of that PRA process. So there are -- and you can see these others. So

there's a lot of next steps still.

But this is, this is sort of where we are now, and before I take this to the survey, I'm happy to answer any questions.

(No response.)

Dr. McDonald: I caught you guys after a late night, so this is awesome. Good for me. All right Kristin, if you wouldn't mind pulling up the survey. So I think if we could go through the survey as different stakeholders, and I'm happy to get -- I'm going to up actually the document so I can take notes. I'm happy to get your feedback on the questions, you know. So a lot of this process has just been creating the survey questions and refining them, and making sure they make sense, and that they're not too burdensome. Is there any way to zoom in on that?

(Pause.)

Dr. McDonald: This thing, this microphone keeps going off. Okay. So the first thing is this is, this is basically the permission to take the survey. So whenever you do survey research, you want to make -- you want to convey that, you know, you want to get the permission of the respondent, and you want to convey that everything is optional, you know.

Nothing's required, and that we're going to keep the answers confidential. We're going to keep your identity confidential as well. So that's what this preamble says, you know, and feel free to skip any questions you don't want to answer. Your responses are, you know, valuable and important and to proceed, click "I agree."

So if they don't agree, then the survey ends clearly. So Kristin, if you wouldn't mind choosing I agree. Joe.

Mr. Schumacker: You just mentioned potential FOIA problems, and in this one it says that it will be kept

confidential.

Dr. McDonald: Yeah. So the identity of the individual respondents, but not the results. So okay. So she clicks "I agree," yes, and then you hit "next." Okay, so also hard to see these. But in the little preamble it says "In the questions below, you can only check one box." This is -- we are constrained by Google Forms because it's free, and so you couldn't check multiple boxes and also there were certain constraints with the software.

So if you're a member of multiple sectors, please take one survey for each sector. So at the end of the survey, it's going to say "want to take it again," and it'll, it'll then take you back to the beginning. So who would you like to -- who would you guys want to be? Do you want --

(Off-microphone comment.)

Dr. McDonald: Sure, questions first.

Ms. Hayden: I've got a question. So did you guys consider having a preliminary question saying or along with this, after this do you -- would you consider yourself belonging to more than one of these sectors, and then you could lead it out by saying pick your primary sector. That way, people are aware because you can only do one this time.

Dr. McDonald: I think that's a good suggestion, but we're also -- so it's just like yin and yang and it's push and pull, like how many questions do we want to ask.

Ms. Hayden: I saw it says "Page 2 of 34," which is -
-

Dr. McDonald: No, no, no, it's -- but it's actually not, because there's all this skip logic. So again, I think I'm going to remove that page number down there. So let me, let me just note that. Thank you. Oh, thank you. Thank Donna. Donna's taking this from me, fantastic. Okay. So what do you guys

wants to be?

(Off-microphone comments.)

Dr. McDonald: Tribal, all right. So if you -- Kristin, if you wouldn't mind click "treaty/tribal fishing."

Ms. Moore: Can I ask a quick question?

Dr. McDonald: Sure.

Ms. Moore: I know you really don't want people to like IT check your survey, but could you not just make this like open entry and make it type in --

Dr. McDonald: No, you don't want to do that.

Ms. Moore: Okay.

Dr. McDonald: That is the last thing you want. You want to give people standardized answers as often as possible, so that was an easy one to answer. Okay, next. Okay.

Mr. Dunn: Can I make a comment or a question on that last -- if you go back one.

Dr. McDonald: Sure, let's go.

Mr. Dunn: So you have recreational and treaty/tribal, but you know yesterday that was a lot of conversation about sort of, I'll label it "non-commercial for lack of a better term." Do you want to add the phrase "non-commercial" or subsistence or something to broaden it out beyond just rec, commercial and tribal treaty?

Dr. McDonald: Charter we consider recreational so -
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(Off-microphone comment.)

Dr. McDonald: Okay.

Mr. Schumacker: This is Joe. I was --

Ms. Lovett: So these are all very good questions,

and I was just going to suggest to let Sara run through it, because she's giving the high level overview today, but the survey is not completely done and these kinds of comments, if you can write them down, we can go back to them. Or we can do it in subcommittee, only because we want to make sure she gets through it all and people kind of get a flavor of what the survey is going for. Is that all right with people?

Dr. McDonald: Yeah. I'm happy to share the link and we can in the next, we meet once a month, so in our next meeting we can discuss all of these questions. Yeah, or send them in to Heidi actually, and I'll -- Heidi, you can send out the link because I just sent it to you. Doug, did you --

(Off-microphone comment.)

Dr. McDonald: All right, love it. Okay. So in what region do you fish, check all that apply. So it's got the whole list. You can check multiple ones, and there's no problem with checking multiples. So since, since Natasha said "tribal," do we want to say Alaska, and our tribal representatives are Alaska and West Coast. Do we want to just check those two? It doesn't matter. Let's check Alaska and West Coast, or you could check all of them. Like it doesn't, yeah. It doesn't matter for this test.

Okay. So if you scroll down. All right. So what gears do you regularly use, and again you can check as many gears, and we tried to come up with as many as we could, and we do have an "Other" with an opportunity to type it in. So we have rod and reel, which includes bandits, handlines or hand-operated pull-in line, trolling hook and line, bottom longline, drifting longline, bottom trawl, net or surface of water, midwater surface trawl, traps, pots, drudge, purse seine, gillnet, other nets, and then Other.

This doesn't, you know, include hand instruments because assuming if you're using hand instruments marine mammals are not really interacting with your gear. So that's why hand implements are not

in there.

All right. So let's check just for grins, let's check traps and pots. Why not?

Participant: And bottom longline.

Dr. McDonald: And bottom longline. Okay, sure. Thank you. All right, so scroll down a little and it says "Where do you fish from?" Let's say shore and boat. Again, it's a "check all that apply." This is just all background information still.

This is just we're trying to figure out when the agency is going to be, when we want to help the agency prioritize what, what mitigation measures to test first, they really have to identify the gears that are being used that are interacting most with marine mammals and where this is occurring in the country because it's going to vary.

So what might be interaction with marine mammals in Alaska is not necessarily in the Southeast U.S. What's happening in the Caribbean is not necessarily what's happening in New England. So we want to make sure that we get the breadth of answers here.

So and this is like honestly, this isn't going to show you much. We're just, we're just, it's just I wanted to run through the questions. "Do you use bait?" Let's say yes, and that includes live and dead. But I think the next question will -- so this will trigger some skip logic, and so you can see here "What types of bait?" We have artificial, natural or other. So we have lures, squid fish, crustaceans, poultry or other, so let's do, let's do natural bait, yep.

And then here's the main thing. This question says "Have you had any encounters with marine mammals? For example, bycatch entanglement, depredation, close proximity, etcetera." If you click no here, you don't have to. If you click no here, it ends the survey right then and there, because we don't care.

But yeah. It's because we're really -- but it's good information to capture, because we want to know who's not interacting as well as who's interacting. That's why you have to go through those questions before you get to this question. So okay. So let's click yes, otherwise we're done.

And next, and then we have "If yes, how frequently, often, sometimes, rarely," and we went through these answers extensively, just FYI. I think we had five, we had seven, we had percentages, we had -- you name it, we've talked about it already, pretty sure. So how about "sometimes." Sometimes? Those Steller sea lions. All right, yeah.

(Off-microphone comments.)

Dr. McDonald: All right. So in the next one let's click "pinnipeds," and let's click tooth whales, and then there's the option of putting in Other, but there shouldn't really be another. Like manatees are not usually -- but they can, you know, but that's not under this agency's purview. So if they say manatees like interacting with their crab pots. Manatees do interact with crab pots, yeah. So that is my former life as a manatee biologist, I can tell you that.

Okay. So then if you know the exact species, you can list as many species as you want. If you know it's Steller sea lions, if you know it's, you know, potted whales or sperm whales or whatever. So we can just skip that for now.

(Off-microphone comment.)

Dr. McDonald: Oh, no, no, yeah. Delete that. So thank you for noting that. Some of this was from the form like before it was put into the survey format, and it was just in the Google doc. So thank you. Thank you for the edits. It's been a while since I've actually gone through this. "So in what seasons do you encounter marine mammals?"

Participant: All of them.

Dr. McDonald: All of them?

Participant: They're everywhere all of the time.

Dr. McDonald: Check all that apply. So let's check all four. So the severity index isn't going to help us run it down.

Participant: Take one out. Take --

Dr. McDonald: But if it's honest, like it is what it is.

Participant: Yeah.

Dr. McDonald: Yeah.

Participant: What's the time that you don't really fish around so --

Dr. McDonald: Do you fish in winter too?

Participant: Yeah.

Dr. McDonald: That sounds brutal.

(Off-microphone comments.)

Participant: I mean there's depending on the different species like the humpback whales are migratory, so they're coming through in the spring and then later in the fall when they're heading back south.

Dr. McDonald: For the example, just unclick winter for now. I mean this is just for an example. But also to get your feedback on like people are actually taking the survey. "Do you lose bait during these interactions?" Let's click yes, because then it will trigger another question about the bait loss. "If yes, please estimate how much bait is lost during the season. Almost half, not much, don't know, other." Just say half. And I'm just making this up.

Mr. Schumacker: FYI, folks: the people online can't hear us unless we're on the microphones.

Dr. McDonald: Oh, okay. Thank you. "Is your target

catch lost during these encounters."

Participant: Yes.

Dr. McDonald: Yes, all right. Let's click yes. Next. Estimate your loss of target catch. So this is, you know, we're trying to figure out like if somebody's like oh, not much and then there's another survey of a different gear type in the same region that says yeah, we're actually losing most, then that's going to help inform the severity index that we have not yet created.

So let's click most and next, and again this is -- "Is your target catch damaged," which is different than lost, right? So if it's like a chunk taken out of it versus it's completely missing. So if it's lost, it's likely also damaged. So let's just say yes, hit next. And then of course you have estimate the damage, almost, half, not much, don't know.

Mr. Veerhusen: And just, that might just confuse because once. Once there's a, you know, a bite taken out the side of a halibut, and you can't sell that. So lost and damage are the same.

Dr. McDonald: So we might want to combine those. We had -- I think we added damaged. We initially just had I think lost, lost and then if you -- but if you ask lost or damaged, it's kind of those double-barreled but doesn't really matter. So if you --

Ms. Hayden: Isn't it the same thing, because if you -- if it's damaged, you can't sell it so it's lost.

Dr. McDonald: Right.

Ms. Hayden: Similarly, you wouldn't want to eat it if it was -- if you were catching it for your own personal consumption. If it's got a big bite taken out of it, you're not going to try to salvage. Depending on the size of the fish I mean.

Participant: Depending on the --

Dr. McDonald: So I'm thinking then we should just

combine lost, just say "lost or damaged," because the end result is the same and it's still an unusable, unsellable product. Okay. Good to know, because that's one less question and I'm always looking for fewer questions. So let's just say half or damaged.

Next, and then you'll see -- because also have this in the aquaculture questions, so -- so we can make these more efficient. Have you lost your gear during these encounters? Yes. And then this is the same thing, "Has your gear been damaged versus lost?"

Participant: Yes.

Dr. McDonald: Yeah, and so those are two different things. "Do you lose fishing time when dealing with these encounters?" Yes. Next, and I know it says page 12 of 34 but it's really not, because we're almost done. "Approximately how much time per trip do you lose in dealing with marine mammal encounters?" It's most of the time, sometimes or rarely. It's just really -- we tried to keep it as simple as possible.

And we let someone -- Donna gave this to one of our captains, and he said it took him like five minutes, two minutes to take this.

Mr. Veerhusen: It's a great thing to just say up front is this, this survey will only take five minutes. We've learned that, because like six-seven is like max attention, and so it might get around that --.

Dr. McDonald: Thank you, yeah. I like that, thank you. So let's just say sometimes. It goes "How are you impacted? Check all that apply." You need to pull gear and change location. Sure, let's check that. Gear destruction, change that. "Did you have to modify your gear?" Sure, and then there's an option of adding more description, and then describe the economic or cultural loss.

So again, this is an optional question. In fact, all of these are optional, aside from like do you agree to take the survey? It's pretty much a requirement. So

cultural loss is, you know, this is part of your cultural heritage and your traditions and if you're unable to fish or you're unable to support your family or support your community, and I'm now probably misrepresenting, so I'll let you guys --

Mr. Schumacker: Donnie, that would apply also to I think any subsistence fishing. If you know, subsistence fishing is kind of a cultural heritage type of thing and supports people. So lost use of subsistence fishing because of this depredation would be considered a cultural loss in many of our minds.

Ms. Hayden: So from a different perspective, growing up in Kodiak when we would do our subsistence fishing for salmon, one of the biggest issues that we would have is seal. Seals eating our salmon or chasing our salmon, and we would -- we'd shoot them and take them home and harvest and distribute the meat.

And so this is -- I really appreciate the survey. This is not really looking to integrate that perspective of interactions with mammals. But I just want to bring that up, because that's prevalent coast-wide around Alaska, that if -- I mean it's not -- we wouldn't stop fishing because we're having, you know, competition from a predator species. We would, if we had an opportunity, we would harvest that species and then we would consume it, and then we would also take every part of that animal and utilize it for different purposes.

And so, again, I know that that's not what you're trying to get at for the survey, but I think that you should just be aware of, that that's a coast-wide circumstances around Alaska. Also, I think it's good information for the agency to know.

Dr. McDonald: Thanks.

Ms. Hayden: I mean I don't want to horrify my colleagues, but it's one of these things where it's like well, what do you take when I'm gillnetting? I

take my gillnet and I take my gun. So you know, because it's part of what we do to provide for our families and communities.

Mr. Schumacker: The treaty tribes in Washington have been working with NOAA on a deterrence policy for some time now, that kind of coordinates with NOAA protected resources and MMPA and all that good stuff, and we have the exact same issues. So just be aware.

Ms. Hayden: Yeah, thanks, and I actually don't want to refer to them as issues. I would like to refer to them as this is -- this is part of -- I'm trying to think of a different, better word than issues. It's part of the process of harvesting and interacting with a resource.

Mr. Schumacker: But it would seem --

Dr. McDonald: So Natasha, you're talking about tribal harvesting, like right. Okay, so oh we're on tribal. Okay, got it.

Ms. Hayden: Yeah.

Dr. McDonald: So this would go under the tribal category when we're, you know, creating this matrix or whatever we're going to be creating, the severity index. So if you click next, have you tried to deter or reduce encounters, and let's just click yes, because this is like the longest form in the survey we'll be taking. A lot of people might not have tried to reduce or deter marine mammals.

"Please describe the devices or methods you use." Okay, so shooting is one. But we're not going -- you don't have to" --

Ms. Hayden: I've also used a grappling hook.

Dr. McDonald: Grappling, so and have those -- in the case of shooting, I would say it's probably been quite successful. So you can click yes. But usually shooting is not -- aside from tribal, it's not legal. It's

actually not legal, so this is -- this is very context-specific, this example.

So and you know, I anticipate we're going to get a lot of like yeah, it's not super-effective. Effectiveness. "Please estimate the effectiveness." So clearly shooting is very effective, but there might be some that they say is rarely effective or I don't know.

Participant: Keep going.

Dr. McDonald: Oh, sorry, no. She had to click next. Sorry, I clicked next online, because I keep forgetting I'm not driving. So let's click very effective. Click next. So this one they wouldn't have to test, right? No shooting is probably not going to deter marine mammals from interacting with their gear.

"Have you modified your gear to reduce the interactions with marine mammals?" So let's say yes. We are getting to the end, I promise. Next. "Please describe the devices or methods of" you know, and then I need to take out that parentheses. Otherwise, please skip. If you don't feel like -- you know, it's again you don't have to answer that. "Have those gear modifications been successful for fishing or otherwise? Otherwise, please skip."

I don't know why there's two question marks there, so there's some editing to be done. So let's click -- let's click yes, and then click next and it's going to go to how effective. Let's just say "rarely effective" and then click next. Do you have any ideas for gear modification or deterrence to safely --

So this is, this is soliciting like hey, do you have any creative solutions? If you say "yes," it's going to just ask you to describe those. So again, we're taking the long form survey, so let's click yes. Click next, and then it's an open-ended. Please describe your ideas, and then also "What do you think the estimated cost would be to implement? Would you be willing to test them out?"

So let's say yes, for the test-out, because then it's going to ask for your information. So this is the only time we ask for your information. Otherwise, it's an anonymous survey, that if you are saying yeah, I'd like to test, then we ask can we follow up with you. So next. And then if you hit yes to that, so it's really several steps to get your permission to get your personal information. Otherwise, you're completely anonymous.

And hit next. Then it's "Please provide your contact info," and see we're at 34/34, but we did not go through 34 pages, I promise. Hit submit, and then you can see that it says "Thank you for taking time to respond to the survey. Your responses have been recorded." And then in the blue, it says "submit another response."

So that would be if you were taking it again, let's say as a property owner, something like that. So that's the long form of the survey. It didn't -- even with discussion, it didn't take us that long. So it's really about a five minute survey I would say, and especially because we're going to -- we're going to eliminate at least one question. We're going to combine the damage and destruction of target species.

So anyway, that's it. It's very similar for the other, other -- I want to be conscious of time, because I know that we want to try and end this discussion a little early. But happy to go through it as a different stakeholder group if you guys want to see like what does it look like for waterfront property owners, or if you guys have any questions or comments or discussion points now, we can -- we can do that, and then if there's time we can go through it quickly. Tom.

Mr. Fote: Yeah, I think we -- if you go through the recreational, you will basically see it handles charter boats and regular recreational anglers pretty well, without doing a separate category, because the questions we're asking they both have the same

interaction. So we really don't need it. So I was waiting to say that after we looked, went through the process.

Dr. McDonald: Thanks Tom. I forgot about that. You can tell it's been a while since I looked at this. Any other comments or questions?

Mr. McMahon: Yeah, I have a question.

Ms. Lovett: Microphone.

Mr. McMahon: Would it be hard to ask the question would you like a copy of this survey at the end?

Dr. McDonald: The results or the actual questions?

Mr. McMahon: Results, the results, what the survey --

Dr. McDonald: Yeah. We could definitely ask that. Would you like to receive a copy of the results or the final product, instead of the results, the actual kind of analysis.

Mr. McMahon: If I was going to take the time to take the survey, I'd sure like to see what the --

Dr. McDonald: The results were?

Mr. McMahon: Yeah.

Dr. McDonald: Would you prefer like just overall results, or would you prefer the actual severity index, like the product?

Mr. McMahon: I don't know.

(Off-microphone comments.)

Mr. McMahon: Whatever your analysis is from that, because the more I think about this it's a big issue, especially in the Gulf of Mexico. Dolphin are just trying to follow you around, and they come take all your snapper.

(Off-microphone comments.)

Mr. McMahon: He shot a dolphin that was following the boat. Got upset and you can't do that.

Ms. Hayden: All right. For the record, I don't -- we don't shot dolphins.

Mr. McMahon: Oh seals, sorry.

Mr. Veerhusen: I think that Donnie has a good suggestion because it's a good way to keep people engaged. If you ever want to follow back up with that. Just we did some COVID surveys of fishermen on the West Coast and sent them sort of like the results, just what was overall and just thank them.

I don't know if you're gathering and asking people if they want to include their contact information to opt-in for future communications, so that we can access them again since they're engaged. But it's a great way to follow up, and I think it will be really interesting. This is a really great survey. I think everybody can kind of relate to different regions, so well done.

Dr. McDonald: Thanks. So we would have to ask for their contact information. If you would like to receive a copy of the survey results, please provide your contact information here, because we're keeping this anonymous.

We want to make sure that the -- and the survey results will be aggregated. So you wouldn't see your particular results. You would see the analysis of all the results together of like oh, in the Gulf of Mexico, here are the trends.

In Alaska, you know, for tribal fisheries, here are the trends and, you know, New England recreational fishing, here are the trends. So it's going to be like, you know, the analyses likely will be by user, you know, user group or stakeholder group, and then gear and species and types of marine mammal interactions. Tom.

Mr. Fote: After dealing with a lot of the anglers from

Florida and listening to their conversations in the last year and a half to two years about sharks, I'll probably pass this on to the HMS because they're going to have the same problem, what do we do with the shark interactions and they're basically destroying charter boats and party boats in the private sector from harvesting certain fish anymore, and it's just so prevalent about eating them.

And again, guns might come out and that's the problem. We really need to get ahead of the curve, and I would recommend this with HMS.

Dr. McDonald: Feel free to recommend it. This is specifically for the Marine Mammal Protection Act and the guidelines that the agency put forward on deterrence, and the lack of information on how effective any of these deterrents are, so that they could focus on prioritizing which deterrence methods they should be doing some scientific field tests with. So but feel free to use this for your shark folks.

Mr. Fote: We don't have this problem with the Northeast, but when I was down at a couple of meetings with recreational anglers, especially when they're from Florida, I just hear it constantly and they're looking -- and these are big manufacturers also because I was at an ASA meeting so --

Dr. McDonald: So any other questions, comments? Any desire to go through it as a different user group? Are you guys feeling okay? And you can always at any time email me or Heidi with any -- Heidi's going to send out the link to the survey. I know that there's some typos. Donna's been taking notes, so I know there's sort of -- Donna's been taking great notes, and so it should be -- and we do have monthly calls.

I can't remember. It's like the second Friday of the month at like 1:00 p.m. East Coast time I think. So happy to have you join us. Joe.

Mr. Schumacker: Yeah. Just to comment, you know,

that a lot of the work done by the committee and subcommittee was working with Pat, who as an analysis guy really had to make this work for creating data that could be analyzed and summarized properly to get some meaningful, something meaningful out of it.

So going through all these different trains might be a little confusing for folks in some of the ways they were done. I just wanted to say that we have put a lot of thought into that as we went forward, things like sometimes, never and all that stuff, you know, mentioned. So that's --

Ms. Lovett: So actually today's Thursday, right? Tomorrow is the second Friday of the month and it's on the calendar. I didn't realize because my calendar's littered with all of your flights. It gets put on my own calendar. Don't ask why. So maybe we want to potentially shift that to next Friday just for this month, and then we can invite other people to come and -- because I think a lot of people will be traveling tomorrow.

Dr. McDonald: Yes, and myself included.

Ms. Lovett: Right.

Dr. McDonald: So next Friday, I --

Ms. Lovett: Or the following.

Dr. McDonald: I can do 1:00 p.m. next Friday, and so if you guys want to look at your calendars, and I can do 1:00 p.m. on the 27th, so folks that have been in the meetings and new folks that might want to join this subcommittee. Would you like to take a moment and look at your calendar for next Friday? 1:00 p.m. East Coast time, 10:00 a.m. Pacific, and I don't know what the Alaska time zone is.

Participant: One more hour back.

Dr. McDonald: One more hour, right. It's 9:00 a.m. Alaska time. That sounds like a lot more --

(Off-microphone comments.)

Dr. McDonald: Yeah. So people, obviously people don't make every single subcommittee meeting, but they do when they can if they're on that subcommittee, and we try to adjust, you know, meetings to meet needs of the members. But at the front end of this work, the subcommittee thought at least having an on the books meeting every month was good to help keep the project moving forward, and occasionally there's more than one meeting a month.

So it's up to the subcommittee sort of to determine its own schedule. I just wanted to make sure new members were aware of sort of operations, how that happens. 27th works for me.

Ms. Lovett: So the last Friday of the month has been the Recreational Fishery Subcommittee standing meeting, right Donna?

(Off-microphone comments.)

Dr. McDonald: Sure, yeah. That could be two o'clock on the 27th. Ten for you, 1:00 p.m., uh-huh. Two p.m./11:00 a.m. works for me/10:00 a.m.

Ms. Lovett: So we'll move this month's meeting, and just because of we're all meeting, and any member of the full committee that would like to be getting email and information and calendar holds related to the Protected Resources Subcommittee, this is their primary project.

There are other aspects to it, including you know sort of field testing the survey with people, and there's going to be writing work related to submitting a PRA proposal, and learning what other -- I believe there's some new things we have to do for PRA. So anyway, all of that will be part of the effort of the committee with staff help.

Dr. McDonald: So thank you guys for any -- well before I say "thank you," any other questions,

comments. Pat, you've been so quiet.

Dr. Sullivan: I'm good. The design seems okay to me, so it's the questions you want to have ironed out, right?

Dr. McDonald: Yeah. So please play with the survey in the interim for anyone who's planning on attending the meeting, so we can talk a little bit more about like are there other questions we can eliminate? Is there wording that we can change to make it more efficient? We want to make it as easy as possible.

We did go through it kind of slowly, and we did take the longest route. But if you do it on your own, I think -- and time yourselves and let me know. Like oh actually it took me ten minutes, it didn't take me five minutes, so that we can think about what held you up. And then Pat and I have some homework with Heidi, et al., and we do have a lot to talk about and think about as far as how do we want to sample.

We can, if we do go for the PRA, we are allowed to discuss the survey and sample it or focus group with nine people from each stakeholder group. So that's 45 people essentially that can give us some feedback, some preliminary feedback.

So think about maybe how do we want to do those other conferences or workshops or something that we would like to do this, you know, in a group setting, or would you just want to approach people, nine people individually or we each take, you know, a couple of people and approach them that way.

So these are things to think about before our next meeting, while we try and figure out what, you know, how to handle the survey questions and the quality. So those are the few things, and then Pat, Heidi and I will work on the PRA next steps, sort of talking with the agency staff on the PRA authorization and what those next steps look like.

All right. So now, anything else? Roger's suggesting his microphone but I hope, okay, all right. Well thank you all so much for your attention. I appreciate it, and I appreciate your time during this morning. I know the first one after dinner last night was a little rough, so thanks everybody and I'll hand it over to Megan and the next group.

(Applause.)

Chair Davis: Thanks so much, Sara, and to the working group on this. I've been fortunate to be able to sit in and contribute along the way, and it's just been a really great process to see the survey come together. It's really a great working survey and we look forward to the time that we can put it out and actually start to use it. So thank you all for that, and thank you Sara.

So it's 9:50 now, and there's a few things that we want to try to cover and through the rest of the morning until 11:30. So I just want to kind of lay it out. Right now, we're not in full MAFAC Committee. We're in the working groups, so there are a couple, a couple not at the table, Matt and Jocelyn. But I think everybody else is here. Is that right? Okay.

I think what we should do, Joe and Roger, is go ahead and move into the Working Group on the Fisheries and Seafood Working Group Workforce Development, and then leave some time, like about 15 minutes before 11:00 to discuss a proposed resolution regarding offshore wind. That way, we can get our work done and then -- and then at eleven o'clock we will take action on the recommendations.

But I also want to talk about a couple of new working groups that came up instead of do a summary, so that we can have that in mind as we leave the meeting and continue to do our work in between the meetings. So any thoughts on that, any questions on that? Yes Tom.

Mr. Fote: I think a couple of us are going for one

o'clock flights, so we'll be leaving after 11:00. I know Roger is, I am and --

Chair Davis: Okay. I don't think we can take final action on the workforce development until 11:00, when Matt, you know, Jocelyn are not here. Is that right Jennifer?

Ms. Lukens: Heidi. Have you been listening? I know you're multi-tasking. So can we move that before 11:00 if we need to, and I think if we can track down Matt and Jocelyn and let me know that, and see if they can get there before 11:00.

Ms. Lovett: What we're moving before 11:00 is the resolution --

Ms. Lukens: The document.

Ms. Lovett: The resolution that's been shared previously with everyone; correct?

Chair Davis: So it's the final action on recommendations for --

Ms. Lovett: The workforce. Right, okay.

Chair Davis: Uh-huh, uh-huh. Okay. So if we can move through that, that would be great. So why don't we start with that Roger and Joe, start with the work of the working group and the recommendations, and we'll flow from there.

Mr. Berkowitz: Okay. Well, we'll go through it fairly quickly. Actually, I was tempted to lead off with a Chuck Norris joke, but statistically I didn't think it would go over. So I will defer to Pat if you want to -

-

Dr. Sullivan: The Chuck Norris joke?

Mr. Berkowitz: Yeah.

Dr. Sullivan: Yeah, okay. Why does Chuck Norris leave the light on at night? It's not because Chuck Norris is afraid of the dark; it's because the dark is

afraid of Chuck Norris. I have a million of them by the way.

Mr. Berkowitz: If we start to falter, feel free to jump in. So what we did and, you know, the workforce training group was made up of Sebastian, Tom, Megan, Robert, Stefanie, Pat, Richard, Joe, and myself, and we took a look at the building resilience in the seafood sector in the initial outline and the work plan, and we focused primarily, of course, on workforce development.

We looked at the changing needs as a result of, you know, the graying of the fleet, aquaculture, warming of the waters, the global warming, and then we kind of drilled down on the opportunities. We had a series of panels that I think were very informative. Sebastian led on one on aquaculture. We had Thor Larsen who did the ocean clusters at the Reykjavik. You know, we talked about apprentice programs that were taking place in Alaska and I think Chuck did something on the Sea Grant Program, very informative.

You know, we sort of put everything together and came up with a draft, and Joe, would you kind of lead us through that?

Mr. Schumacker: Yeah, going to hand it off to me. All right. Thanks, Roger. Thanks a lot. Yeah, and so that -- there was a big, broad range of subjects involving seafood resilience in the seafood community, and we as Roger said, we concentrated on workforce development.

So we came up with this draft of recommendations from MAFAC for your review and for the entire Committee's review of course, but also for folks' input today obviously if we can get it in time. But the idea being that we want to put something that will help NOAA Fisheries in their efforts to -- in what they're doing out there right now for workforce development.

We kind of initially had a frame. We had a couple of

sideboards on this initially, where it said hey, what if NOAA had a million dollars to go out there right now and initiate some programs for workforce development in communities? Which is not a lot of money, but you know, at least it gives you something to kind of frame this with.

So that kind of started our initial thinking on this. But then the million dollars didn't show up, but that's another story. So basically that was kind of the idea behind some of the recommendations that we're putting forth today. This document basically has some background including NOAA's mission statement, and if we could scroll down below background there. Thank you.

And then NOAA has done an exemplary job to date of working with, working with and managing U.S. fisheries, fostering aquaculture, which in turn supports coastal communities and businesses, etcetera. In the next paragraph "These challenges continue today, but in 2020 our coastal communities' economies and NOAA operations face new trials when the COVID-19 brought different complexities to commercial fishing, aquaculture, seafood consumption, etcetera."

So we kind of used the COVID-19 lens to really help focus on these issues. It really shined a light on so many of them, and they were existing already to some degree, but COVID really brought them out. So you'll see that as we go through this program. And like so many other U.S. industries, "the seafood sector has immediate needs to regain its pre-pandemic status and to meet its long-term challenges.

"And an essential step towards alleviating these problems will be fostering meaningful and robust workforce development programs." I'm at the top of the second page now. Sorry, I'm skipping through this rather quickly, but I'm trying to save everybody some time here to get to your planes. There we go, thank you.

In MAFAC, "an essential step towards these will be fostering meaningful and robust workforce development programs sponsored by the Department of Commerce and NOAA Fisheries. MAFAC has sought information and examples from a variety of regions in the U.S. on successful WFD efforts that include needs assessments, education, training, innovation and business support."

I want to say before we go into these recommendations here that we felt that the needs assessment was the critical first piece of all of this obviously. In order to focus these efforts properly and efficiently, especially in the varied regions of the U.S., we need to get out there and really establish what are the needs of the various locales.

So with that, we have the recommendations below, and many of these are what NOAA knows already, but we're helping to amplify their voice is the idea here behind the MAFAC recommendations. MAFAC recommends to NOAA Fisheries and the Sec of Commerce that the following items be addressed with a needs assessment being the first step.

And as you can see we have a bullet there for needs assessment. "NOAA should employ its regional assets, including the National Sea Grant Extension Program, to conduct local needs assessments of coastal communities that fish wild stock and grow aquaculture and seafood across the U.S. and its territories, the needs for sustaining and improving the seafood sector success very widely. NOAA will benefit from local on-the-ground expertise to determine what gaps and needs exist."

So that's Step 1, and we really feel that maybe that needs to be called out more as a first step that needs to put on this. But it's right up there at this point, and we put it in the preamble that it should be the first step.

"Training programs. Based on that assessment, NOAA -- the needs assessment, NOAA should build upon and support education and training programs

initiated by Sea Grant, academia, industry and other regional groups that directly address seafood, wild fisheries and aquaculture, industry needs and jobs.

"Education, training and apprenticeships must be tied to local community-based needs, while also expanding regional opportunities where possible.

"Potential retraining needs. NOAA should address the concerns of workforce displacement from changes that may occur from coastal development such as offshore wind, changes to working waterfront infrastructure and fishery regulations, and environmental changes due to climate change." There's a number of other things that could be listed there, but those are some of the big, big things right now.

Workforce and Business Development. This is really -- it's more than just that bullet header. "Many of the nation's fisheries are based in remote, underserved communities that have specific needs for workforce and business development. NOAA should expand its efforts to support community needs beyond just the major points of waterfronts and address workforce and seafood sector needs in underserved areas."

So I think this, this might be -- this is focused more on the underserved communities in that section.

"Science-based management. NOAA should continue to strengthen and improve its science-based management of stocks, fishery stocks. Incorporating new methods and technologies will serve to minimize gaps and improve fisheries science to support sustainable fisheries. COVID pandemic caused unprecedented challenges to those stock assessments and highlighted the vulnerability of dependence on large ship assessments for management," and we heard some good discussion on that from our NOMs. Lovett: representatives here over the last couple of days.

"Coastal and marine aquaculture expansion. NOAA

should continue and strengthen support for those coastal marine aquaculture. Opportunities areas, Aquaculture Opportunity Areas are a good step, but more can be done. Support innovation and reduce the red tape that limits growth of this needed part of the seafood industry. With aquaculture comes jobs, domestic product and diversified incomes for coastal communities."

Under-utilized species, and a lot of these came from -- these topics came from the presentations that this Subcommittee got from various groups around the nation. "NOAA should boldly support innovations in seafood harvesting. Sustainable fisheries for under-utilized species and innovative methods of processing and marketing them should be supported in order to diversify and expand seafood industries in coastal communities."

There's efforts going on in this regard in numerous areas currently, but we're just underlining this need.

"Product utilization. NOAA should boldly support innovation in the utilization of harvested and aquaculture seafood products where feasible in the innovations in particular. In many cases, new innovative uses have been found for 'seafood waste,' that expands the value of the product and opens new markets and business opportunities.

"Using the entire product may offset the limitations in fisheries caused by low abundance or low fishing accessibility, while creating new opportunities and jobs for those affected by decreasing fisheries."

Finally, Aging Infrastructure. "Commerce and NOAA Fisheries must address the aging infrastructure needs of the seafood industry. This recommendation includes fishing port infrastructure, transport and shipping to and from ports, processing facilities including refrigeration and storage, aging vessels, high-speed internet and other needs that could revitalize communities and industries for the next decades."

I went through all of those because those are the main points of this. These are the recommendations, and I'd really welcome discussion today on these. The appendix below just basically lists out the different informational panels that were presented to the Subcommittee over the period, virtually over a long period of time here.

This was done virtually. It was a very difficult process in that regard, but we got her done. Then we also, we have some other informational panels at the bottom. So that's the basic document as it stands right now. We're looking input today from the group, the Subcommittee and others, and then potentially final action on sending this forward today at 11:00. Madam Chair or after 11:00?

Chair Davis: We can actually proceed with the final action earlier than 11:00, because all of MAFAC's here. So we can -- we can have discussion and then we can wait, do a motion and we can do that all within, within the timeframe.

Mr. Schumacker: Hey, that sounds efficient.

Chair Davis: I know, right.

Mr. Schumacker: So I'd like to defer to my co-chair, Roger Berkowitz, if you have any other comments on this, and to open the floor.

Mr. Berkowitz: Yeah. No, I think it was fine and we welcome your input, to see if we've missed anything or can adjust something.

Chair Davis: You have Donnie there.

Mr. Berkowitz: Do you want me to call or do you --

Chair Davis: You can. Either way, Roger.

Mr. Berkowitz: Okay, all right. Donnie, you're up.

Mr. McMahon: Yeah, thank you. Excellent work. Very complex and you drilled it down. But I was talking to a lot of new members, and they're not

aware of what the Sea Grant arm of NOAA does, and maybe you could kind of explain that and how that ties in with what we're trying to do.

Mr. Berkowitz: One of the things -- there's great knowledge there and a lot of programs that we didn't know existed in different parts of the country. So one of the things that Joe and I realized and the rest of the group realized, if we took sort of the best practices instead of going out and trying to reinvent the wheel.

You know, let's say there was a great program, I think a mentorship program in Alaska, you know, for boat captains that why couldn't we use that as a template, you know, in other parts of the country where there was, you know, lack of you know, you know, boat captains out there? There were some aquaculture programs out there that Sebastian talked about.

So again, rather than reinvent the wheel, let's -- let's take some of those programs and put them into effect. So I think that's, you know, it's sort of best practices I think was one of the things we were left with.

Mr. Schumacker: Importantly, Sea Grant programs and the funding mechanisms behind all these programs are so siloed I get them confused. But the big thing about Sea Grant is it's boots on the ground out there in the communities. They're in regional offices throughout the U.S. and its territories.

And they really have people that go out and work with coastal fishing communities. They're involved with just about all aspects of it, from ecosystem management to sustainable fisheries, resilient communities, environmental literacy, you name it. They've got it all. So a very, very strong organization that we work with extensively out in my neck of the woods, and I think a lot of our members do as well.

Mr. Berkowitz: Tom.

Mr. Fote: I just wanted to say, you know, after doing this for about 40 years, it was interesting sitting on these panels that I learned a lot. I mean it's always interesting what you don't know when you basically sit through here, and it was really a great experience. That's why I say if you want to get involve and learn a lot, get on some of these subcommittees.

Mr. Berkowitz: Very true. I think one of the things that, you know, kind of impressed a lot of us is what's happening with these ocean clusters, and the fact that you can take a cod as an example, and it's worth far more the side-stream businesses, whether it be skin from the cod or the bones from the cod and be worth many times more than what you would get for the full thing, you know, if you will. So I thought that was -- Kellie.

Vice Chair Ralston: Thank you Roger. I want to commend your group on putting together a really great document. I participated in some of the early developmental conversations and just feel like you've put together some great areas to focus on. I think because it's so good, I think there's an opportunity to actually expand this to kind of multiple areas in addition to seafood and aquaculture.

I was wondering if you would consider adding recreational, particularly to training programs and workforce and business development, because I think there's really broad applicability there because of your good work.

Mr. Berkowitz: Yeah. I think that makes sense Joe.

Mr. Schumacker: Absolutely.

Vice Chair Ralston: Thank you.

Mr. Schumacker: No hesitation on that.

Mr. Berkowitz: Good, good. Coming down the line here, Jocelyn.

Dr. Runnebaum: Yeah, thank you. I think I wanted to raise two points. I enjoyed going through this, so thanks for letting us have the opportunity to comment. Yesterday when we heard from the Caribbean Council members, the idea of a 4-H equivalent for fisheries came up, and I think Sea Grant might be a good route to think about that type of opportunity.

But the Eastern Maine Skippers Program, that's run by Maine Center for Coastal Fisheries, I think, is a really nice example of getting high school students thinking about business practices, engagement in management and operationalizing their businesses.

The other thing that I wanted to comment on is the aquaculture section. I was really hoping to see a little bit more focus on the sustainable development of aquaculture. I think focusing on just expanding aquaculture is, has some danger in that there's carrying capacity of the ecosystems, and they have -- depending on the type of aquaculture, it can have some pretty significant impacts if not done right.

But I do think it's a really critical part of our seafood sector, and so I would like to really focus on sustainable development of aquaculture. We say it for fisheries, and I think it's important to say it for aquaculture.

Mr. Berkowitz: Okay, good point. We should probably get Sebastian's, you know, thoughts on that now. He's president, I think, of the American Aquaculture Association, so he would have something to say about that.

Mr. Schumacker: About sustainable, responsible aquaculture?

Dr. Runnebaum: I have some language that I would be willing to offer for a suggestion.

Mr. Schumacker: Okay. Do we have anybody online there?

Mr. Belle: I'm here.

Mr. Berkowitz: Hi Sebastian.

Mr. Belle: So we covered everybody. No, I think, I think it makes sense to add some modifying language there. I think the only thing that we probably don't want to do is, at least in my mind, to comment on specific production methods or techniques. That would probably be difficult to do.

Dr. Runnebaum: Yeah. Sebastian, I totally agree. I don't think that's the role of this document. I think just even commenting. I guess my question for you is would you be comfortable with sort of indicating that certain types of aquaculture can have benefits for the ecosystem? That might be getting a little bit closer to what you just said, so I'll let you contemplate that.

Mr. Belle: Yeah. You know, I think at least most people in the field come out by saying, you know, every form of aquaculture has impacts, just like everything that we do as human beings, and that the responsibility of the sector is to acknowledge those impacts and work on minimizing them.

So that's kind of our working definition of sustainability if you will from a sector point of view. I think there is a somewhat widely held misconception that some forms of aquaculture don't have impacts, and I think, you know, the science just doesn't back that up. Every form of aquaculture has some form of impact, and we've got to focus on what those impacts are and try to reduce them.

Mr. Schumacker: Thanks, Sebastian.

Mr. Berkowitz: Okay, thank you.

Mr. Schumacker: I'll take a look at that language if you can share that with us. Thank you.

Dr. Runnebaum: Great, thank you.

Mr. Upton: Thanks for all the work that went into

this. I guess I feel really conflicted about workforce development, and I think part of the reason for that is that I hire the people that work on the boats, I mentioned. You know, it's a really difficult time to be a trawler in Alaska right now, and I just see a lot of regulatory uncertainty. When I first started on board the vessels maybe 11 years ago, we had five boats. Now we're down to two boats.

A lot of the guys basically it's better for them to work construction, to work on our vessels or to go work on ferries. And so I think it's really important that we're doing these steps, but I just really -- I sometimes lose sleep when someone's coming and saying hey, I just got a job on land, but I really love fishing, and I just tell them that you've really got to be excited about this, because it's really a difficult time at least in the Alaska trawl fisheries.

And so I just think that it's important that we're doing this work, but also I mean between the Steller sea lion restrictions, tariffs and repeated bycatch cuts, you just see the industry that I'm involved in just kind of going like this. And so for young people, I really struggle when I tell them hey, this is a good use of your time. It's what I love to do and I'm in for the long term.

My family's been doing this for generations, but I really don't sugarcoat it to people coming into it, and I know other fisheries have their similar version of this story. It's a difficult time, but I think this is important work.

But there's other parts of the regulatory environment that are putting a lot of stress on these businesses, and you see businesses selling and fishermen just saying hey, I'm going to go paint houses because that's, you know, the better job for me and my family. Thanks.

Mr. Berkowitz: Point well taken. Thank you.

Mr. Schumacker: Hey Matt, you know, on this list of recommendations, do you have -- I've heard you

speaking already about a regulatory uncertainty, and the impacts it's having on fisheries. Do you see a place where this could be fit into these recommendations?

Mr. Upton: That's why I'm struggling, because I think you've got to kind of walk and chew bubblegum at the same time. I mean I think you've got to kind of work on these areas, but I think you've also got to be real with people about if you come and work on a boat, this is what it's -- what it's going to look like.

I mean, you know, there's also other obligations that NMFS has and that we have to balance interests, but and when you do a bycatch cut, it basically hits people's paychecks by about 40 to 50 percent, and a lot of people that's the point where it doesn't make sense for them to go to sea.

So I'm not saying that we're not going to have those as part of this deal, and I think the different actions here are really important. But I just want to provide the context, how we can't think of things in isolation because at the end of the day, it has to make sense on the business side of stuff.

You can do all the workforce development, but if it's not an industry that is -- people are excited about because they see that it's going to be around in 20 or 30 years in the growth area, it might not be the best of use of their time in spite of our good efforts, which I really think I support a lot of these ideas here.

Dr. Sullivan: If I can, if I can comment on that.

Mr. Upton: Go right ahead.

Dr. Sullivan: This is one of the reasons why we had that needs assessment sort of upfront. We don't want to be pushing jobs that aren't there, right? And it's an idea like sort of figuring out where the need is. A lot of discussion about aging fleet but, you know, do we need to replace that or not? In

some sectors it does say yes; in others, no. So I'm hoping that that is what helps us out there.

Mr. Upton: I agree with that, and I think one of the things I think I'm -- that's exciting here is for aquaculture, when people tell me that they want to get involved with fisheries, I just say hey, wild capture fisheries there's a lot of uncertainty, and I tell them that right now there's a lot of investment and excitement in aquaculture, and Sebastian gets fired up.

Mr. Berkowitz: Since I wasn't paying attention in terms of who had their cards up, I just going to go back and forth across the room. So Meredith, why don't you make a comment, then I'll come back to this side.

Ms. Moore: Thank you, good morning. It's helpful to look over the document, so appreciate the work that you all put into it. I have a smattering of thoughts, which is typical for me. So on Points 1 through 4, which I feel like are really focused on the workforce development question, I just have a couple of notes, which is, I think perhaps we should consider mentioning the need for honoraria stipends for training opportunities.

There's certainly like lost income when fishers are able to participate in things like this and other things that takes time off of the water for them. So that would, I think, lower barriers to participating in some of the training opportunities. I also thought that maybe, and I don't know enough about how this works, but when there is a fishery disaster, they have less time on the water already, and it might be a moment to provide additional focused training opportunities for crew and captains.

So just flagging that as like if I don't know if that can go into disaster declaration spending plans or anything. Obviously not trying to take money out of people's pockets to do that, but noting an opportunity there. Also there isn't a focus in there on -- obviously to me on training them on the

management process.

I think it might be an opportunity to help the workforce understand how to engage in the council process and serve on advisory bodies, and understand how the regulatory system works, and I think that might help improve the pool of candidates available to serve in those capacities. So I just wanted to note that that could be a consideration for a training program.

And then moving on to a couple of other points, Point 5 is weird to me. I really appreciate including the concept of sustainability in this, but I think it -- and maybe Jocelyn talked a little bit about this. I feel like it almost needs to be enfolded in the three subsequent points.

So the points on aquaculture and the points on utilization and I forget, sorry, what the next one is. Utilization, under-utilized species and the aquaculture pieces. I think the idea of considering sustainability while you are making those investments, like whether you are considering the ecosystem impacts of additional utilization of species or in the aquaculture expansion.

That seems like the right place to me. I just wasn't quite sure how the sustainability, and this is wild for me to be like I don't know if you should have a sustainability bullet point in here, and someone's going to yell at me at some point for that. I just don't know how it's fitting in clearly, but I love the inclusion of it. But I feel like it maybe is enfolded within the other points.

And then sorry, the last point I promise that I have to share here is that we've heard a lot about the need for additional infrastructure investment for underserved communities, and I note that you have that I think in Point 4 with the business development. But also noted there's probably an opportunity to echo some of that or to like consider the infrastructure under your final point on aging infrastructure.

If there's a way to like infrastructure gaps assessment or something like that. I just wanted to flag that as another possible opportunity.

Mr. Berkowitz: Thank you.

Mr. Schumacker: Yeah, thank you, and thank you kindly. I wanted to address the science-based management or sustainability quickly. That was something that came out of the Subcommittee. It was important to folks to, you know, in order for a workforce to be in place and for it to develop, especially around fisheries, you need that science to keep those fisheries, sustainable fisheries available to people, and that was kind of the basis for that.

We're also at a point now where we kind of really need to, you know, specific language to help us with this, if we're going to try to get through this today. So I just want to make that point, because we're going to come up against a wall here real soon here on that. Otherwise, we'll have to pass this on to a future meeting so --

Ms. Moore: Okay, wonderful. Well I'm not voting to strike Point 4 or anything, but I may want to -- I'll take a look at the utilization ones and see if there's a sprinkling of a couple of words that I might offer to bring in the idea of like ecosystem sustainability and those under-utilized species and product utilization. I can send that over to you, thank you.

Mr. Berkowitz: Okay, to Joe's point, if we could do that fairly soon, that would be great. All right. Linda.

Ms. Odierno: I think the report was really good. One thing that you might want to consider, and this is not kind of on the direct line of employment, but also reaching out to some of those groups like culinary schools, chefs associations, retailers with training programs, because one of the primary goals is to increase the consumption of seafood products.

And at one time there were a number of programs.

NMFS used to run one on a fee for service basis for supermarkets and also for culinarians, and I think that might be an ancillary consideration. I know that they worked with Legal Seafood in Boston on some of these efforts, and it just might be another thing to consider because there's so much misinformation and disinformation out there.

If you're looking towards under-utilized species, that's really the interface with the general public. I know Sebastian has a program up in Maine, and it might be another consideration.

Mr. Berkowitz: Very good, thank you. Brett.

Mr. Veerhusen: I really appreciate the work Roger and Joe and everybody else has put into this. I'm glad that we're having these discussions. It's complex. I find it just as a new member hard to fully understand a document and then vote on it. That's uncomfortable, and I also, you know, one of the pieces of advice and things I've heard as a member of MAFAC is a kind of --

You don't sometimes know if your advice and advisory to the agency where it's really being kind of included and heard, and one of the approaches that I'm thinking about is really having actionable, achievable and measurable recommendations, so that we can really provide specific guidance so that it's not -- the onus isn't put back on the agency, but then we can have accountability to ourselves and the agency for what the recommendations are, so that we can revisit that.

And so that, that's just something I'm struggling with, with kind of where the document is. I think it's in the right place, but it's hard for me to understand it fully and not have this conversation, and then be put to a vote. I'd like to understand also the role of MAFAC better, so that we can empower the agency, hold ourselves also accountable, as well as have measurable results so that we can, you know, we can get there.

One of the pieces that I don't see as an appendix, for example, is the -- is the workshop that Kellie mentioned earlier that Sebastian was part of, that Meridian Institute held. It was around aquaculture, but we had six different sectors together. It was the recreational fishing, commercial fishing, aquaculture, finance, supply chain and NGO and workforce development was a main component discussed there.

I know that some synthesis documents are going to be produced and, you know, the synergies between all of those sectors were so similar, you know. I loved the fact that we talked about, you know, being able to actually have sectors that may disagree on policy actually find ways to supplement workforce together, charter fishermen being able to also fish on commercial boats, you know, supply chain having issues and Linda was mentioning being able to engage where the supply chain is and their bottleneck.

Just because you want to expand an industry doesn't mean that you're going to have the people to work it. That's just like a fundamental issue that I think we're trying to get at. So I'd like to flag that workshop and the results from that to be potentially included, and I'd like to maybe have a little bit more thinking on how do we really give specific kind of guidance that really pulls and digs just a little bit deeper, and I'd be happy to volunteer that, some of my time to help get there.

Mr. Berkowitz: So Brett, you made some very good points, and Linda, you as well. And I'm just thinking aloud here. We haven't discussed it. So we're -- there are seven new members here now, and maybe it's not fair, you know, for us to say okay, take a quick look at this, you know, give us your rubber stamp on it without getting enough input. Go ahead, Joe.

Mr. Schumacker: Thanks, and I just want to flag that we're not done with this yet, and Madam Chair

has some input on this.

Chair Davis: Yeah, thank you. This is a great discussion and Roger, you are thinking in the right direction there, and Brett, thanks for that, as I hear additional comments around the room from different MAFAC members. And when we think about the presentations and discussions that we've had over the last couple of days, workforce and equity and justice has come up in the National Seafood Strategy.

So there's a lot more that we've learned just at this meeting alone. So I'm in total agreement that we continue our work on this, and that we don't jump to any recommendations. So I just wanted to -- I can feel the room and the excitement around wanting to contribute and making it a fuller document.

Mr. Veerhusen: Yeah, and I want to say it's more towards excitement of being able to bolster this.

Chair Davis: Exactly, yeah. Thanks for that. Thanks Roger and Joe for --

Mr. Berkowitz: All right, Meredith. You can take your time.

(Off-microphone comments.)

Mr. Berkowitz: Yes, Jennifer.

Ms. Lukens: I just want to add in terms of -- I think there's things that can be done, and we are and I just want to put out there our next in-person meeting is in the fall, but it's looking like we're going to have a short virtual meeting over the summer.

So that could be a more near-term target for this, to get something together that's fully cooked. People have had enough time to look at it and approve and move on some things. So just it won't be October. Well, it can be but it doesn't have to be.

Mr. Berkowitz: Okay, great. Thank you Stefanie.

Mr. Schumacker: And, you know, and this goes back to that much broader document you saw earlier. So the concerns of MAFAC go well beyond what we've put forward today, and you know, this has been out and about for review for a while now. So we want to make sure you guys have had a chance to look at this, and we're getting good input today.

But let's get this thing, you know, we need more help on this. We've been working out here on this committee, so I really appreciate this input and hoping you will all join us. Thank you.

Mr. Berkowitz: Go ahead, Stefanie.

Ms. Moreland: Thank you. Given that this starts with a needs assessment, it's quite broad, which I appreciate. But I was looking at where there may still be gaps, and under training programs at the end of it, it says "Education, training and apprenticeships must be tied to local communities' needs, while expanding regional opportunities where possible."

I think this provides broad latitude to consider everything from skilled trades to business administration training, and I think that that's a good interpretation to have that be quite open.

But I feel like it still is missing something, and would suggest this be -- the header be "Training and Education," and I'd suggest inserting the sentence, just in the middle line, that "Training programs initiated by Sea Grant, academic, industry and other regional groups that directly address" and then insert "and build awareness" I think is needed.

I think that there needs to be some focus on awareness of what the industry is today, and with a more positive outlook than what has been stated from my colleague, Mr. Upton. There some super-exciting things happening in this space with gear

innovation, with robotics, with skilled trade jobs and opportunity, modernizing our sectors and it's an excellent opportunity for people who grew up in coastal communities to look for a bright future and go to college and come back and have a good job in the seafood sector.

I don't think that that awareness is out there. I feel like we're pinned with the image of a slime line job, and the industry has evolved quite a bit both on fishing vessels as well as in processing plants. And so I'd suggest inserting awareness along with that training.

And then I think to one of the points that's been made by others, that maybe we'd want to insert a section and create a new section that's specific to outreach and engagement, and that could be where we pick up those efforts that are really uneven around the country, that provide opportunity for people involved directly with fisheries management, to get support for how to engage and management decisions in shaping the future. So outreach and engagement is a category that I think is missing that would promote interest.

Mr. Berkowitz: And we can look at expanding that, okay.

Mr. Schumacker: Thank you, thank you. That would apply also obviously to the needs assessments, that first piece. We really need to get that message out there and engage folks on that. Okay, thank you.

Mr. Berkowitz: Janet, I see you up there.

Ms. Coit: Perhaps Sarah Schumann is going to speak to the same, but I just wanted to mention, we've talked a few times in this meeting about sources of funding that aren't from NOAA, and in my home state of Rhode Island, we were able to use Department of Labor, U.S. Department of Labor funds for a -- it was a program Governor Raimondo started, Real Jobs Rhode Island.

But it was a training program for crew and future captains that was designed by the fishing community. Fred Mattera, the head of the Commercial Fisheries Center and then many of you probably know Chris Brown as well have been talking about it for quite some time. The point being, you know, it was U.S. Department of Labor money to put together a training program primarily. It just so turned out a lot of veterans participated. When I last checked in with Fred, they had a very high rate of people doing the program and getting involved in the industry.

So I know you've been looking at models around the country, and I talked to some of you about the closer to the ground you are, the more likely you are to have understanding and engagement and durability. So I just wanted to flag that I think there's money out there in places that we might be thinking of that could go towards this effort.

Mr. Berkowitz: Great, thank you. Natasha, you're up.

Ms. Hayden: Thank you Roger. Thanks Joe for both of you guys and the committee, subcommittee, for all the work. I really am grateful that Brett brought up the circumstances that many of us new members find ourselves in, and I really appreciate the nimbleness of being able to continue to work on this and make a contribution, because I too feel like there is some more work that could be done on this.

I'm just going to say, I think that another section on underserved communities is warranted as well, and I haven't fully developed the language that would go into that. But I know that there's -- to me it almost seems like it's low-hanging fruit that we could put something in there for underserved communities.

Similarly, I find myself feeling like the comments that Matt made resonate related to underserved communities and rural communities as well, as far as the regulatory environment being prohibitive to

workforce development for the smallest operators and participants, and would agree that from the other perspective, that that is something that needs to be included, some discussion about how the regulatory environment is -- what the role of that is in workforce development for those communities.

I wanted to point out that there's an opportunity to promote in-region participation versus, you know, importing labor from outside of regions. One of the things that we, that you know COVID really shined a light on was just how dependent the seafood and fishing industry is on labor, skilled labor from other areas. Not just the labor, but in fishery like ownership, you know, vessel ownership, permit ownership.

People that are, you know, have a role or have a stake in the fishery, that don't live anywhere near the region where the fisheries are conducted. And so I'm really wanting to focus on promoting in-region workforce development, skilled labor, those supports, the support roles. I appreciate the seafood preparation and the consumption part of it.

But what we also have is a real shortage in the skilled labor, in the support, support areas, you know, welding, mechanics, refrigeration. There's like, I'm trying to think. I mean there's like every part of what goes into a healthy fishing community needs to have those, those support occupations being promoted.

So I'm looking forward to have an opportunity to participate in more work on this, but I appreciate all the work that's gone into it.

Mr. Berkowitz: Well thanks Natasha. I think there's a statistic out there. I don't know how valid it is, but I've heard over the years that for every job on a fishing boat, there's seven ancillary jobs supporting that.

Ms. Hayden: And I actually had one more point, and we haven't -- I haven't heard it mentioned at all,

but I think it's worth at least bringing up is the drug and alcohol epidemic that is really having a very severe impact on our communities and our fishing industry. I mean we have had people who have passed away of drug overdoses on fishing boats, and which is --

I mean there's a crisis in everywhere. So I don't know if there's an opportunity to work with, you know, other agencies, you know, being able to -- if you don't have people who are healthy enough to work, this is contributing and also I believe it's contributing to the need to bring other people from outside, you know, outside of the region who are able to work or who are not affected by that drug and alcohol epidemic personally.

Not that I -- I don't think there are very many people who are not affected by it, but anyways, I just wanted to draw attention to that, that that is also a limiting factor in many communities for being able to have a healthy, sustainable fishing industry.

Mr. Berkowitz: Excellent point, thank you. Sarah.

Ms. Schumann: Thank you, great work, and I share the sentiment that we can make this even richer if we continue to work on the discussion with the new members, and I look forward to being part of that. I have two broad comments. The first is I would appreciate it if we got some clarity on how the workforce development work fits into the broader resilience work.

I see it as being nested within that, but it's not quite clear to me what the other components of the resilience work that MAFAC will be working on are, and I would appreciate even like a visual that lays that out. As part of sort of the source of my confusion, I actually see some conflation of these notions occurring in some of these documents.

I went through and looked at the document we looked at yesterday, which was the work plan, and it had sort of four main recommendations for what

we'd be working on under the heading of resilience, but three and a half of them were focused on workforce development. Today we're looking at a set of recommendations on workforce development, but only four out of the nine recommendations seem to me to be directly pertinent to workforce development, whereas the other five seem to fit into some broader work on resilience.

So I think before we do any more work on this document or anything else under the resilience heading at large, that some clarity there would be appreciated, as well as some clarity around what the end work products of each of those streams of activity area. I'm not clear whether this document we're looking at today was intended to be sort of the end product of the workforce discussions, or whether there's more coming and how this acts as a bridge to whatever that more is.

Mr. Schumacker: Thanks. I just want to address that real quick while you've got it on your mind. No, in my understanding from NOAA Fisheries is they needed some recommendations in a pretty rapid timeframe, and so we were kind of asked to put something together for this quickly for this meeting. So that's kind of where these came from. We are not done with this topic and it's got a lot more to go.

Ms. Schumann: That's helpful, thank you. And then my second broad recommendation is that the word "workforce," I think we could explore that a lot more, and that would guide and sort of expand our thinking around this. I think we're lumping in a lot of different workforces with a broad brush. If you're talking about sort of a young person trying to start a fishing business, that is very different from the sort of fishmonger training that Linda spoke to, to help inform the public about eating American seafood, and that is very different from a processor looking to fill jobs on the slime line.

And I think that segmenting out workforce would be

both more inclusive, so that everyone can -- you know, everyone who is part of these diverse workforces can see themselves in this. And would also lead us towards more nuanced thinking about what the context facing each of those workforces is, and what the solutions are.

Mr. Berkowitz: Very good, thank you. Paul.

Mr. Schumacker: Yeah. Paul, did you have something to say there earlier?

Dr. Doremus: I was just going to thank you for recognizing that we were looking for sort of early insights that we could wind into our seafood strategy, but that that's the front end, not necessarily -- right. So I was just agreeing with your point and recognizing that part of the timing is linked to us getting that piece of our strategy right and setting out, in effect, implementation goals that are consonant with your advice. Thank you.

(Off-microphone comments.)

Mr. Berkowitz: Heidi.

Ms. Lovett: Yeah. I just wanted to clarify one thing too. So that is a good point, and the workforce -- the outline that's under the title "resilience" was worked on by the committee over the summer and through the fall. But it's not a written in stone kind of document, and it's definitely open to input and suggestions and massaging and, you know, reworking, because it can be whatever work you all think is important as the next step.

And then also the discussion of needs assessment that has been happening within the workforce group is very much tied to your comment about people recognize that the needs of the various different segments and sectors might be completely different. So what the processing community might need versus a person trying to start a business on a fishing boat versus the food industry hopefully would be captured by the needs assessment that

MAFAC had as a suggestion, I think, in this document.

And I just want to also clarify, because it's a little bit different than the work that the other subcommittee is doing, where they're wanting to do a survey. But normally that kind of work is not something we would put on you all to do; it's something that you would be recommending to the agency to do.

I just want to make clear that sometimes MAFAC starts down a path and feels like they have to do this work. But it's more like you're providing that advice to the agency, what the next steps would be.

Mr. Berkowitz: Thank you. Sara without an H.

Dr. McDonald: So thank you. I was going to -- Donna's had her card up longer, so but I'll go now. Thank you so much and thank you guys. This was a great document. It was nice to see this summary of everything, you know, over the past year, all of those different webinars that we had. So it was a really good, concise. I really appreciate it.

I'm pushing back against Meredith. I want to keep the science-based management in there. I want to call it out. So slow your roll. It's one of my suggestions --

(Off-microphone comments.)

Dr. McDonald: And I like the idea of calling it out. I like the justification for it, and I think it's different. I think under-utilized things pulled out are actually nested, could be nested within that. But I actually, I like the way it is, depending on how. I also appreciate Sarah's comments about it really does -- this whole document really summarizes the resilience conversations that we had last summer.

The only thing that it doesn't include is some of the disaster response discussions we had. But I think it's -- but it's trying to mitigate some of the need for

that disaster response. So I just wanted to express my support and thanks, and keep science-based management in. Thanks.

Mr. Berkowitz: Thank you. Donna.

Ms. Kalez: Thank you. Thank you Roger and Joe. I really like the report. I find a lot of great recommendations in here. Speaking to Kellie and Matt, like I really appreciate that we could also use this for recreational fishing. My industry, the commercial passenger fishing vessel industry, we struggle really hard with a workforce and with training.

We actually, as an industry we, you know, we supply a lot of fishing trips to underserved communities. We bring kids out to go fishing. We're really hoping that it sparks an interest, because there are so many people that have never been on the water, and that really helps our workforce development. It also goes into what we were speaking about yesterday, that we really have to target communities to get kids more engaged, because that's really where it starts.

And so I don't really think -- it's hard for me. When I look at this document, I think of why you wrote it for the workforce development, but it really is for all sectors. So and the needs assessment really speaks to that too. So I don't really have anything to add, but I maybe want to broaden it a little bit to go with the recreational. The 4-H program was really, when we talk about doing that for the water, that's very interesting to someone like me that really works.

We do like after school fishing camps, for instance, and it gets kids really involved and they may come back and be a deckhand and then they go on to be a captain and then they go on to own a boat. And then they go to Alaska to work for trawlers. So it really, everything kind of ties in. So when I think that it only is segmented to one industry, it's for everything.

Like we've been getting a lot of people coming from Alaska, Hawaii to be fishing boat deckhands, because it's a different industry, and so there's a lot of crossover. So I just want to thank you for this, and I do think that we can broaden the training programs and the needs. So thank you.

Mr. Berkowitz: Great, thank you. Yeah, I think we absolutely agree with that. Yes Tom, I know we have to wrap this up for you and I to make it to the airport. Is that why you have your card up?

Mr. Fote: Yeah, no. I was just looking at it, and I listened to Matt and then I listened to Stefanie, and I fall on Matt's side of this in the recreational fishing industry. I just look at the last ten years and what I've seen in New Jersey. Half the party boats are out of business that were there years ago. More than half the charter boats are gone, tackle stores have folded.

We saw that the industry was coming back because of COVID. There were people out buying boats and getting to. But now we see the \$5 a gallon of gasoline, and I remember 2007, which started the economic fall that's going on here, and how you do charters. You know, and regulatory is the most important part of it, because having to justify charging \$160, because that's what it's going to be with the gas going up, to go on a party boat to catch three fluke or one sea bass.

I mean this is, you know, this is where we're basically pricing the fares out of the market, and we don't do what we used to do, is providing for the poor, to basically go and harvest fish to bring home to eat. And so I'm looking at this and I'm not as optimistic as Stefanie is. I'm looking at an industry that has been in serious trouble for years as the amount of population are going.

And Roger, we did talk about that. As a matter of fact, we were supposed to do it and we hadn't got it scheduled yet, was the Mates Program down on Long Beach Island, where they bring the kids in and

we would set that up, and we were talking how you do this in the recreational sector too.

But yeah, I understand what you're talking about. I see the pain all over New Jersey, and not only with just the recreational. It's the commercial guys, the small boats. Not the big industry, not the group from Cape May that has lots of boats and lots of money and can buy up all the quotas.

It's the poor guys that were out of Point Belford, Point Pleasant, Barnegat Light, that basically had the industry going on, and they're the ones that are suffering because with the gas prices also and the markets and influx of imports and lying about what they're importing, that affects them too so --

Mr. Berkowitz: Good, thank you Tom and thanks everyone. Pat.

Dr. Sullivan: I'm going to be a little contrary here and ask if we could move the needs assessment forward. Is that a possibility? The needs assessment part. Is that possible for us to do that here today, or is that on hold as well?

Chair Davis: Yeah. I was -- I was wondering the same thing, if there's parts of this we can move forward, knowing that we're going to add to it, because it's still a document that we'd like to give to NOAA, especially you know, as Paul mentioned, as they're starting to put comments in and finalize the outline of the National Seafood Strategy, that we can state in here that this is just preliminary, but these are our findings to -- or these are our recommendations to date.

Dr. Sullivan: Yeah. I don't know if we could kind of narrow it down to something, as opposed to the entire document. But I mean it seems like if we're in agreement -- maybe we're not, that the needs assessment is something that needs to move forward, we could put that forward and then have the rest of the document there for us to work on subsequently. It's just an idea, but I don't want to

mess up things here.

Mr. Berkowitz: For kind of bifurcating a little bit. Sebastian, you had your hand up?

Mr. Belle: Yeah. I just thought I'd chime in and support that idea. I think, I think -- I think that's a great idea, to try to move the needs assessment forward.

Mr. Berkowitz: How do you want to go about that?

Ms. Lukens: Heidi, I'm just going to turn to just -- oh sorry, Jocelyn has a question or a comment, and then I can talk about the process.

Dr. Runnebaum: Yeah. I guess I have a question to Sarah Schumann's point about the different industries with the needs assessment, if we move it forward today, capture the all-encompassing industries or sorry, workforces. That's the word we're using.

Ms. Lukens: So I think if you all can get to something that you can all vote on or come to consensus on, if you want to put forward the needs assessment, if there's a tweak to the language. If you all can do that in the next few minutes and be able to move that on, we can -- you can do that individually, and then we can circle back to the rest of it. So that -- Heidi, do you concur? Okay.

Mr. Schumacker: Yeah, thank you kindly, and Stefanie, it looks like you had something there?

Ms. Moreland: Yeah. I have a question on the broader National Seafood Strategy. There still is input being solicited on that, and I can't recall until when. So what's the timing for National Seafood Strategy for the host of things that have been discussed that relate to that?

Dr. Doremus: We're developing it now based on input that we're getting along the way. So it's in, it's in development now, and the goal was to have it

ready for public review mid- to late summer. So I would say for your input broadly, June would be good.

And again, I view that as this is getting the front end. So we're, we're framing needs clearly and then there's plenty of opportunity for follow through on how we address those needs.

Mr. Berkowitz: So Pat and Sebastian, good points. So can we put forth a recommendation then?

Dr. McDonald: I have a process comment first. I had my card up.

Mr. Berkowitz: Go ahead, go ahead.

Dr. McDonald: It's me, Sara.

Mr. Berkowitz: Sara without the H.

Dr. McDonald: Sara no H. So I'm wondering if we could do something like what Pat suggested and Sebastian supported, of having the needs assessment fleshed out in a letter, and then bullet these other broad categories but not have the specifics underneath then, as sort of a hybrid sort of -- it's just a suggestion of a process way to move forward.

Mr. Upton: Yeah, let's do that to get something done. I think what Pat was getting at is, as well as Natasha, is can be so varied by region by region what's going on. Like if you're a gillnetter in Bristol Bay, life's good. If you're a gillnetter in the Southeast, life is pretty bleak. If you're a pollock boat in the Bering Sea, it's probably better than the Gulf.

So it's just like getting at like there's nuance. I think that's what you're saying. Then we can at least get something out if folks aren't on board with the full document. It's good to get something done if we can.

Mr. Berkowitz: And the needs assessment will

inform all the others, I think yeah, yeah.

Chair Davis: That sounds great. I don't know who is running the document up there, but if you could make the needs assessment statement larger, if it's possible, and then Roger and Joe, if you'd like to put a motion together.

Mr. Schumacker: Madam Chair, I think we could have it a draft and ready to go for review here in just a few minutes. We're just doing a little cutting and pasting. Uh-huh. That could go up on the screen if that's proper.

(Pause.)

Mr. Schumacker: Yeah, we might need a couple of minutes. So if you want to fill the time with music or anything.

(Off-microphone comments.)

Mr. Berkowitz: It's either Chuck Norris or Wind, I don't know.

Chair Davis: Okay. Do you want to vote on the concept, and then we can circulate the language?

Dr. Runnebaum: I'd rather take a five minute break and see the language before voting please.

Chair Davis: Okay. Yes, it wouldn't be -- it would just be on the concept that we would move forward, not the language. But if you want to work on the language now, that's fine as well.

Dr. Runnebaum: That would be my preference.

Chair Davis: Yeah, I know. Are you good with Roger and Joe on that? Okay.

Dr. Sullivan: There's a new restaurant opening up here in town, Chuck Norris is hosting it, but it only serves knuckle sandwiches.

Ms. Lovett: So as I understand it, we're going to

take a five minute break. But essentially what we're suggesting at this end of the table is keep the first paragraph of the document and keep the needs assessment, and just say that this as a first step, blank, the needs assessment. So I'm working on that.

Before you break, just note that lunches are going to get delivered around 11:30, and the cost is going to be 28.50 per person to cover delivery, tax, food, and Kristin has a Square. She's going to be paying for the entire meal, and so we're asking people to pay her back 28.50, and when you get your --

But you can do that now and we'll check your name off the list, if you want to start doing that during break. Just a quick suggestion.

(Whereupon at 10:57 a.m., the above-entitled matter went off the record and resumed at 11:13 a.m.)

Fisheries and Seafood Working Group

Chair Davis: While they're putting that up, what we plan to do after this discussion is talk about next steps in terms of working groups. So we'll go through that before we break and then we'll have just closing remarks after that. So we'll probably end up going to 11:45.

(Pause.)

Ms. Lovett: Do you want me to read it out loud?

Chair Davis: I'm not sure that's necessary, but if anybody wants to have it read out loud. Everybody can see it in their email. So it's the first paragraph of the original document that Roger and Joe presented, and then it's a needs assessment paragraph. So it's really -- have there been other wording change as well?

Ms. Lovett: Yes. So in the first paragraph, "fishing" is included as well as seafood. It says "In the fishing

and seafood industry." Before it just said "seafood industry." And there are changes in the second paragraph, based on input received from different members. So would you like me to just read the needs assessment portion? Okay.

Mr. Schumacker: And the addition of recreational fish as well.

Ms. Lovett: Yeah. Okay. Let me just bring this up and -- so the second paragraph expands to make sure it includes recreational fishing as well. It says "MAFAC recommends to NOAA Fisheries and the Secretary of the Department of Commerce as a first step NOAA should employ its regional assets, including the National Sea Grant Extension Program Network, to conduct local needs assessments of all industries linked to fishing and seafood production and distribution.

"In coastal communities, this includes those that fish wild stock, recreational fish, or grow aquacultured seafood across the U.S. and its territories. The needs for sustaining and improving the fishing and seafood sectors' success very widely. NOAA will benefit from local 'on the ground' expertise to define workforce segments and determine gaps and needs, to that funding and other support is focused and directed appropriately for industry and workforce development."

Chair Davis: Any comments on the additions to the language?

(Off-microphone comments.)

Chair Davis: So we put a motion forward?

Ms. Lovett: Madam Chair, would you like a motion?

Chair Davis: Make a motion, and then we'll have a discussion, thank you.

Mr. Belle: I make the motion to approve the proposal.

Mr. Schumacker: All right, thank you Sebastian. I'll second that, Madam Chair.

Chair Davis: Okay. We have a motion on the floor and a second. Is there any discussion, any other input? Sarah.

Ms. Schumann: I think in the first paragraph after "sound science" we need to mention management, qualified by an adjective but I'm not sure what that adjective is. But something that conveys like "supportive management" or management that is attuned to this particular need among others. I don't know what the -- Stefanie says "responsible," but responsive, yes. Responsive management. I would propose adding that.

(Pause.)

Chair Davis: Okay. Thank you for that addition. Natasha.

Ms. Hayden: Thanks, Madam Chair. I would also like to suggest that in the second paragraph that looks like the second sentence that starts with "In coastal communities," this includes those that fish wild stock, recreational fish, grow aquacultured seafood." I think after "coastal communities and underserved" and try to find where it would fit in including underserved communities, marginalized, under-represented, local needs industries linked to fishing and food production and distribution."

Ms. Lovett: In coastal or underserved communities?

Ms. Hayden: "And underserved communities."

Ms. Lovett: And underserved communities.

Ms. Hayden: Coastal and underserved communities.

Chair Davis: Okay. Thank you for that input. Any other? Stefanie?

Ms. Moreland: Yeah. In the very last phrasing, I suggest I think replacing the word "industry" with

"fishery stakeholders and workforce development."

Chair Davis: Thank you, Stefanie. Sarah.

Ms. Schumann: I think we should think a little bit more about the instruction of "and underserved communities" in that way. I think that that implies either that we're talking about both coastal communities and underserved communities, when in fact we're talking about -- or that we're talking about communities that are both coastal and underserved, and I don't think it's either one of those.

I think we're talking about coastal communities including those that are underserved. So we need to phrase that differently.

Mr. Schumacker: Can you just -- can you just move it to after includes?

Ms. Schumann: Maybe "in coastal communities including those that are underserved"?

And then put the word "communities" before including. "In coastal communities, including those that are underserved." I'm not a punctuation person, but there may need to be a comma after communities. Thanks.

Chair Davis: Yeah, that's great. I think that's a good -- I think that's an improvement. And delete this, yeah, the second "communities."

Dr. Sullivan: Get rid of the second "includes." We have including and then includes, so get rid of one of them, the second "includes" maybe. We want to say "in coastal communities, including those that are underserved, those that fish wild stocks, recreational fish," blah blah blah. Can we say it that way?

(Off-microphone comments.)

Ms. Lovett: For the second "includes," if you don't like two includes in one sentence, just comprise --

Dr. Sullivan: Comprise is fine too. I just, it was having include, including-includes twice is too inclusive. Yeah, thank you.

Chair Davis: Okay Joe.

Mr. Schumacker: A quick one. Aquaculture-seafood, does that need to be expanded to a product or changed to product, and I'll defer to our aquaculture folks here. I'm thinking of kelp production and things of that nature.

Chair Davis: That's a good point. I'd like it broader than "grow aquacultured products." Oh, go ahead Sebastian.

Mr. Belle: Yeah, no. I support aquacultured products instead of seafood. I want to go back to Stefanie's suggestion on the last sentence there. I just, I think, you know, industry is an inclusive term. Fisheries stakeholders is pretty specific to fisheries. So I guess I would just ask if Stefanie, if you have any objection to adding, after fishery, add "aquaculture." So it would read "fishery and aquaculture stakeholders."

Ms. Moreland: No objection.

Chair Davis: Thanks Sebastian. That's a good suggestion. Do we have -- Natasha, did you have another comment? Okay.

Dr. Sullivan: We still haven't changed the aquaculture to seafood. There we are.

Ms. Moreland: Okay. In the first place where it says "or grow aquacultured seafood," change "seafood to product, products."

Mr. Belle: Correct, yes.

Ms. Lovett: Yeah. We can't see it on the screen but that's -- if it slides over just a touch, yeah.

Chair Davis: That's great. Do we have any other discussion, comments? Okay. So the motion again

please Joe, one more time?

Mr. Schumacker: Sebastian made the motion, Madam Chair.

Chair Davis: Oh Sebastian. Thank you.

Motion to Approve Subcommittee Recommendation

Mr. Belle: Yeah. I would say that the motion now is to accept the amended draft.

Mr. Schumacker: And I'll second that.

Chair Davis: We have a second. Now it can go to vote. All those in favor?

Mr. Schumacker: Sebastian, do you have your hand up?

Mr. Belle: Yeah, no. I'm just voting aye.

Chair Davis: Okay. Do we have any nays? Do we have any abstentions? Okay. The motion passes and I think this is amazing that we have this very strong recommendation to give to NOAA Fisheries, NOAA leadership, and we can draft a cover letter that goes with that. Is that right Heidi? So we'll do that as well, and then also send it around to everybody. So congratulations on the good work.

(Applause.)

Mr. Schumacker: Madam Chair, Madam Chair. Just a quick note that the Subcommittee will be meeting again on this Wednesday next week, and we would welcome everybody to participate. Thank you.

Ms. McMurtry: And also you can email me and I can add you to the calendar.

Dr. Doremus: And I also on behalf of NOAA just wanted to thank all of you for your efforts today to get timely advice in our direction on something that clearly needs to be done, and it's a great help to us. Thank you for all your efforts.

Chair Davis: Thank you for that, Paul, and so I would recommend, Gabriela, that we send out the invitation or we send out the option for others to join. So we send it to all of, all the new members and everybody to see who would like to join the continuation of this discussion, this very important discussion on workforce development.

Chair Davis: Okay. I'd like to spend maybe the next ten minutes or so on discussing the formation of some new working groups, and get your input on these working groups and items that we can -- items that we can do together in between meetings, and for the near term, the medium term and the long term, okay, because a lot of these are ongoing.

We heard a tremendous amount of great work that NOAA is doing, both in operations and regulatory and science, and the 2030 Vision. So we -- there was a very robust discussion throughout the last two and a half days, and I think it really surfaced quite a number of things that we'd like to work on as a group. So I'd like to gauge your thoughts on all of this.

So we know we have the ongoing Working Group on Workforce Development. The other discussion was to form a Working Group on Equity and Environmental Justice Strategy, and that is actually one of the overarching, the overarching items. Equity is one of the themes in our work plan. So that falls in really nicely also in our existing work plan.

So I'd like to hear some discussion about whether or not this would be a good working group, and then I'd like to see to there is anybody that would like to volunteer to lead. It could be a co-chair, you know, two leads, and then we can also build up a membership group around that.

You don't have to make all these decisions right now, because Gabriela and Heidi will also send out this information and ask for people to, members to join, okay. So it's a lot going on and a lot to think

about. But let's first decide if this is a working group that we'd like to put together.

I see a lot of nods, and we know that we also have some comments that are due August 18th. So this is something that we should work on relatively rapidly. The other thing that I wanted to discuss around this working group is I think Brett might have brought it up is the "what" and then I know that NOAA leadership is also really interested in this being a bottoms-up approach and how do we make sure that we do get the input of the underserved communities, and that the ownership belongs to the people.

So that's something that we also want to be able to give some recommendations to NOAA on. I can provide some more guidance around that too. But anybody like to take this on as a lead or a co-lead? I see Brett and Natasha sort of thinking about this.

Working Group Formation

Ms. Hayden: I'm sorry Madam Chair. I was just confused because I -- are you talking about two different work groups or are you just still talking about the Equity and Environmental Justice Work Group?

Chair Davis: It's the Equity and Environmental Justice.

Ms. Hayden: Okay, yeah. I'll volunteer the lead. It would be great if I could have a co-lead, because I have limited experience in leading work groups.

Chair Davis: Thanks for that Natasha, and --

Mr. Veerhusen: I'll offer to help co-lead, but I think we're a little heavy here on the North Pacific knowledge, so anybody else from other coasts would be great. We'll have three co-leads.

Ms. Hayden: We'll voluntold Jocelyn from the East Coast.

Chair Davis: Yeah. So remember you'll have, you'll have working members that will be part of it, so you will co-chair, and just like Sarah presented and Pat and Kellie presented, you know, and then Joe and Roger. So you can see that it's a working group that will work with you, and then you'll help to lead the effort. Then you'll have support staff from -- that Heidi will help assign with you.

Mr. Veerhusen: Can we hold on deciding who's going to lead and co-lead and have a discussion amongst us once we meet?

Chair Davis: Absolutely.

Ms. Hayden: Yeah.

Chair Davis: Absolutely, yes. Okay. But thanks for stepping forward.

Mr. Veerhusen: There might be some things that make sense on timing and coasts and fishing schedules and this type of thing.

Chair Davis: Sure, sure. We can help you with the charge and, you know, and I'll help participate as well. Okay. That's excellent. Thank you very much. The other working group that we should put together is for the National Seafood Strategy, so that we can provide unified MAFAC input on that by June, and I know we're already, you know, starting -- or not starting, but we're already putting items together that fall really nice into the National Seafood Strategy.

So it may, it may be that we just review it again and have a MAFAC statement that comes forward as well, because there's also the whole implementation side of it. This was a long-term, right? It's not necessarily near term, but the near term would be our comments and MAFAC statement that would come forward. Would anybody like to lead that?

Dr. Sullivan: I have a question before. I don't want to lead it. I do have a question.

Chair Davis: Sure Pat.

Dr. Sullivan: So we, we had -- we put this proposal together for the Seafood Council, right, or the Seafood, what are we calling it, the board? Yes. Is that part of this and so we did submit something already to include in this, and the question is what in addition we would, might be doing for that? Is that what we're asking or, because I'm not --

It's not clear to me what additional kinds of things we might be thinking about in that regard.

Chair Davis: Okay. That's a -- okay. So the National Seafood Council report is part of the National Seafood Strategy. So yes, that's -- and I know that MAFAC sat on a call about the National Seafood Strategy and provided comments.

Those comments were probably recorded in, but do we want to make a MAFAC statement? I think it's really -- I mean we could take a lot of those inputs and put it into a statement that's an official statement from the advisory board, Advisory Committee.

Dr. Sullivan: That clarifies for me. Thank you.

Working Group Formation

Chair Davis: Any other thoughts around that? So maybe that's the direction we go, is we look at the input. We think about our time together here, and we see what else we might want to do. Like I said, this is really a near term, where we're going to be, continue to be involved in providing, just like we did today with the working development, I mean excuse me, Workforce Development.

Okay. So that's great. Two more items to discuss with you. I'm going to discuss this briefly, and then I want to have a slightly longer discussion on our resilience work plan. But Roger and Joe came forward and would like to make a resolution around offshore wind development, and it was too rushed

to be able to bring it to the group to be able to have discussion.

But remember, we have the report that came out in 2020 in July, and so the resolution to definitely continue to highlight the recommendations in that report. But it was also a resolution of the things that we heard during our time together, and in terms of the urgency and NOAA's role being able to have --

Well, I'm not going to try to phrase the resolution at this point. I would rather us having discussion around it. So what we're asking Heidi to do is to please put together a meeting in the short term, so that we could share the information that Joe and Roger are looking at in the resolution. It's really in support of the recommendations that we've put forward in July 2020, and what else we can do to support NOAA's role with wind.

Okay. So we'll leave it that. Is that good Joe?

Mr. Schumacker: Yes, thank you Madam Chair. Yeah, yeah that's fine. I really appreciated the attention being paid to it. This is an urgent matter for many of us around the country here, so we really appreciate further attention from MAFAC. There was some discussion of this. You know, we have a resolution process which some of us are vague on, and then a letter to the Secretary, the type of a thing that might be created by MAFAC as well.

So what can we create out of this to make a recommendation on the offshore wind process as it's now going, and NOAA's role in that and what we can do to help them. Thank you.

Chair Davis: Thanks, Joe. Jocelyn, did you have a comment on this?

Dr. Runnebaum: Yeah. I guess maybe it's part of the resolution, but I'm curious if there's a role for this group to continue thinking about offshore wind and how we can support the agency, maybe beyond

just these brief -- well not brief, but these initial steps that we're thinking about taking right now, because I think that this is a pretty significant issue for these marine environments that are about to be developed.

I think that it's something that is going to have a pretty significant impact in the near and long term, and I would really like to think through that.

Chair Davis: Thank you for bringing that up, Jocelyn. We could look at a working group, because this is an ongoing long term, as you mentioned, and as we all know. So we could easily have it as a working group.

Dr. Runnebaum: I'm actually wondering if it falls under the Ecosystem-Based Management Subcommittee.

Chair Davis: Okay, okay. This could be a nice task to have in that subcommittee. I really like that, and who, who would like to be a -- so this is the subcommittee that Raimundo was -- okay. So we actually need a new chair for that. It sounds like there's a task at hand.

Ms. Lukens: So maybe that's one of the things that we can follow up with, is we're going to follow up with a lot of information on all the working groups whose volunteered here and be pressuring for more people to volunteer and are not pressuring. You people have raised your hands, all three of you just brand new, so appreciate that.

But we'll follow up with that, and that's a great suggestion for that Subcommittee.

Dr. Runnebaum: Sign me up for EBM.

Chair Davis: That sounds great, so let's note that, that we're going to follow up on that as a task under the, under the Subcommittee and we'll have a chair and we'll go from there. So great suggestion that was brought up. Sara.

Dr. McDonald: Question. We have an Offshore Wind Ad Hoc Working Group. Is that now done because we had a product already, or is it like a continued working group?

Ms. Lukens: I believe it concluded because they finished their product that they -- in 2020. So for those of you who are new, I would before going into those conversations go back and read that 2020 report that we already put together on wind. But so that, there's no need to -- it's already been dissolved, so under the Ecosystem-Based Management would be great.

Chair Davis: And Sara, I'd just acknowledge that you had a big part in helping to make that happen. So thank you. Okay. The last working group that I see on the horizon are -- it's really an active working group, and if you think of any others, we can certainly discuss that. But that really has to do with continuing to look at our building resilience in fisheries, the seafood sector and coastal communities reliant on marine resources.

We have this working plan. We've been referring to it throughout the last couple of days. We already know that we're working on Workforce Development. We know that equity actually comes up in this as a theme. I know that there's other sections of this that need to be worked on, and Stefanie and Meredith are quite excited to be able to see what other work products could come out of this and how it blends in with the Vision 2030.

And so Stefanie, would you like to speak with that now?

Ms. Moreland: Sure. Just in reviewing the outline and work plan for MAFAC, there's a lot of new content that was brought to our attention and a lot of new framing from the agency in terms of work product and then the Vision 2030. So Meredith and I discussed taking a look at Vision 2030, in light of the weight of information that came here in the previous outline, and look and see what's already

covered by those other workstreams.

What might we want to enhance based on the discussion that occurred this meeting, and then come back with some ideas about potentially additional tasking or fleshing out the implementation questions that have already been brought up regarding Vision 2030.

Chair Davis: Thank you for that Stefanie and Meredith. So as Heidi mentioned, this work plan is a living document, and it's going to change as we hear of new information, new priorities. And so I like the fact that we have this work plan and that it is a living document, and that we continue to work towards work products that come out of this. So let's not abandon it. Let's just keep working on it that way.

So any other -- let's see what time it is now. Okay. I'm going to start to wrap up so we can get ready for the field trip. I know that Janet would like to have some closing remarks and possibly -- is Jon here? Possibly Paul and Jon, and then I'll wrap up as well.

Ms. Coit: Thank you Megan. I've been told that it's an old Jewish curse, I don't know if this is true. May you live in interesting times, and I just wanted to highlight how interesting these times are, and again mention that climate change is on our minds constantly, and the way that the ecosystems that we're so privileged to care about and enjoy are taxed and challenged by climate change.

When we talk about resilience, you know, I also always think about the resilience of communities, the resilience that we have in our spirits when we support one another and can use humor to lighten a moment. And so it's interesting, as Sara was mentioning resilience, I was thinking we use that very specifically about climate change and reacting to stresses. But it's really also about this much bigger network of things.

So I just wanted to acknowledge that we're all coming to the table and working so hard a time that makes a tremendous amount of anxiety, and have such important work to do. So it's really been heartening to be with all of you. What an incredible group of people who are passionate and experienced and energetic and thoughtful and funny and warm.

So I wanted to thank you all for the warm welcome from me, and say that this has been a really valuable experience. For those of you who are participating remotely, thank you for your fortitude and patience. I know that's particularly difficult and something we're learning how to do for a variety of reasons.

And finally I just wanted to say thank you to a number of folks. Jennifer Lukens is extraordinary, and her team, Heidi and Gabriela, thank you so much for all that you're doing and have done to foster and support this group.

(Applause.)

Ms. Coit: I know, I don't even know who's handled all the IT. I know many of us are going to go to the eye doctor after this, but it really went rather seamlessly using the screen and all that, so thank you for all the folks that supported that. Laura and Sean, thanks for all you're doing and going to do coming out of this meeting.

And then just to each of you, I've had a chance to talk to all of you, the various perspectives around the room and what you're bringing to this effort. Just overwhelming in terms of how much benefit it brings to us in terms of our public service and the mission. So I want to just thank you for your time, your thoughts and Megan, you are such a skillful Chair, so we're in great hands and it's been wonderful to see how you've run this meeting.

We still have an afternoon ahead of us that I think will also be really instructive and fun. So thank you

all, and MAFAC is a tremendous institution and we're sort of stepping into the river and we'll keep flowing. But it's our moment, so thanks.

Chair Davis: Thank you so much, Janet. We appreciate you being here and also leaving, so thank you so much. And are there any other closing remarks?

Dr. Doremus: I think Janet said it all. I just want to add my thanks to the group and especially to you in your new capacity as Chair. Thank you for leading us through this whole meeting and --

(Applause.)

Dr. Doremus: We've definitely set out a great course here, and it's extremely helpful to us, and we're looking forward to continued work down this path. Thank you, Megan.

Ms. Lukens: I just want to add one last logistical thing here to notice. Thank you everyone for your time and your attention. I know it's draining and for the new members for jumping right in head first, and always thank you Megan.

We will be in touch with all of these follow-up action items and working groups. But I did want to mention we will be also in touch about scheduling a virtual meeting over the summer to deal with some of the business that is time-sensitive before our fall meeting, in-person meeting.

Right now the dates we are looking at and it's -- remember, this is tricky to navigate, given all the council meetings and my leadership schedule. I'm looking at the week of October 11th and the week of November 29th after Thanksgiving right now. And so those are the dates that we're looking at. If you have any huge red flags on those dates and you can raise your hand now or let Heidi and Gabriela know.

But we have to do a bit more vetting, but those are the two dates we're looking at right now, and that

will be in D.C. So thank you so much for all of your time and effort here, and I'm super-excited and proud of the work that MAFAC is doing. So can't wait for those meetings, to start planning for those meetings.

Chair Davis: Heidi, you have some logistics that you'd like to share?

Close Out

Ms. Lovett: Okay. So just a few final logistics. Lunches are here. I'm not sure if they're out here or downstairs.

They are, okay. So they're out here, and our assistant is putting names so you all grab the correct thing. I sent around and if you didn't receive it, let me know. But there's a QR code easy online way to pay for your lunch. I think I said 28.50 is what I said in the email, and it's all inclusive. Then the bus, I'm like texting with them now, it's a bigger bus. So they -- it's a little limiting where they can be.

I told them 12:20, and I believe it's just like going to be across -- like on the Main Street, because they can't come down this narrow drive here. So at least be ready, change, go to your rooms, change, drop all your stuff, be comfortable, bring sunscreen, water, etcetera, and I think that's all I have on that.

And lastly, we do try to reuse your name tags and your table tents. Some of them always disappear, but if you could leave all those here, we'll be collecting them and then we'll use them for the next meeting, as well as your wonderful gavel, Madam Chair. I think that's all I have.

Chair Davis: If you could meet about 12:20. I think the bus will leave close to 12:30. So I will officially end our meeting and look forward to seeing you down in Naguabo.

(Applause.)

(Whereupon, the above-entitled matter went off the record at 11:51 a.m.)