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7 8 9	PAGE 77: Motion to reappoint Marcia Taylor to the St. Croix DAN and Lee Steiner and Collin Butler to the St. Thomas/St. John DAP. The motion carried on page 77.
11 12 13 14 15	PAGE 78: Motion to reappoint Douglas Gregory, Jorge Garcia-Sais, Richard Appeldoorn, Juan Cruz-Motta, Churchill Grimes, Joe Kimmel, Tarsila Seara, Vance Vicente, and Walter Keithly to the SSC. The motion carried on page 78.
16 17 18	PAGE 78: Motion to appoint Julian Magras to the O&E AP. The motion carried on page 79.
19 20 21	PAGE 84: Motion to appoint Ruth Gomez to the O&E AP. The motion carried on page 84.
22 23 24 25 26 27 28	PAGE 179: Motion to develop an amendment the St. Croix Fishers Management Plan to consider amending the bag limit of the snapper, grouper, parrotfish complex by considering the yellowtail snapper separately from the complex and giving the yellowtail snapper its own recreational bag limit. The motion carried on page 186.
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# CARIBBEAN FISHERY MANAGEMENT COUNCIL 169<sup>TH</sup> REGULAR COUNCIL MEETING Webinar

JUNE 23-24, 2020

The Caribbean Fishery Management Council convened via webinar on Tuesday morning, June 23, 2020, and was called to order at 9:00 o'clock a.m. by Chairman Marcos Hanke.

### CALL TO ORDER

MARCOS HANKE: Good morning, everyone. It's 9:00 a.m. on June 23, 2020. We are going to start the meeting, and we're going to start the meeting by mentioning a few tips and guidance for participation. Make sure you mute your microphone if you are not speaking, and always respect every participant, either when we're speaking or to the chat, like we always have been doing.

All comments will be recorded, and any participation is going to come through the Chair, and you have to request for a turn through the Chair, using the chat, and talk to the point, please, and let's do comments that are very objective and to the point. Additional comments can be sent after the agenda item ends, if you need to make any important comment, and please send an email to the Executive Director, Miguel Rolon, to make sure that all the points and participation is received and recorded.

Members of the public can have five minutes in the end of the agenda of each day of the meeting, on the  $23^{\rm rd}$  and the  $24^{\rm th}$ , and we're going to start now in advance with a big thank you to everybody for participating in a virtual meeting, and I'm asking for your support, to make sure that this meeting runs quick and smooth and like we have been experiencing in the past with the examples of the DAP and the SSC and all the meetings, which they did a great job. Now I'm going to pass it to Miguel, to start with the roll call.

MIGUEL ROLON: Thank you, Mr. Chairman. I will call each one of you, and please say present, just that. I will start with myself, Miguel Rolon. Present. Natalia Perdomo. Graciela Garcia-Moliner.

GRACIELA GARCIA-MOLINER: Graciela Garcia-Moliner here.

MIGUEL ROLON: Clay Porch.

CLAY PORCH: Good morning. Thank you.

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    MIGUEL ROLON: Marcos Hanke.
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    MARCOS HANKE: Marcos Hanke, present.
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    MIGUEL ROLON: Sarah Stephenson.
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    SARAH STEPHENSON: Sarah Stephenson, present.
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    MIGUEL ROLON: Liajay Rivera.
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    LIAJAY RIVERA: Liajay Rivera, present.
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    MIGUEL ROLON: Julian Magras.
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    JULIAN MAGRAS: Julian Magras, present.
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    MIGUEL ROLON: Diana Martino.
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    DIANA MARTINO: Good morning, everyone. Diana Martino, council
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    staff.
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    MIGUEL ROLON: Maria Lopez.
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    MARIA LOPEZ: Present.
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    MIGUEL ROLON: Bill Cordero.
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    BILL CORDERO: Present. Good morning.
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    MIGUEL ROLON: Nelson Crespo.
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    NELSON CRESPO: Nelson Crespo, DAP Chair, Puerto Rico, present.
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    MIGUEL ROLON: Christina Olan. Jack McGovern.
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    JACK MCGOVERN: Present. Good morning.
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    MIGUEL ROLON: Edward Schuster.
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    EDWARD SCHUSTER: Edward Schuster, present.
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    MIGUEL ROLON: Vanessa Ramirez. Howard Forbes.
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    HOWARD FORBES: Present.
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MIGUEL ROLON: Carlos Farchette.

1 CARLOS FARCHETTE: Present.

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3 MIGUEL ROLON: Robert Copeland.

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5 ROBERT COPELAND: Robert Copeland, present.

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7 MIGUEL ROLON: Damaris Delgado.

8

9 **DAMARIS DELGADO:** Buenos dias. Damaris Delgado, Puerto Rico 10 DNER.

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12 MIGUEL ROLON: John Walter.

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14 JOHN WALTER: John Walter, present. Good morning, everyone.

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16 **MIGUEL ROLON:** Good morning. Helena Antoun. There might be a problem with your mic. Ricardo Lopez. Richard Appeldoorn.

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19 RICHARD APPELDOORN: Rich Appeldoorn, SSC Chair.

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21 MIGUEL ROLON: Roy Crabtree. Yasmin Velez.

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23 YASMIN VELEZ: Present.

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25 MIGUEL ROLON: Miguel Borges.

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27 MIGUEL BORGES: Miguel Borges, present. Good morning.

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29 MIGUEL ROLON: María de los Irizarry.

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31 MARIA DE LOS IRIZARRY: Good morning. María de los Irizarry, 32 present.

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34 MIGUEL ROLON: Orian Tzadik.

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36 **ORIAN TZADIK:** Orian Tzadik, Pew Charitable Trusts. Good 37 morning, everyone.

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39 MIGUEL ROLON: Nicole Angeli.

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41 NICOLE ANGELI: Nicole Angeli, USVI DFW.

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43 MIGUEL ROLON: Thank you. Jocelyn D'Ambrosio.

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- 45 **JOCELYN D'AMBROSIO:** Good morning. This is Jocelyn D'Ambrosio,
- 46 NOAA Office of General Counsel.

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48 MIGUEL ROLON: Adolfo Gonzalez. Manny Antonaras.

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MANNY ANTONARAS: Good morning.

MIGUEL ROLON: Carlos Velazquez.

CARLOS VELAZQUEZ: Carlos Velazquez, commercial fisher.

MIGUEL ROLON: Katie Siegfried.

**KATIE SIEGFRIED:** Good morning. This Katie Siegfried, Southeast 11 Fisheries Science Center.

13 MIGUEL ROLON: Advan Rios.

**ADYAN RIOS:** Good morning. This is Adyan Rios, Southeast 16 Fisheries Science Center.

**MIGUEL ROLON:** Mr. Chairman, I believe that Tony Blanchard is with Julian. Tony, can you identify yourself?

21 TONY BLANCHARD: Tony Blanchard, Vice Chair.

MIGUEL ROLON: Thank you.

25 ROY CRABTREE: Miguel, this is Roy. I am on.

MIGUEL ROLON: I hear you now.

ROY CRABTREE: Okay. Great. Good morning.

**MIGUEL ROLON:** Those are the people that we have on the roster 32 here, Mr. Chairman. If somebody comes in, I will let you know.

GRACIELA GARCIA-MOLINER: Vanessa Ramirez is online. She is having audio problems, but she's listening to you.

 MARCOS HANKE: Perfect. In the meantime, the ones that have audio problems, please write through the chat your situation, just for us to have a list of people and attendance. Thank you to all. One thing that I missed when I opened the meeting is that, if the meeting has any technical problems, myself or Miguel Rolon, we're going to ask you to restart the meeting and log off and log back in in ten minutes. Can you explain that, Miguel?

MIGUEL ROLON: If the Go to Meeting crashes, the technical advisor from Go to Meeting told me to stop the meeting for five or ten minutes, and so what I will do is I will close the

meeting to everybody for five or ten minutes and then open it again, and so, just by default, if we have a crash, wait for ten minutes, and then I will open the meeting again.

MARCOS HANKE: Thank you, Miguel.

ROY CRABTREE: Miguel, I have a question. Is there a way to raise your hand on this meeting, or what do we do if we want to be recognized?

MARCOS HANKE: For participation, you're going to use the chat and just ask for a turn, or put a little emoji hand to participate, and we're going to paying attention on the chat, either myself and Miguel and the staff, the co-organizers and Miguel.

ROY CRABTREE: All right.

19 MIGUEL ROLON: When you want to speak, put it in the chat.

MARCOS HANKE: That's clear, Roy?

ROY CRABTREE: Yes.

MARCOS HANKE: Thank you. Any other comments?

GRACIELA GARCIA-MOLINER: Mr. Chair, you also have a number of people that are telling us that they can hear us, but they cannot speak, for whatever reason, and so you do have Natalia Perdomo and Adolfo Gonzalez from CARICOOS, and Tony Blanchard just asked for a turn to speak when you come to the agenda, and I think that's what we have in the chat right now. Thanks.

MARCOS HANKE: Okay. I will give a turn to Tony in a moment, but I just want to go now to the Adoption of the Agenda and to make some changes.

MIGUEL ROLON: Marcos, you have to open the meeting and say the date.

# ADOPTION OF AGENDA

 MARCOS HANKE: I can do it again. I did it at nine o'clock sharp, but it's June 23, 2020, and right now it's 9:11 a.m. on June 23, 2020. This is the 169<sup>th</sup> CFMC virtual meeting. The Adoption of the Agenda, I have some minor changes to the agenda, as discussed with the Executive Director.

 We are going to recommend to move the overview of SEDAR 57 presentation and the Southeast Fisheries Science Center presentation to before the Scientific and Statistical Committee, which will be a new order at 11:10 to 12:00, and the order will be the SEDAR overview, the Southeast Fisheries Science Center presentation, and then the SSC presentation. After that, we will keep running the agenda as is written, or is in the Federal Register. Does anybody have any problems with this change?

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GRACIELA GARCIA-MOLINER: Mr. Chair, if I may, I have shown the Federal Register official agenda, but I've turned this over to a Word document, so that you can annotate the agenda clearly, and please let me know if you're seeing the Word document on the screen.

MARCOS HANKE: Yes, I am.

GRACIELA GARCIA-MOLINER: So I'm hoping that everyone else can see it, and so, what you've just said, I believe it's recorded here, and so the overview of SEDAR 57, the Caribbean spiny lobster assessment by Adyan, will be first, and then the Southeast Fisheries Science Center updated projections for spiny lobster for each island platform, and then the Scientific and Statistical Committee report.

That might continue to -- I tried to fix the times, but I don't think that I've been very successful, and that might run into the lunchtime, and so you might want to change that a little bit, and then we'll finish with the SSC report, which includes not only the spiny lobster SEDAR 57 information, but also the conceptual model work that the SSC has been doing, and then moving to the afternoon also the Ecosystem-Based Fishery Management Technical Advisory Panel report, and I have the new Chair of the TAP, and then everything else I have left the same.

MARCOS HANKE: Perfect. There is one extra item for the second day, and I spoke to Damaris yesterday, and the DNR wants to present, in Other Business on the second day, a short presentation on e-reporting, and I just want to inform you of that. I don't have any other changes. Miguel, did you capture everything that we need to change?

**GRACIELA GARCIA-MOLINER:** Tony Blanchard had asked for a turn to speak during the adoption of the agenda.

MARCOS HANKE: Yes, and I'm going to pass the turn to Tony. Tony, go ahead.

 TONY BLANCHARD: Good morning, everybody. What I'm looking at is we have a very long agenda, and not only is the agenda long, but the agenda has a lot of information it entails. I mean, this agenda would compare to probably one of the biggest council meeting agendas with the information and the amount of stuff that we have to go through and the kind of information.

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I think we need to shorten this agenda to less topics, so that we have time to go through the agenda, instead of trying to run through the agenda and meet the timeline. What I'm basically asking is to shorten the agenda with less things that we have to touch on and that this is actually a meeting that -- We're not in the room together face-to-face, and we are on computers and phones and everything else and trying to tap into the system.

MARCOS HANKE: Thank you, Tony.

MIGUEL ROLON: Marcos, the agenda cannot be changed, and so the task that you have is to make it work, and then we have to stop at -- When we get to the time that we're supposed to switch to another agenda item, you stop, and anybody that has any comments has to write the comments. You may not be able to finish some of the articles in the agenda, but you can put it back at the August meeting, but you're already losing sixteen minutes of the agenda, and so go ahead, and I have a request from Roy Crabtree about Maria Lopez, and, also, Damaris is saying that the Secretary will join us at another meeting, and so that will be -- At this time, we probably need to hear from Roy Crabtree on his presentation of Maria Lopez. Roy.

MARCOS HANKE: Go ahead, Roy.

 ROY CRABTREE: I wanted to announce that Maria Lopez has been selected as the new Caribbean Branch Lead for the Sustainable Fisheries Division at the Regional Office. I think all of you know Maria, and she'll serve as the go-between between the Regional Office and the fishery management council and take on many of the same job responsibilities as Bill Arnold did, and she'll also serve as my designee on the council and be able to vote on my behalf when I have to step out.

Maria has a master's degree and a bachelor's degree from the University of Puerto Rico, and she has worked on Caribbean fishery issues for more than thirteen years, and this includes serving as a fisheries biologist in the Caribbean Branch since 2011, as well as working for the Puerto Rico Department of Environmental and Natural Resources on marine resource issues as a NOAA coral management fellow.

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I know that Maria will be a great asset to the Caribbean Branch in her new position, and she will continue to maintain a strong positive relationship with everyone at the Caribbean Council and with the Caribbean Council staff, and I just want all of you to know that I am committed, and my deputies, Andy Strelcheck and Jack McGovern, we're all committed to maintaining a strong presence in the Caribbean and continuing to participate at the high level at all of our council meetings, and so join me in welcoming Maria into her new position.

MARCOS HANKE: Welcome, Maria. You have a turn, Maria.

MARIA LOPEZ: Thank you, everyone. Thank you, Roy. I am very pleased to continue to be serving you in this capacity, and my phone is always available for you, and I am really, really looking forward to seeing you all in person soon, and so I am based in the St. Petersburg office, and I have -- On previous occasions, I have shared with you my information, my cellphone and everything, and so, if there's anything that you ever need, please feel free to communicate with me, and I'm looking forward to continuing to work with you, and thank you for the opportunity.

MIGUEL ROLON: Marcos, you have Clay Porch. Before that, I just want to say that I've very proud of Maria Lopez and Adyan Rios, two young ladies from Puerto Rico at the National Marine Fisheries Service that are really outstanding and excellent. I believe that Clay would like to talk about John Walter at this time.

CLAY PORCH: Good morning, everyone. I do want to introduce Dr. John Walter in our new position as Deputy Director for Council Services. As I said, this is a new position that we developed so that we can better serve the councils, and we're the only Science Center that services three federal fishery management councils, and, on top of that, we essentially have a fourth council with Highly Migratory Species and the International Commission for the Conservation of Atlantic Tuna.

 The Science Center Director is stretched pretty thin in trying to attend all those meetings and keep all of our communications organized, and so we're trying to do a better job of working with all the councils, and John's new position is part of that effort, and so he can attend with me a number of meetings, and, when I can't go, he can be there, and he will help manage all the communications and just generally improve our support to the council.

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John has been with the Southeast Center for I think about thirteen years now, and he's been one of our lead stock assessment analysts, and he has experience working, at one time or another, on stock assessments for virtually all the councils, and he's currently the Chair of the Bluefin Tuna Working Group at ICCAT, and so he has a lot of leadership experience, and he has a wonderful vision for ecosystem-based management, and so we're really excited to have him onboard.

While I have the mic, I would be neglectful if I didn't also introduce Dr. Katie Siegfried, who is the new Gulf and Caribbean Branch Chief for the stock assessment group, and Katie has been working as a lead analyst for many years out of our Beaufort Laboratory, working with the South Atlantic Council, and, before that, she worked with HMS sharks, and so she has a very broad experience, and she is a very affable person, and she works very well with people, just as John does, and so we're really excited to have her onboard, and I think you'll see that, in the near future, we'll have even better support for the councils than you've seen in the past, with these two folks in place, and so thank you very much.

MARCOS HANKE: Thank you, Clay. John, welcome to the team, and I had the opportunity to share with you at the ICCAT meeting, and welcome to the new position, and we are here to help you in any possible way. Do you want to say anything, John?

JOHN WALTER: Just good morning and thanks for this opportunity, and I will be on the meeting. I have to jump out for some HMS IEC meetings, but I will be here most of the day, and I'm open to talking to each and every one of you, and I hope that soon I will be there in person, when we can return to in-person meetings, and I look forward to working with you. Thanks.

MIGUEL ROLON: Mr. Chairman you need a motion to adopt the agenda, as you mentioned before.

 **GRACIELA GARCIA-MOLINER:** Yes, you do. Please be aware that the times might change a little bit. I heard from Damaris that the Secretary is not available yet, and so these are tentative times that I have annotated in the agenda.

MIGUEL ROLON: The Chair has the authority to be flexible, and so, with that caveat, just adopt the agenda and move on.

MARCOS HANKE: I would like a motion to adopt the agenda.

CARLOS FARCHETTE: So moved.

MARCOS HANKE: Any second?

ROY CRABTREE: Second.

# CONSIDERATION OF 168<sup>TH</sup> VERBATIM TRANSCRIPTIONS

MARCOS HANKE: The motion was from Carlos Farchette, and it's seconded by Roy Crabtree. Any opposition? The agenda is approved. The next item on the agenda is the Consideration of the 168<sup>th</sup> Council Meeting Verbatim Transcription. The floor is open. Any comment?

**CARLOS FARCHETTE:** Move to accept the verbatim minutes for the 168<sup>th</sup> CFMC meeting.

MARCOS HANKE: Any second?

NICOLE ANGELI: Second.

MARCOS HANKE: Nicole Angeli seconds, and the motion was by Carlos Farchette. Anybody in opposition to this? Hearing none, it's approved, the verbatim for the 168<sup>th</sup> council meeting transcriptions. The next item on the agenda is the DNER Puerto Rico participation, and we are expecting him to arrive any time soon, and we're going to leave that on hold for now, and we're going to pass to the Executive Director's Report.

#### EXECUTIVE DIRECTOR'S REPORT

MIGUEL ROLON: Thank you, Marcos. Very briefly, I just deleted everything that I had, and I will leave it until August, but I just wanted to tell you that, due to the COVID-19, the council will be operating until December 31 as follows. All meetings will be webinars. The staff can go to the office in groups of three, and we supply the week according to those groups, but everybody will be teleworking or a combination of council office work.

 Visits to the building are restricted, and so, if you want to visit the office, and you have a coordinated meeting, let's say with Graciela and myself, we need to advise the building operator twenty-four hours notice in advance that so-and-so is going to be visiting the office, and that goes for providers and everything.

The building has a very strict protocol, and we are going to be

taking the temperature, and you are going to be asked who are you, who you represent, and where you're going to visit, and then they will give you a bracelet, similar to when you go to Disney World, and that will allow you to come in and out of the building. However, every time that you come back to the building, you will have a temperature check again, and so, from here to December 31, that's the way we are going to operate.

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In 2021, we may be able to open if the staff has a vaccine and/or we have a good medicine for COVID or 70 percent of the population already has had the COVID and it has surpassed the pandemic to become an endemic disease, and so those are the measures that we have taken.

In addition, in order to comply with OSHA and Puerto Rico local laws, we have a COVID exposure plan that dictates the way that we are going to operate at the office, and, also, it states that the Caribbean Council's exposure level is from moderate to low, unless you have a meeting with more than ten people, and then the exposure is high, and that's why we are going to operate the way that I just mentioned.

We are following the Executive Order of the Governor of Puerto Rico, and so, as you know, for the next few weeks, they have a special condition, and the lockdown is open, but you have a curfew after ten o'clock until 5:00 a.m., and there are some expected changes that can occur in two weeks, and so that's all I have, Mr. Chairman, at this time.

MARCOS HANKE: Thank you very much, Miguel, for your report, and the next item on the agenda, because we are skipping the Secretary of the DNER's participation, we're going to go straight to the overview of SEDAR 57, Caribbean spiny lobster.

## OVERVIEW OF SEDAR 57 CARIBBEAN SPINY LOBSTER STOCK ASSESSMENT

ADYAN RIOS: Good morning, everyone. My name is Adyan Rios, and I work at the Southeast Fisheries Science Center, and I was one of the lead analysts on the SEDAR 57 spiny lobster, which we'll be having an overview of this morning.

Stock assessments, let's just make sure that everyone is on the same page, and just a little bit of background about stock assessments, and stock assessments use models and data to determine if fishing yield is sustainable and to determine if stock size is above or below the level that can provide MSY, maximum sustainable yield. They are also used to quantify uncertainty in the status of the stock and to provide management

advice for optimizing resource utilization.

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What do we mean as fishing yield is sustainable, sustainability? I like the analogy of think of a bank account where, if you take out more than what goes in, the account will decline, but, if you take the same amount by which the account is growing, then the account will just stay the same into the future, and you can do that sustainably. Using stock assessments, we can ask if current rates of harvest would cause our fish accounts to decline, increase, or stay the same.

Not only do we want to know if the same amount is being taken so that it's sustainable, but we want to identify what that maximum amount is, because, at any account size, there's a sustainable level, but there is a specific account size where the returns are highest, and we want to have the population at that size. Recall that the goal is not to have the maximum amount of fish in the ocean, but to have the maximum sustainable amount of yield.

Once we have all our data in a model, we can explore uncertainty, and we can run the model under different conditions to understand sensitivity.

All three of these first steps are then documented and provided in reports and presentations like this one, to ultimately be used for management advice. The assessment we're reviewing today was developed through the SEDAR process, and that is in this diagram, showing how NOAA Fisheries participates in this process, and so this report initiated from the Southeast Data Assessment and Review process.

This involves a data workshop, where all the data inputs are reviewed in-depth, where we look at the individual years of information, as well as other information available, and then it goes to the assessment workshop and then the peer review, and all of that gets documented in the stock assessment report, which comes to you through the SSC and to the council. Today, we are just going to be doing an overview of that stock assessment report.

 For SEDAR 57, we used Stock Synthesis Version 3.3, and we refer to as SS. It is an integrated catch-at-age model, and so catch-at-age, and that means that it tracks cohorts of fish, or, in this case, lobster, as they age, and the processes that are modeled are relative to age. For example, we know that relationships, like maturity and mortality and growth of fish, are changed as they age.

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The simulated characteristics of a biological stock, like growth, as well as characteristics of fisheries, are incorporated into the model, and this is a very powerful tool, because it's flexible with the types of data you can use and the types of stocks and fishery characteristics that can be incorporated. Lastly, this is a globally-used framework, and it can be used for very intricate models and also data-moderate models, like we're going to see today.

 Here is a slide that summarizes the data-moderate nature of this assessment, where we have the summary on the left of the two data streams, or time series, that go into the model, and those are the annual removals and the annual length composition data, and then, on the right, we have the fixed parameters, and we have those for properties of the population, like growth and natural mortality and maturity, and we also use the information about there being very little relationship between spawners and recruits, and we use a 50/50 sex ratio, and we incorporated a relationship, referred to as retention, to reflect the size limit.

Lastly, on the bottom left are the two main parameters being estimated here to get at understanding what the stock status is and to develop the model we can use to project into the future. Those are the unfished recruitment as well as parameters that help us understand the size of individuals selected and retained by the fishery.

This slide gives us a summary of the structure of the model for Puerto Rico as well as the landings are plotted on the right for the two gears. We have the diving gear in red and the pots and traps gear in blue, and both gears together are in black.

Again, the model has two fisheries, pots and traps and diving, with selectivity estimated freely for each fleet. The initial fishing mortality was set to zero for the pots and traps, which, in the beginning of the time series is very low, and the initial fishing mortality was estimated for the diving fleet.

 The minimum size limit, which was introduced in 1985, the data showed that it was more enforced after 1999, and so the time block for retention was from 1999 going forward, and we have the estimated quantities that I reviewed earlier, but here, because we were estimating it for two large component fleets, the selectivity parameters were estimated for each fleet.

Here is the summary of the model structure for St. Thomas, and

we see that St. Thomas is mainly a pot and trap fishery, and the model still has two fisheries, pots and traps and diving. However, selectivity was only estimated freely for pots and traps, and it was kept the same for the minor component of diving. The initial fishing mortality was set to zero, because it was so low in these initial years.

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Retention blocks were introduced in 1985, with a period of some undersized being retained, and so that was modeled for the years 1985 to 2003 and 2007 to 2016. The estimated quantities were that unfished recruitment and the elements of the selectivity for the pots and traps.

Here we have the model structure for St. Croix. We also have two fisheries, but, in this case, the diving is the main component, with pots and traps being a minor component in most years, and we used the selectivity at-length, like we did in the other two regions, with information borrowed from St. Thomas, and the trap fishery set to the same as diving, because it's a minor component.

The retention plots were introduced in 1985, and the data showed that we were able to model that retention from 1985 to 2016, and the estimated quantities were the unfished recruitment and the selectivity parameters, and so those last four slides give us a summary of the nature and data-moderate -- All the data that goes into the model.

 Here we have a slide that summarizes the conclusions, and so, first, we'll focus on the table on the left and the rows highlighted in yellow, and so the rows highlighted in yellow are calculated off of the rows, and, essentially, the conclusions of not overfished and not overfishing for 2015 are what we see in these two rows highlighted in yellow.

Because the current spawning output is higher than the spawning output at MSY, these stocks are not overfished, and these values are above one, and, when we look at the current fishing mortality, or the fishing mortality in 2016, divided by the fishing mortality that produces MSY, these are not overfishing, because overfishing would be above one.

Another key output from the assessment is the estimated MSY at equilibrium, and so that is what the model is saying what could be taken out each year sustainably into the future, and so what you see on the right is the total of the two fishing fleets for each island, as well as with this MSY plotted, and so that is what that green line represents.

what that green line represents.

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We can use the stock assessment to produce projection of OFL, overfishing limits, for upcoming years based on what we know through the current year, and so the terminal year for the stock assessment -- We can incorporate additional information about what we know through the current year, to be able to understand what the model predicts for future years towards getting the stocks to be at the -- To get towards getting yields to be at MSY and having a stock that allows us to have MSY.

In order to do that, we needed to have values for 2019 and 2020, and so, to the extent possible, we always want to use the official final data, and so, in Puerto Rico, the landings are complete through 2018, and they're 99 percent complete for 2019, and the correction factors are being finalized for 2019, and so, for now, 2018 is being used, those correction factors.

In St. Thomas and St. Croix, in the U.S. Virgin Islands, landings are complete through 2018. The 2019 data only currently included records through early September, and so, for Puerto Rico, 2020 values were set equal to the average landings from 2017 to 2019. For St. Thomas/St. John and St. Croix, 2019 and 2020 values were set to the average values from 2016 to 2018.

This is the initial setup for obtaining OFL values, and we will -- I just want to point out that these values can be updated when data for recent years are finalized, and here are the OFL estimates that result from using those current values, and so OFL was projected from 2021 to 2026, and we have those for each island, and what happens is that these projections aim to get the stocks toward MSY, and so what you will see, when we show these visually, is how these values move towards MSY.

Moving on from OFL, we also estimated ABC for the SSC, and ABC is lower than the OFL. OFL, of course, the overfishing limit, is overfishing is occurring when catches exceed this level, and this level is the one that should allow you to achieve MSY in the long run. ABC is the catch reduced below OFL to account for scientific uncertainty, and so OFL comes as an estimate, but there can also be a window around what that actual value might be, and the probability of risk is a way to reduce the risk of overfishing.

Using the P\* with a sigma value of 0.5 recommended by the SSC, and so using P\*s that range from 0.4 to 0.45, and we have tables that show what the ABCs would be for each year, and so these tables in these presentations have the OFL by year, as well as

the ABC, for given different P\*s. We have that for St. Thomas/St. John as well as for St. Croix.

Here is where we see that more visually, all of the same information from the past three slides, and so here we have the time series of landings as first shown in 2017/2018 of those final values, and we have the preliminary values used for 2019 and 2020, which can be updated when more recent data are available, and then we see what the model projects into the future for 2021, 2022, and 2023, and that is the OFL estimate, and you see that that converges towards the MSY, as the projections intend to do, to get to that MSY level, but keeping in mind that there is uncertainty associated with these values.

That's what is reflected in the ABC values, and so, on the previous table, I showed all of the individual steps between 0.4 and 0.45, and, here, we just have the lowest and the highest. Also, in gray, we have the ACL that's on the books from 2020, and we have this plot also for St. Thomas and St. John, which shows that the current values -- That the current three-year mean gives us a level that's below the MSY, and so the initial estimate goes a little bit higher, in order to be able to get the stock to MSY, that the value converges back to MSY.

The interpretation of the upper and lower values of ABC are the same, and we also have this for St. Croix, where you also see what occurs with sort of -- If you're not catching at MSY, you're kind of allowing that bank account to build up, and so there's a little bit more you can take before you get back to that sustainable level. With that, I will take any questions about the overview of this stock assessment, at this point.

MARCOS HANKE: Any questions? I am looking on the chat and looking for turns to speak.

MIGUEL ROLON: Marcos, before they speak, we need to have their name, for the record.

MARCOS HANKE: Yes, and everybody please state your name before you have your turn, for the record to be clear. Thank you. Tony.

**TONY BLANCHARD:** Why can't the P\* be at .048 or 0.49? Why does 44 it stop at 0.45?

MARCOS HANKE: Adyan, did you hear the question?

ADYAN RIOS: Thanks for the question. The different  $P^*$  -- The

closer you get to having a P\* of 0.5, the less uncertainty you're accounting for, and so that is the level of uncertainty that you want to account for, and you have to take into account some of the different decisions in the model, like how we are incorporating -- We could learn more about growth, or we could learn more about certain things that bring down the uncertainty.

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You want to be able to account for uncertainty in a way that makes it less likely that you actually do overfish and the stock actually declines, but, for why it has to be in that specific window, I think I will turn it to John or Clay to elaborate further.

MARCOS HANKE: Thank you, Adyan. I have Roy requesting a turn, and then I might pass the word to Clay or to Shannon, if they want to help Adyan to clarify the question of Tony. Roy.

ROY CRABTREE: Good morning, Tony. I think the gist of the problem is to go any higher than 0.45 is you would essentially be saying there was no uncertainty in the assessment and that you're going to push it up to the absolute legal limit of it, and that sort of becomes just an unrealistic assumption, because we do know there is quite a bit of uncertainty in it, and so probably pushing it to 0.45 is pushing it quite a bit, but I think that's the gist of the issue, is making sure that you can legally defend where you're setting it, given that we do know there is a good bit of uncertainty here.

MARCOS HANKE: Thank you, Roy.

TONY BLANCHARD: My question is we're dealing with lobsters, and we're dealing with a size limit, and, really, at the end of the day, these lobsters are mostly caught by divers or by guys with traps, which it would have to be measured, and so, I mean, to a certain degree, I understand the uncertainty part, but we're looking at a 0.5, which, at the end of the day, if you're talking about ten-bucks, that's not a big deal, but, when you're talking about over a span of hundreds or thousands of pounds, you're talking about a very big difference, and I think it might be too restrictive, and I am not seeing that there's not a certain -- I think it could get bumped up a little higher than the 0.45, and that's what I'm saying.

MIGUEL ROLON: Marcos, you have Clay Porch that would like to address the issue, too.

MARCOS HANKE: I just did.

CLAY PORCH: Roy has it exactly right, and there is two components to addressing the uncertainty. From the science perspective, we specify that so-called variance parameter, or sigma, that you will see in the ABC control rule and the SSC talked about, and that's supposed to give you an idea of how uncertain the assessment is, and then that P\* value, which is supposed to, by law, be something under 50 percent, that is just an expression of how tolerant the council is of overfishing.

If you set P\* very close to 50 percent, then it's basically a 50/50 chance that you will actually be overfishing when you set the catch limit to essentially the OFL, and so, basically, you are discounting the uncertainty if you set P\* to 50 percent, but, if the council wants to say they are willing to live with this high uncertainty, they could set a P\* at something that's just under 50 percent, like Tony is mentioning, of 0.48, but, again, then you're not really putting much buffer in place, and so I think that's why the SSC preferred values of 0.45 and below.

MARCOS HANKE: Thank you, Clay.

TONY BLANCHARD: Let me follow-up on that, Marcos.

MARCOS HANKE: Go ahead, Tony.

TONY BLANCHARD: We are dealing with an individual stock here, like lobsters, and I could say these lobsters are basically hand-picked, to a certain degree, with very little bycatch, because, really, there shouldn't be any bycatch, because you're going out either diving for them to a size, or you're catching them in the trap, and, when it comes up, the sizes are taken. I understand the part of the uncertainty, but we're dealing with a stock that, in my opinion, should have very little uncertainty, and so why are they holding back on the range is my question.

MARCOS HANKE: Clay or Adyan, do you want to respond?

 CLAY PORCH: I can jump in on that. The uncertainty is about the stock status, and so, even though I get what Tony is saying, in terms of how they're harvested, the question is how much have we been taking relative to the true MSY and whether the stock is overfished or not, and, there, we do have quite a bit of uncertainty, because we don't have perfect data.

If we had perfect data, then we would have been -- We would have -- To have perfect data, it would look something like this, a survey that goes back to the beginning of the fishery, and,

essentially, it assesses how many lobster are out there from that point to now, and, if we had that information, in addition to perfect catch information, then we probably would have very low uncertainty, in terms of stock status, but the reality is that we don't have all of that, and we don't have surveys that go back in time that counted all the lobster out there, and we don't have perfect catches, and so there is quite a bit of uncertainty in the assessment, and that's what that variance parameter that the SSC discussed is all about, how much uncertainty there is in the assessment.

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To ensure that we're not overfishing, we want to account for that uncertainty, and we make a probability distribution about the OFL, and, to ensure that we don't exceed whatever that true overfishing limit is, we might want to set a P\* that's below 50 percent, and, like I said, that's why the SSC picked 45 percent below, but the council, if they want to be risk prone, they can pick a higher P\* value, but, again, the uncertainty is not about how they're harvested, but it's in stock status.

**ROY CRABTREE:** If I could, Mr. Chairman, if you go with a P\* of 0.45, that is a very high P\*, and that is more aggressive than where we set these types of things for most stocks, and so you are, Tony, taking a very aggressive stance if you go with a P\* of 0.45.

MARCOS HANKE: Does anybody else want to jump in on the discussion, and then I will go with you, Tony. Tony, go ahead.

MIGUEL ROLON: You have Julian before Tony. You have to follow the chat.

MARCOS HANKE: Julian.

 JULIAN MAGRAS: I was part of the whole process of SEDAR 57, and I am a little concerned with the outcomes, the final outcomes, presented in this presentation, because, from all of the meetings that I sat in, including the SSC, and not the previous one, but the one before that, it showed that our lobster numbers should have been way higher than where they're at, because it's one of the stocks that we have the most information collected on, and, with the 3.5 carapace length being in place, with so many years, your sizes of catch has not changed in the size of the animal itself, and it's a fishery that is market driven.

With all that's been played over the last few years, from the hurricanes, from the economy before the hurricanes, and now we're dealing with a pandemic, our numbers are way down, and the

fisheries on the fish -- You see that what we are concerned with is, if we set low numbers, and, once our markets are back up into full swing, with the hotels and all the restaurants back opening, what we are seeing is a problem with us overrunning the ACL and accountability measures again.

That's a serious problem for a fishery that the resources are not being hit, not even to half of the potentials that they can be hit, and the concerns that are brought up here today worry us, and that's why we speak all the time about measures that are put into place, and especially you have so much information, and this fishery, where individual information was collected for a long, long period of time. Thank you.

TONY BLANCHARD: Let me follow up on that, Marcos.

MARCOS HANKE: Tony, you have the turn.

TONY BLANCHARD: Okay. As for Clay's statement, where we don't have the actual MSY, I don't think we will ever have that, and I don't think we will ever have the exact numbers to work with, but you have to understand that our fishery is fluctuating, and, when I say fluctuate, sometimes, because of whether it be environmental problems or where they decline, and you name it, the fishery moves up and down, and it's never to a certain degree a straight line.

 My thing is this. With all the information out there, and I understand the part about taking a precautionary look at it, I think we ought to work with the numbers that we have, as for the MSY, which -- What I'm saying is how this market and how the lobsters are handled should be looked at in a different way than another species, because of all the information, like Mr. Magras said, that is out there, all the studies that have been taken and so on and so forth.

I don't see, to a certain degree, the big deal with taking a bigger gamble on it, meaning going up to that 0.48, which we're talking about, and to take more of a precautionary take on what we are going to be dealing with.

 MARCOS HANKE: Thank you, Tony. I have a question for Adyan. Can you go back to the slide for Puerto Rico, the first graphic that you have, and I am in the process of understanding the numbers and being able to understand this in more detail, and that's Puerto Rico.

If you have the intercut line in the center, and with the P\* of

0.45, which is the undercut line, the projection for the next year, how much it represents the total catch on that projection in relation to the average three previous years or the year before, just for us to have a comparison, in terms of poundage, to have a language that we understand a little more clear in this case.

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**ADYAN RIOS:** So the question is what fraction is the values of recent landings?

MARCOS HANKE: No, and it's related to that, but, if we decide 0.45 for the next year, how much poundage for Puerto Rico will that represent?

**ADYAN RIOS:** Let me go back one slide, and so, if we eyeball it here, if we go with 0.45 for 2021, it's somewhere in the middle to higher 300,000 pounds, and so let me -- Here is Puerto Rico for 2021, with a P\* of 0.45, and it's 358,000.

MARCOS HANKE: How much was it last year?

ADYAN RIOS: Last year is on the previous slide, and so, in recent years, in 2016, we have an estimate of 446,000. In 2017, it's 282,000, and, in 2018, it's 518,000, and so this is what — The 647,000 and 482,000 are the preliminary values for what they were in 2019 and 2020. That's also shown in this plot right here, where you have those recent estimates, as well as the time series in black.

**MARCOS HANKE:** If I am understanding correctly, the years before, by choosing a  $P^*$  of 0.45, the industry of the fishermen of Puerto Rico have less available poundage to fish for.

ADYAN RIOS: Not necessarily less, and I will turn this over probably to Clay to explain further, but the estimates -- The model for 2016 gives the estimate of the MSY, and so, had we looked further into this model earlier to use as management advice, those estimates of OFL, and the ultimate estimate of MSY, would still be in the same ballpark, but, Clay, can you elaborate?

MARCOS HANKE: Clay.

CLAY PORCH: Sure, and thank you. Adyan, could you go back to the slide that shows the full catch history? If you look at the top graph there for Puerto Rico, you can see that green straight line is the MSY estimate, and the value of P\* of 0.45 is a little bit below that, below that 400,000-pound grid line, and

what you can see is the average landing for Puerto Rico before 2016 is about at the level that corresponds to P\* of 0.45.

I mean, you have a few cases where they were up in the 400,000-pound range, but, most of the time, they are around 300,000, or maybe 350,000 or so, and so right there at the P\* of 0.45. It's only in the most recent years, where we do have some uncertainty about the expansion factor, where the estimates are up around 500,000 pounds, or even 600,000 pounds, and so it was surprising to us at first that, post-hurricane, that we were getting such high landings, although I understand that some of the fishermen have confirmed that landings have been particularly high in recent years. The bottom line is the value of ABC associated with a P\* of 0.45 is pretty similar to the average catch all the way back from 2015 through the 1990s.

MARCOS HANKE: Thank you, Clay, and, on the same line, for me, it's exactly what you explained is very important, because, with the fishermen of Puerto Rico performing the way they have been doing historically, that number is something that is proven, in my view, proven to be not harmful to the stock of the lobster. We have a sustainable lobster fishing performing on that level, and this is the only comment that I want to make, close to the higher poundage of the P\* of 0.45. I'm going to check here in the chat if anybody else would like to -- Does anybody have a question? Hearing none, the next presentation, Adyan.

ADYAN RIOS: I put the two components into one presentation, and so the OFLs are actually included in this presentation, and so we covered both, and I think the next presentation would be the SSC, and so the next item on the agenda.

GRACIELA GARCIA-MOLINER: You do have a couple of things in the chat, and one of them -- I don't know if Carlos wants to comment, because it just says his name, and I don't know if it's Carlos Velasquez or Carlos Farchette who is asking for a turn, and then Vanessa Ramirez has a comment. Do you want me to read it out loud for the record?

MARCOS HANKE: Yes. Go ahead, Graciela.

GRACIELA GARCIA-MOLINER: Okay, and so Vanessa says that data from the 2016 to 2018 should not be used. They have a big issue with commercial fishermen that don't fill out reports and lose their license, and so the better number is 2019, and, with the new tools of e-reporting, better education, and the importance of the information that they give, and now better access to real data from commercial fishers, definitely those numbers will go

up. We have sustainable lobsters and many juveniles. That was Vanessa Ramirez's comment.

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MARCOS HANKE: We have another comment from Carlos?

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GRACIELA GARCIA-MOLINER: It just says Carlos.

CARLOS FARCHETTE: Actually, all I wanted to comment is that the bottom line here for St. Croix, and I guess, since we're moving into island-based fisheries plans, I really want to emphasize the comments for the St. Croix District, because the fishermen, when I go speak to them at the fish market, or wherever they

12 13 sell, they don't want to hear about sigma or P\*.

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All they want to know is tell me how many more pounds I can harvest from what I was harvesting before, when we were just using estimated numbers, and so is it 197,000 pounds for 2021, is it a-hundred-and-thirty-something-thousand pounds for 2021, and, that way, I can take the information that they want to hear. I also want to say that we have to be careful, where -- I don't want to see, all of a sudden, people start to export a species because they can harvest, theoretically, 50,000 pounds more. That's what I've got.

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MARCOS HANKE: Thank you, Carlos. Now we have Carlos Velazquez requesting to speak. Carlos, very quick, please.

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29 30 CARLOS VELAZQUEZ: Good morning, everyone. Carlos Velazquez, commercial fisherman from Naguabo, Puerto Rico. question on this data for Puerto Rico lobsters. These are all of the pounds from the fishing traps and nets and diving?

Yes, for commercial. That's the total of all

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ADYAN RIOS:

commercial gears.

MARCOS HANKE: Thank you, Adyan. I think we are ready for the next presentation, and remember that, if you have any extra comments, please do it via email to Miguel or to the office or via the chat, and we want to make sure that we have all the comments recorded, stated, and so we'll go to the presentation.

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SCIENTIFIC AND STATISTICAL COMMITTEE REPORT, INCLUDES USE OF LANDINGS PROJECTIONS AND OTHER DATA FOR STOCK ASSESSMENT AND DETERMINATION OF MANAGEMENT PARAMETERS

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Thank you, everybody. We met for a full RICHARD APPELDOORN: five days a while ago, virtually, and we considered two major items, SEDAR 57, which is what I will talk about first, and also where we are with the conceptual ecosystem model.

A little bit of background is we have proposed ABC control rules that are based on three tiers, and those tiers are based on the sources of information available, and those sources are catch data, size or age composition, and some kind of index of abundance, and, in Tier 3, which was data rich, we had all three sources that were available. In Tier 2, data moderate, two of the three sources were available, and Tier 3 was data limited, and only one source was available.

In actuality, the assessment that the Southeast Center conducted actually had two of these sources. It had the catch data and some size composition, and so, technically, that sort of meets a Tier 2 requirement.

However, we felt that the spiny lobster assessment really is one that we would like to keep as a Tier 3 rather than a Tier 2, and the reason for that is because, following discussions with the Science Center, although we have two sources of information, the amount of uncertainty in the reliability of that data, and particularly the catch data, we felt that it should stay in Tier 3.

We are hoping that, with ongoing improvements in the data, such as better correction factors and random sampling of length composition, that at some point we could go into Tier 2 in the future, but so we're staying in Tier 3 for all of this at the moment.

The Tier 3 control rule is what you're seeing on the screen. At the moment, I would just like to really kind of call your attention to the items in yellow, because this is what we were dealing with, to be able to get to ABC from OFL, and OFL was what was coming out of the assessment that was made by the Southeast Center, and so we have a level of OFL, but this is going to be reduced by a buffer that includes scientific uncertainty and reflecting the acceptable probability of overfishing, and that's the P\* value that you were just talking about.

In looking at the scientific uncertainty, we are looking at what we call sigma min, and that's the width of the -- I'm going to show this graphically in a minute, but the width of our distribution, which is a reflection of that certainty, and then there are limits in Tier 3 of how big of an acceptable -- How small an acceptable sigma could be, and, in Tier 3, the minimum

is two-times that sigma min, and so it could be greater than that.

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Just to put this in a simpler context, our ABC is going to be equal to scientific uncertainty times the risk of overfishing times the OFL, and that's simply an equation, as shown at the bottom, and so, to put this graphically, and this is not an outcome of the assessment, and this is just an idealized hypothetical distribution, but the assessment gives us a distribution of OFL.

In other words, the assessment is run many, many different times, but with various randomizations of parameters to control for things, and you get a distribution, and that distribution of OFLs looks like this, and that distribution is divided by a mean, or a median, depending on whether it's normally distributed or not, and a variance, or a coefficient of variation, and so that's the width, and the mean or median is what the center point is. That's what we see here. The OFL then is defined as the median of this probability density function of the OFL outputs from the assessment.

Sigma is a measure of the uncertainty, and so width around that mean value, and I have shown you three examples here. The green one, which I showed you before, has the largest value of sigma, and then you have the red and the blue, and you might think of these as something where, in a Tier 1, you have a very narrow range of variability, and you're fairly confident about your estimate, but, as you go out from Tier 2 or Tier 3, you are getting less confident about where this value actually is.

Scientific uncertainty is dependent on the sigma min and a multiplier, where, for Tier 3, that multiplier has to be a two or greater, and so the first question, when dealing with what's the variance that we're dealing with under Tier 3, is what is our sigma min, and a note here that sigma must increase as scientific uncertainty increases, and that was what I reflected in that previous slide of the three curves, where Tier 3 had the broadest distribution and Tier 1 had the most narrow, and that would be showing that the uncertainty is decreasing as you go from three to two to one.

 Our sigma min recommendation comes from two studies that were done initially, one by Ralston et al. in 2011 and one that just came out by Privitera-Johnson and Punt in 2020, and both of those studies looked at very well studied, and therefore datarich, assessments, and they looked at what the sigma mins would be coming out of those kinds of things, and the conclusion was,

in both of these things, is that a sigma min of about 0.5 is about where you want to be, and that's what shows up from these analyses of where they do have a lot of information, and we have a lot of discussion about that, which will be available once the transcripts are up, but this is the decision that the has to make, is a sigma min of 0.5.

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We also thought that there are similar amounts of scientific uncertainty in all three platforms, and, therefore, we're going to use the same approach for all three platforms for this assessment of spiny lobster.

The multiplier, as I said, per the Tier 3 of the ABC control rule, has to be greater than or equal to two, and the SSC felt that, with spiny lobster in particular, the multiplier should be set fairly low, and I think both Tony and Julian had talked about some of the factors that are there and are acknowledged of the behavior of these fisheries over time and that it could be set fairly low, and, therefore, we actually did choose the minimum value of two for a sigma min.

The next step then, after we have sigma min and the multiplier of two, is setting the ABC, and setting the ABC requires first knowledge of what is going to be the acceptable limit of overfishing, and so we have our 50 percent probability of overfishing, which is where we are with our OFL definition, and this is going to be buffered down to some value of ABC, and that buffer will depend on the width of the distribution, which is set by using the sigma min and the multiplier, and the P\* value that is a prerogative of the council.

Here is the buffer coming in, and this is our assumed risk of overfishing, and that will bring us down to here, and this is set at 0.45, just for discussion, and your ABC is reduced from the OFL accordingly.

 As I said, the risk of overfishing is something that is set by the council, and that is the P\* value, and so, when I talk about values, when I talk about 0.5 and 0.4, et cetera, this is the scale that we're talking about here, and so, if we were to go to 0.4, you're here, and you're coming over here and down here to get an ABC, and, again, remember this is a stylized graph, and it's not the actual values for any platforms, but it's just to illustrate how this process works.

The SSC, in their determination of sigma min and using the multiplier of two, has set the width of this curve, and P\* is going to say, okay, where on that curve are we going to be given

the level of risk of overfishing that we're willing to accept.

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The P\* is set by the council, and the value has not been decided upon, and it's needed before the SSC can set an ABC. However, we were told that the council has presented a range of acceptable P\* values, and that range is 0.4 to 0.45, and so this initially gave us a conundrum, because the council had to give us the P\* before we could set ABC, but, if the council gives us a range of acceptable P\* values, and the SSC accepts that, then we can go ahead and calculate ABC for that entire range.

Therefore, it technically would already be calculated when the council decides what their final P\* value is, and that's exactly what we did, and so we agreed with the range of P\* that was provided by the council, and then we can go ahead and calculate it.

We remind the council that, in determining the final value of P\*, they should consider what would be the time to the next assessment, and so, the longer the time, the more you're getting out away from the predicted values, and so you're going into unknown territory, and that would drive your P\* down to a lower value, say toward the 0.4 end rather than the 0.45 end.

Other management measures that might be -- Management regulations that might be in place, and this is some of the stuff that, again, Julian and Tony talked about, is minimum sizes, closed areas, closed seasons. The more management you have in place that you think can buffer the effect of fishing, that would allow you to use a higher value of P\*.

There is also the life history of the species, and that's already been somewhat taken into account, but sometimes there are some factors that you might want to indicate, and that could go up or down, depending on the species, and any other factors that might be considered.

 This is actually a summary of what Adyan had already told you, and so we agreed to use a three-year average of the most recent landings for the estimate of the landings in 2020, and then those are used to do the projection of potential future OFLs. They are different on Puerto Rico versus the Virgin Islands, because of the data that's available, just as the explanation at the bottom, but this is the data that was available at the time that the SSC met, and so the most recent projections were used based on that.

The SSC developed then a table of ABCs over the range of P\*

values that was provided by the council, and, again, that 0.4 to 0.45 range. I would point out that, if you go outside the range, the SSC would need to go back and recalculate an ABC, because this is the only range that we considered.

Here, the values for Puerto Rico, this is the same information that Adyan put up, and we have the different P\* values going across the top, and then the projected years going down the graph, and the OFL for Puerto Rico goes down, as you saw in -- It goes up, because you're approaching the MSY rather cautiously from a value below it, and so, at the bottom, and I've only done this for this one slide, but it's the same value, and so hopefully you can kind of remember that.

As you go down the P\* values, from 0.45 to 0.4, these are the percent reductions you have from that 0.45 value, and so, if you go to 0.44, it's 2.5 percent less. If you go to 0.43, it's 4.9 percent, all the way down to, if you use 0.4, it's 12 percent less than what you would have at 0.45, and that's a fixed value, because it's just a multiplier, and so that applies to all the islands.

Having said this, you are not supposed to say this is where I want the landings to be, because that's cherry-picking your P\* value, and you are supposed to consider what the P\* value should be and then find out what your catch is, and so these, I will also mention, are estimates, and there is reasons why those are going to change, but this is the current state, and so that's Puerto Rico, and here's St. Thomas, and, here, you will see that the values actually go down, and that's because, unlike Puerto Rico, which is currently over the limit, if you remember those graphs that Adyan showed, both the Virgin Islands platforms are under the limit, and so they can actually fish at a higher level and bring their catch rates down to what the final level would be, and so that's why these numbers go down, because there is excess biomass available to you, and the model allows you to harvest that, to get down to what the MSY level would be, and here's St. Croix, and it's the same thing.

 You see the numbers go down, because there is excess biomass currently available. In fact, for St. Croix, there's a lot of excess biomass currently available, and it allows them to fish at a much higher level at whatever P\* value you're using, as you get down to approaching the MSY levels.

I would point out that, if you remember the graphs, Puerto Rico was currently over that MSY level for that last couple of years, and both the Virgin Islands were not. However, St. Thomas/St.

John was pretty much pushing that envelope in the early to mid-2000s, and St. Croix went substantially over that MSY in the late 2000s, and so, just so you know, it is possible to get above these numbers.

One last thing about reality is these are based on the current data, and the control rule is tied into the island-based plans, and so the island-based plans need to be approved before you could actually implement this, or this is our understanding anyway, which means it's going to be some time in the future, and so we recommend that -- We have already gotten comments from that fishing community that 2020, because of COVID, is going to be -- Fishing mortalities, across-the-board, are less than what we normally would see, and this is particularly for spiny lobster, and so we think that, by the time you actually have to do this, the 2020 data might be fully available, and so you would be able to run that with the most recent data and not go with projections, and so this changed what the OFL projections will be at the time we do it, at the time you actually would be in a position to implement this control rule information for spiny lobster.

I think that will -- That's the last part of that. Should I take questions now or continue to go through the conceptual model, which is actually fairly quick, before taking questions?

MARCOS HANKE: Richard, let's finish with your presentation and then take questions, please.

 RICHARD APPELDOORN: Okay, and so the second thing that we looked at was continuing our work on the ecosystem conceptual model, as developed by the SSC, and I have used this Jackson Pollock thing to kind of show you how messy this can be.

We have eight sub-models, and these sub-models have a various number of components, and so I listed here what the eight sub-models are and the number of components in them. If you add all these things together, you get something over sixty, and that means there is potentially something over -- Over eighty, rather. There's a potential of over 64,000 connections that might be considered, and so it's a daunting task.

This is an example of one of them, and it's the marine ecosystem components model, and it's one of the ones that we have finished. Well, I shouldn't say finished, but it's one of the ones that we've gone through and made connections, and there's actually only one sub-model that we haven't gone through to make those initial things, and so, here, the blue lines show our

positive connections, and that means like inshore forage fishes are positively contributing to reef fishes.

The red lines are negative connections, and so reef fishes decrease the population of inshore forage fishes, and so there's a mutual feedback there. The thickness of the lines is an indicator of the strength of those, and we ranked those as low, medium, and high. There are some questions, and so, although we've gone through this exercise of drawing the lines, there are still things we need to go back to.

For example, in this one, we have highly migratory species, which was included because this is obviously something the council has to deal with. However, ecologically, highly migratory species has things like nurse sharks, which are anything but highly migratory, and so we have to kind of more formalize the definition of what we mean here, and same thing applies with coastal pelagics, where maybe that's where nurse sharks should be, but coastal pelagics can include something like dorado, which, ecologically, are really highly migratory, and so we need to kind of pin down our definitions here, to see if we're talking legally or ecologically in this case, and there's a number of similar definition problems that we have to go through for probably most of the sub-models, but we have the connections down pretty well.

For each one of these, there is a matrix that shows these connections, and you will see here the values go from one to three, one being a loose connection and three being a very strong connection. Positive values mean that one factor is contributing to another, and so inshore forage fishes contributes strongly, positively, to reef fishes, and negative values are the opposite. As I mentioned before, reef fishes, and reef fishes contribute negatively to inshore forage species, and so if they're eating the inshore forage fishes, and so each one of these diagrams that you saw can be reduced to this kind of matrix.

Here is a more complicated one, and this is socioeconomic and cultural drivers, and it has substantially more boxes, and there's lots more connections between them, because, well, basically, in a large part, we're putting -- Although there are some other human component elements, a lot of it is in here, and so you can see we have things about market demand and what's the status of the local economy, how is tourism doing, is there competition or opportunities for imports or exports, and there's the human population size, and so all these things are interconnected, and we have issues about public health, the

wellbeing of community, and so this is something we want to maximize, and, eventually, the model will be, okay, what do you need to tweak to do something like that.

This is one of our more complicated ones, and this is the matrix that goes with that, and I should point out that the reds are changes that were made in the last meeting, and they could be textual changes or number changes, and black are things that we actually had before, when we had an earlier works, and blues are things that we might want to -- That we need to reconsider, and there's a lot of them here, and a lot of that arose from the fact that relationships could go both ways, or we weren't sure about how strong the relationship is, and so there's some things, and this is one of the worst, actually, examples of where we need to go back and kind of make some final decisions.

Actually, one of these boxes, and I don't remember which one, is going to go out of this model and into another one, but I kept it in here to be able to draw the boxes.

We also had some really good presentations at those meetings, looking kind of further down the line about how things should be connected, mostly between the sub-models, and this is one by Reni Garcia looking at land-based activities, and his point was trying to emphasize, first of all, where do we actually get data from, and so this is kind of where he was here, and we get data on what the river runoffs are, and so there's things that feed into here, and we get data on what the sewage outfalls are giving and the power plant effluent is giving, and so his was a data-driven approach and then, okay, how do these all connect into water quality or sediment quality and reflecting various potential sources of pollution or just kind of sediments and nutrients that could lead to turbidity, which would affect the plankton productivity and the benthic productivity and whatnot.

There's that, and here's another one that was given to us by Vance Vicente looking at water quality issues, and he was very adamant about saying there really are differences about the nature of the inputs that are coming from either upland sources or coastal sources and what their impacts are, potentially, into the system.

This is a more simplified diagram, and, so, as we start looking at the connections between sub-models, this kind of information that was provided by Reni Garcia and Vance Vicente I think is going to drive a lot of how we connect things.

This is the full conceptual model as we had it in 2019, which I

presented some time ago to the council, and what we have done now is gone through all the sub-models, except for this one of competing uses of resources, and we got about a third of the way through that one before we ran out of time in our all-week meeting, and so, the next time we start up, we'll be finishing that.

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What I want to show here is that, although we were going from a sub-model to sub-model and doing all the connections within sub-models, in our previous discussions, we've actually talked a lot, what looks like to be a lot, of connections between sub-models, or across sub-models, and that's what all these lines here are showing, is connections across these things, and they are far from being complete, but it's just to show you that we have looked at it, and, already, as you can see, it looks messy.

We have some things -- This is the one that I just showed you of socioeconomic cultural drivers, which have very highly-complex connections within them, whereas something like abiotic factors don't have too many connections between them, but they affect a lot about factors of habitat, ecosystem components, water quality, et cetera, and so this is going to be where we are going.

Just to give you an idea of what this looks like, as I mentioned, there's a matrix for each one of the sub-models, and that's what these little boxes are. These are the matrices of each sub-model, and the size of the box is driven by the number of components that are in the box.

 Where you see -- I know you can't read these, but, where you see the kind of orange coloration, those are where we have said there is a connection, and, as I said, we've gone through most of them. The green areas are areas from that previous slide where we have previously said there are connections between submodels, and so all this white area here represents the connections that we haven't really gone through, but we have, in previous discussions, talked about connections, and so we actually aren't going to start from scratch, but, as I said, potentially there are 64,000 little boxes here, and clearly there won't be that many connections that we actually have to deal with, but it's still somewhat daunting to see it on paper.

We're going to take an approach that hopefully will kind of streamline this for us, at least initially, and so this is a future homework assignment for the SSC, which will be given to them after our next meeting, which we will finish up hopefully all the sub-models, and, here, what we're going to do is ask for

each potential sub-model, and so that's what we have here on the top and going down, and we want to look at this, and so these are the boxes representing the connections within the sub-models, but the homework assignment is going to be connections between the sub-models.

What we want to do is basically say what are the top three for each sub-model to each other sub-model, and so we might say, for fishing -- Let's go the other way around. For socioeconomic and cultural drivers relative to the fishing block, we want to know what's the three most important socioeconomic things that are connecting to the fishing sub-model, which component in the fishing sub-model do they point to, is it a positive or negative relationship, and is there a low, medium, or high relationship.

That's what we want to do, and it would look something like this. Again, this is the socioeconomic and cultural drivers, but we may say something that -- I just chose three here that I think might be important. We might say, okay, of all the components in here, the ones that are most important for fishing might be market demand, the regulatory structure, the fishing regulatory structure, and other regulatory structures.

Then these would connect to someplace in the fishery model, and market demand certainly would be an important factor driving fishing mortality, for example, and regulatory structure would also, fishery regulatory structure would also, affect that as well, and maybe there is other regulations that are outside of fishing, such as endangered species or water quality, something coming out of EPA or something like that, and so these would point to someplace in the fishery, and so the SSC is going to be challenged with saying, okay, for each one of these sub-models, give us the top three, and it may be one.

Market demand may connect with three different things in the fishing sub-model, and those are the most important, or it may be three things, like I have looked at here, and so that's our assignment for how we're going to try and get through that maze of connections between the sub-models, and so I think that's -- Yes, that's it.

MARCOS HANKE: Thank you, Richard. Miquel.

MIGUEL ROLON: Richard said in the beginning that these are two major topics, and I believe that we should go back to the first one, and Roy Crabtree has a motion that has to be read for the record, and Graciela is ready to put it on the screen. On the chat, I have the motion by Roy and seconded by Carlos Farchette,

but that has to be -- You have to send that in the audio, and so we can go back to that part of Richard's presentation and address the issue that Roy Crabtree would like to address via a motion.

**GRACIELA GARCIA-MOLINER:** Sorry for the interruption, but you also have Tony Blanchard and Carlos Farchette with questions for Richard.

10 MIGUEL ROLON: Yes, but that's after we get the motion. Then, in the discussion, you can have all the other discussion.

13 MARCOS HANKE: Okay. Graciela, can you put the motion on the screen, please?

16 MIGUEL ROLON: It's on the screen.

18 GRACIELA GARCIA-MOLINER: Natalia is projecting it.

MARCOS HANKE: It's open for discussion.

22 ROY CRABTREE: Do you want me to read the motion, Marcos?

MIGUEL ROLON: You have to read the motion on the record.

MARCOS HANKE: Yes, and I am just checking the participants. One second. Roy, can you read the motion, please?

ROY CRABTREE: Yes, and so I would like to make a motion. I had originally thought we should probably set the P\* at 0.42 or so, but, in listening to Tony Blanchard's arguments, he has persuaded me that we can go higher than that, and so, based on a lot of the rationale that Tony laid out, I would like to make a motion to accept a P\* value of 0.45 for spiny lobster.

CARLOS FARCHETTE: Second.

MARCOS HANKE: Okay. Let's open for discussion. Miguel, I don't see in the chat the persons that asked to speak.

MIGUEL ROLON: We have questions from Tony, and I guess that's the first one that you need, and, also, Carlos wanted to have a question for Richard, but, here, what we need to do now, Mr. Chairman, is to address this motion and discuss the motion itself, and then you vote, and then you can open for other questions that they may have for Richard, and then you go to the second part, which is the model.

 MARCOS HANKE: Yes, and let's discuss now the questions in relation to the motion. I have Tony Blanchard.

**TONY BLANCHARD:** Well, I appreciate Roy making this motion, but I am planning to go farther than 0.45, and so what I am going to do is I am going to abstain from this vote.

MARCOS HANKE: Does anybody else want to make a question or a comment?

MIGUEL ROLON: Marcos, you have Richard Appeldoorn.

MARCOS HANKE: Richard.

RICHARD APPELDOORN: I just want to point out two things. One was that Puerto Rico and St. Croix definitely, in their history, have gone over the MSY level, which is the OFL, and, if you have your value close to that, you are setting up a potential for actually having a fishery declared overfished, and so that's where the precaution comes in.

The second point I would make is I think you would want to include here the rationale for that choice, but Jocelyn can probably comment on that better than I, about what goes into justifying the  $P^*$  value.

MARCOS HANKE: Carlos Farchette.

 CARLOS FARCHETTE: My discussion is I just wanted to know, because I heard Richard, in the earlier presentation on spiny lobster, mention that, in the future, you may be able to move it from Tier 3 to Tier 2, and so would that also change things that we're doing now, or would it remain the same, or do we go back to the negotiation table, if that was to move to Tier 2? I'm not sure what would happen.

MARCOS HANKE: Richard.

 RICHARD APPELDOORN: I'm not sure either, but what happens when you go from Tier 3 to 2 is that you're allowed to use a smaller variance, and so your curve is going to get more peaky, and, therefore, indicating you have more confidence in the estimates, and what this mean is that, as you reduce by your P\*, the amount of reduction in catch would be smaller, and so that's already taking into consideration then, if you will, the scientific uncertainty surrounding that and allowing you to have a larger harvest accordingly.

It doesn't necessarily mean that you would change your P\* value. However, it would also depend -- I mean, the other thing we could have done was say, okay, let's make this a Tier 2 evaluation, but, if we did that, we would not have chosen the minimum multiplier for sigma min. We would have chosen a much larger one, because we were saying -- So the result probably would have been the same.

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If we move to Tier 2, we would like to do that when we have better data, and so it really does represent an opportunity to get a better estimate, and hopefully that better estimate allows us to have a higher catch.

CARLOS FARCHETTE: Thank you, Richard.

MARCOS HANKE: Roy Crabtree.

ROY CRABTREE: I wanted to clarify a couple of things. One is my motion would apply to the three islands, Puerto Rico, St. Croix, and St. Thomas, and my rationale is this. This was the highest value that we asked the SSC to look at, and, as Tony pointed out, I mean, this is a -- We have a pretty precautionary minimum size limit in place here, which affords quite a bit of protection, and the fishery has a relatively long history, and it appears that it has been stable over time, and the level of fishing that has historically taken place doesn't appear to have caused problems. The stock is not overfished, and it's not undergoing overfishing.

 It seems to me, in this case, probably more than for most of our stocks, we could argue for a more aggressive approach to the fishery, and I think, primarily, because the size limit provides a fair degree of protection, and recruitment is really driven by external events anyway, and so it doesn't seem likely to me that setting it at 0.45 is likely to cause any harm to the stock.

 MARCOS HANKE: Thank you, Roy. I would like to make a comment that I agree with the 0.45 on the presentation. Like I stated, it corresponds to very close to the historical landings that didn't show any big problems, and it has a sustainable factor in there, the historical performance in there, but I have a question to Clay Porch.

Once the new datasets that we are working on now, that will change -- It will allow us to change -- Let's say that it's a positive outcome, and the mechanism is to change the P\*, or how will we readjust into the future, once the new dataset arrives, and let's say that it's a positive outcome from the new studies

and the data collection that has been done.

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CLAY PORCH: Sure. Thank you, Chair. As the data gets better, we could arguably justify moving up to Tier 2, and so I think Richard is exactly right. We have two of the types of data that are required to move an assessment to Tier 2, but both of those data are rather uncertain, and so the spirit of Tier 2 would be to have say size or age composition data and catch data that are both reliable, which, right at this point, we don't have, but, as those data become more and more reliable, that allows us to move the assessment to Tier 2, and that means we use a lower variance parameter, which means there is less uncertainty, and so there's less of a buffer in the ABC advice, and so that means the ABC could come up. Does that get at your question?

MARCOS HANKE: Yes, and I understand that, but I wanted the whole group to have your input on that. Thank you very much. We have Carlos Farchette, I believe.

CARLOS FARCHETTE: I just have a question. Is there any way that we can actually review these decisions like every two years, do a review every two years, or every four years, to make sure it's working right, before something goes wrong and all of a sudden we have a problem and then they do an emergency shutdown? I think we did that for something else years ago, where we said that every two years we would review something, but that's just a question.

MARCOS HANKE: Clay, can you answer that, please, or anybody from the Science Center, if we can review the data for the lobster in a shorter period, in two years, addressing the fact that we are changing the system of managing?

MIGUEL ROLON: Marcos, there is a slide by Richard Appeldoorn that addressed just that. The longer you wait for the P\*, you have the consequences. Not the P\*, but the information that you have available for reviewing this, and I believe that Richard and Clay can address that.

MARCOS HANKE: Please, Clay or Richard, to the question of Carlos, and, if I understand correctly, it's that if you can make sure that we can address lobster in two years.

CLAY PORCH: That's just something that has to be negotiated on the SEDAR schedule. If you wanted to have another assessment of spiny lobster, then we take that to the SEDAR Steering Committee, and we would negotiate what the next assessment schedule would look like, because remember, and Carlos has been

there, we're balancing the needs of four different councils, and so we just kind of have to look at how much manpower we have available and then set the schedule out, and we're trying to do that two years ahead.

The short answer is yes, and it's just part of the negotiation, and the council would also -- The Caribbean Council that is, would also have to look at what other priorities they have, if that's what he's talking about, updating the assessments. If he's just talking about updating catch information and such, we could do that much more quickly, and that doesn't have to go through a SEDAR process.

MARCOS HANKE: Thank you.

CARLOS FARCHETTE: Thank you, Clay. That's exactly what I was looking for. I didn't want to do another assessment, and so thank you. That's what I wanted.

ROY CRABTREE: The SEDAR Steering Committee meets twice a year, usually, and I think we have a virtual meeting coming up in the fall sometime, and so that would be the time for Miguel or the council chair to look at the schedule and try to figure out where to put this in.

MARCOS HANKE: Thank you very much, Roy. We have Tony Blanchard.

 TONY BLANCHARD: I would just like to make a comment on that statement of what was just made. I don't want to sound like the bad guy, but this sounds like wishful thinking, because, really, we're supposed to be looking at these ACLs how often, and how often does that happen? I think looking at the lobsters every couple of years, I don't think that's going to happen.

MARCOS HANKE: Thank you, Tony. Does anybody else want to make a comment? Otherwise, I think we are ready for voting on the motion

GRACIELA GARCIA-MOLINER: Mr. Chair, if I may, you have a comment from Vanessa Ramirez. I will move forward with 0.45 and don't lose more time with -- Not to lose more time and numbers, but I will appreciate that this gets reviewed every two years with better data.

MARCOS HANKE: Thank you, Graciela. I think we are ready for voting.

 GRACIELA GARCIA-MOLINER: Mr. Chair, if I may, I have a question for clarification. Should the motion read that the CFMC moves to accept a P\* value of 0.45 for spiny lobster for each of the three islands, or would this cover that it's assigned to all of them?

MARCOS HANKE: I think it's each of the islands, and this is what Roy has stated. Roy, please correct me if I'm wrong.

ROY CRABTREE: Yes, this would apply to all three islands.

MARCOS HANKE: Thank you. Can you please clarify it on the screen that that's his intent on the motion? Carlos Farchette, are you okay? You seconded the motion.

16 CARLOS FARCHETTE: Yes.

18 MARCOS HANKE: Okay. We are ready then for voting. Miguel, can you help with going around?

MIGUEL ROLON: Just ask them if there is any opposition or any abstention, and I believe that you already have one abstention, and so that's the way that --

MARCOS HANKE: Okay. Any opposition? Any abstentions?

TONY BLANCHARD: Abstain.

MARCOS HANKE: All the others are in favor, and the motion carries. Thank you to all for a good discussion, and we're going to go to the next presentation that Richard presented to us. Any questions on the second presentations about the models?

**MIGUEL ROLON:** You have Damaris Delgado asking for a turn to speak.

MARCOS HANKE: Damaris.

**DAMARIS DELGADO:** Sorry. It wasn't a question, but I was in favor of what was being suggested by Vanessa Ramirez in the chat.

43 MARCOS HANKE: Thank you. We will go back to the questions 44 about the models that Richard presented, and I have Roy 45 Crabtree.

**MIGUEL ROLON:** Marcos, before you go, we need to ask Damaris whether the Secretary is here or not.

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MARCOS HANKE: Damaris, do you have any news from the Secretary? Is he here now?

**DAMARIS DELGADO:** I have a suggestion. Can we have the welcoming remarks from the Secretary just after lunch, after the break of lunch?

MARCOS HANKE: Yes, we can do that arrangement.

DAMARIS DELGADO: Thank you.

13 MARCOS HANKE: You're welcome. Roy Crabtree, do you have a question?

ROY CRABTREE: I just wonder, Miguel or Graciela, if it would be appropriate to ask staff then to start putting together a framework action or some options to bring back to the council, because we'll have to, I think, take a framework action to actually implement the new ACLs that come from this ABC. We could look at that either in August or in December, I guess.

MIGUEL ROLON: The staff can start working with the Regional Office and have that option for you at the August meeting. If we have a question regarding the timing and the information that we need, then we will contact, through the Chair, all of you.

GRACIELA GARCIA-MOLINER: There is the update of the island-based FMPs coming up, and they have not been approved yet, or implemented, and August might be a little bit too soon for the staff, because of the conceptual models that are happening with the SSC, but we'll try for August, or definitely for December.

**MIGUEL ROLON:** What Roy is asking is not that, and so, after we get this off, we can exchange emails with Roy and make sure that we are on the same page.

 ROY CRABTREE: My question was sort of along those lines, and I understand that the island FMPs aren't implemented yet, but we expect they will towards the end of the year or early next year, and so, if we start pulling together the options and framework, we could have it ready to vote it up at the appropriate time, and so I think whether you bring something to us in August or December, whatever workload dictates, we'll be fine with that.

GRACIELA GARCIA-MOLINER: Thank you.

MARCOS HANKE: Thank you very much. Tony, do you have a

question?

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**TONY BLANCHARD:** I've got a question for Richard on the previous slide with the P\*. I believe it was a blue -- That it was a blue page where it shows the timeframes and the years that was used.

GRACIELA GARCIA-MOLINER: Richard, do you want to --

TONY BLANCHARD: No, for the P\*. It was 2016 through 2018. It was in the previous presentation.

RICHARD APPELDOORN: I am not sure which figure you want to see.

TONY BLANCHARD: That's not the one. I believe it was farther back, where it shows the years that was being used with the P\*, and I believe it was 2016 to 2018.

RICHARD APPELDOORN: The actual values that come out --

TONY BLANCHARD: I believe that's what we were talking about, but I'm not sure. I would have to see the screen first.

GRACIELA GARCIA-MOLINER: Richard, I think it's Number 15, Slide Number 15.

 TONY BLANCHARD: What I'm looking at is the time that's being used, the timeframe that's being used, and we just went into two major hurricanes in 2017, and now we have COVID in 2020, and the fishery still has not recovered, and, when I say recovered, I mean the guys actually fishing to potential, and my thing is that there's a problem when you want to use the latest information, and now we're looking at 2020.

We're currently in 2020 and suffering the COVID, and so I understand the part about using the latest timeframe, but, when you have to plug in the factors of the COVID and the two category fives that we just went through, I don't think this is going to fill the bill. I don't think this should be used, because of the mere fact of what we just went through and that we still ain't fishing at the potential. We haven't gotten our money yet from the disaster that we're still waiting on, but we're still waiting on that.

MARCOS HANKE: Tony, can you hear me?

RICHARD APPELDOORN: Let me go down to my last slide, and this I think addresses your point, is that this information -- The

points you were just bringing up were brought to us by both Puerto Rico and the Virgin Islands, Nelson and Julian, and they were saying that the fishing is going to be way down, and so that's what we're saying, is that you're going to have to go through this framework approach to get the control rules accepted as the way that things are going to be calculated, and that's going to take time.

By that time, you're going to have the new data for these years that are obviously not typical, and so what we're going to see, I assume, is a great reduction in the catch levels, and, when we put those data in, the process is still the same, but what it's going to say is that, even more so for the Virgin Islands, and to a lesser degree for Puerto Rico, there is now much more biomass in the system available for harvest than there would be if you were right at the MSY level, and, therefore, the model would say that initial estimates of what you can harvest are going to be much higher, and then you can fish that down until your population gets down to its appropriate OFL, or appropriate ABC level, or ACL, actually.

What it does when you account for that is it just allows you to take more initially of that biomass that you've built up, because you haven't been fishing it, and those calculations are like -- Well, they're a couple of clicks on the spreadsheet, and so those things could actually be updated every year, as soon as those new data are available, and you could update what you -- If the COVID problem exists through 2021, and you update it again to show that you still have even more biomass available that you could harvest, and so that's how that works.

That doesn't require a new assessment, but it just takes the most recent data into the spreadsheet, and it's pretty much just geared to go, once you put those data in there, and you press the button, and it calculates the new values, and so that's how it works. If your catches are really being suppressed, if you can get that data into the system, it will say, hey, you've got a lot more biomass out there, and we'll let you harvest that until you get down to the appropriate level.

 MARCOS HANKE: Thank you, Richard. We already voted on this motion, and we have a very tight agenda, and I would like to have the last comment about it from Clay Porch. Any extra comments, Tony, please write an email to Miguel.

CLAY PORCH: Thank you, Chair. I think that's the point that Carlos was getting at when he was asking about updating the data, and so, yes, we could update the catch data and rerun the

projections to get different ABC advice, and the only caveat that I would say is that it might be a bit strong to say that they will estimate that there is a lot more biomass out there, if the catches in 2020 are a little lower, and I don't think it will make that much difference to the ABC advice.

I mean, it will say that you can catch more if the catches in 2020 are quite low, but I don't know if it's going to be a lot more, and, in Puerto Rico, you actually had rather high catches during the hurricane season, if those estimates pan out, and so, in that case, you had, in the most recent years, overfishing, and so a little decrease in 2020 may allow the catch rates for future years to be a little bit higher, but I don't think it will be a lot.

MARCOS HANKE: Thank you, Clay. We are ready to go to the next item on the agenda, or do you guys want to have a short break before we continue?

MIGUEL ROLON: Let's have a five-minute break and come back.

MARCOS HANKE: Yes, and let's have a five-minute break. We will come back in five minutes. We will come back around 11:25. That will be a six-minute break. At 11:25, we will reconvene. Thank you to all.

(Whereupon, a brief recess was taken.)

MARCOS HANKE: Hello, everyone. We are back.

 MIGUEL ROLON: Marcos, Graciela and I will make a summary of the comments received in the chat, those that are appropriate, and we will send it to all as part of the transcript of this meeting. we have had several exchanges that are important, and some of them, as you said, are beyond the discussion that we had in the agenda, but just to let everybody know that Graciela and I will work on a summary.

MARCOS HANKE: Thank you, Miguel. Graciela, the next presentation is the District Advisory Panels?

GRACIELA GARCIA-MOLINER: No, the next presentation is the --

44 MARCOS HANKE: I'm sorry. It's the Ecosystem Technical Advisory 45 Panel?

**GRACIELA GARCIA-MOLINER:** It's the Ecosystem-Based Fishery 48 Management Technical Advisory Panel report.

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MARCOS HANKE: Yes, and can you put up the screen and get ready for that presentation, please?

MIGUEL ROLON: We need to also announce that Bill Arnold, a past member, resigned to attend to his new business, and we would like to welcome Dr. Sennai Habtes as the Chair of the panel.

MARCOS HANKE: Yes, and I was going to comment to that, Sennai, welcome to the team, and thank you for being available to be Chair, and I wish you the best in your duties as Chairman of the TAP. Thank you very much.

## ECOSYSTEM-BASED FISHERY MANAGEMENT TECHNICAL ADVISORY PANEL REPORT

**SENNAI HABTES:** Thank you to all. I look forward to eventually meeting those of you that I haven't met before someday in person, after we've retreated from all of this. I guess, with that, I can go ahead and get started.

Today, I just wanted to present the report on where we are with the Ecosystem-Based Technical Advisory Panel, and I apologize. As you guys mentioned, I was only recently appointed as the TAP Chair, and so I'm still familiarizing myself with the history and everything that's gone on previously, but I look forward to being a part of this larger effort to bring ecosystem-based fishery management, if possible, to the U.S. Caribbean.

A little bit about myself is I'm currently an Assistant Professor of Biological Oceanography at the University of the Virgin Islands, and I'm originally from St. Thomas, born and raised, and I received my PhD in Marine Resources Assessment from the University of South Florida in St. Petersburg in 2015, before accepting my position here at the University of the Virgin Islands. That's a little bit about me, and now a little bit about where we are with the Technical Advisory Panel.

A lot of the work for this happened a bit prior to the formation of the Technical Advisory Panel, as you guys are aware, and a lot of work was done by the previous chair, Bill Arnold, and a small group of core members, both volunteers and those on the SSC, towards creating a conceptual model for ecosystem management in the U.S. Caribbean.

On October 23, 2019, the council established a technical advisory panel to continue this work in a more formalized fashion, so that it could be structured under the meeting

requirements of the council, so the information developed towards ecosystem-based fishery management could be codified within council business. On December 10 and 11, the TAP members were appointed, and that ran through basically December of 2019 through January of 2020, and the EBFM TAP convened for the first time in February of 2020.

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At this time, we essentially planned our next meeting for June 1, three weeks ago, and we were deciding on the agenda, where we were heading, assignments, coordinating schedules and determining how we can coordinate and collaborate on all the existing previous work being done on conceptual models and ecosystem-based fisheries management within the U.S. Caribbean.

During our meeting, on June 1 and 2, which is the second meeting of the EBFM TAP, we developed an outline for a fishery ecosystem plan, which is still in progress, as well as goals and sub-goals for the fishery ecosystem plan and the EBFM TAP in general. These are draft recommendations, which I will be presenting to the council now, and we would like to hear both your feedback as well as any questions on those, so I can take it back to the TAP to discuss and more formalize those into a fishery ecosystem plan.

The current process that we are working under is the same described in the Lenfest loop to the left, which is from the publication by the Lenfest Ocean Program, Essington et al. 2016, on building effective plans for ecosystem-based fisheries management, and it essentially describes the process for developing an FEP within the United States.

These steps, 1, 2, 3, 4, and 5, all work together to create a larger ecosystem-based management plan. However, the Steps 3 through 5 create an iterative loop that is made to learn and adjust on the fly to information that is coming in based on ecosystem management strategies.

 Essentially, it serves as a blueprint for creating a fishery ecosystem plan, and it is the process that we in the TAP are trying to follow through. The first step, where are we, is essentially where managers, scientists, and stakeholders begin the process by looking broadly at the ecosystem, and usually the process of creating a conceptual model, where we are looking at individual species and fisheries, as well as the interactions between them, and then more formally create a vital sign of indicators, threats, and pressures on the ecosystem.

The next step is to understand where we are going, and this is

where managers, scientists, and stakeholders collaborate together to develop and prioritize the goals for the fishery system, and the plan in this step is to create high-level objectives that are then broken down into clear, tangible, and desired outcomes, which are created as statements of what we are going to achieve and how success will be measured.

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The third step is how we will get there, and, this, the managers and stakeholders, based on the information provided by scientists, develop specific performance measures that address the ecological, sociocultural, and economic objectives and develop a host of alternative management to achieve the objectives, leading to much clearer view of the costs and benefits of each strategy.

The fourth step is the implementation of this fishery ecosystem plan, where we initiate the alternatives selected in Step 3, and, generally, this can be done using existing processes for assessing scientific information or including newly-recommended ways of assessing ecosystem scientific information.

The fifth step is to assess the alternatives formulated in Step 3, through the implementation plan, develop a plan for monitoring that tracks the processes back towards these specific objectives, and produce data that can answer the key questions about the ecosystem developed in Step 3, and it is a cycle of going between Steps 3, 4, and 5 continuously that allow it to create these more adaptive management strategies that are associated with ecosystem-based fisheries management.

Now I will go through the outline that the TAP has developed as a draft for understanding the type of fishery ecosystem plan that we will try to put in place to present to the council. As I go through these, the bullet points that are highlighted in yellow are the areas where we currently are in adapting the work towards what is needed for the council.

 The first part of the outline is the introduction, and this will involve the background, which develops a clear purpose and need for the fishery ecosystem plan, specifies the goals and objectives for the fishery ecosystem plan and general ecosystembased fishery management in the U.S. Caribbean, explaining the approach of ecosystem-based fisheries management, and describing the organization of all members that go into developing management within the region.

The next section will be defining the interface between fishery ecosystem and management, and, here, we lay out the

jurisdictions, the laws and regulations that are in place, other federal laws and guidance, the obligations of federal agencies, territorial agencies, and other agencies associated with ecosystem and fisheries management within the U.S. Caribbean, describe local regulations, and explain the fishery ecosystem plan development process and the reassessment, i.e., that iterative loop between Steps 3 through 5 which are used to describe the management decision support system. Finally, describe the local interface between fisheries, fishery communities, and ecosystem-based management.

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Section 3 will involve describing the environmental setting, and this includes the society and culture of all the individual regions. A sub-section within that will be to describe the connectivity between those regions, and Section B of that will be the economics, or the economic realities, as well as socioeconomic realities, of the individual regions and the connectivity between those.

Sub-Section C will be describing the unique ecologies of the region including St. Thomas, St. Croix, St. John, and Puerto Rico, as well as the connectivity between all of those and the specific habitat in which the ecology of those regions, or the ecosystems of those regions, are intertwined and found. Then Sub-Section D will be describing the current fisheries between all of those and the regulations and connectivity which is associated with the individual fisheries for the region.

Section 4 will describe the larger conceptual models and sub-conceptual models that are currently developed and will be developed within ecosystem-based fisheries management, and this includes those that are currently being developed through the SSC, the DAPs, other council body members, as well as that which is being defined for the entire ecosystem and currently being worked on by the TAP.

 This is highlighted because this is part of the work that will be understood and evaluated by the TAP, and it is currently not developing a conceptual model itself, but there are other people within the regions that are designing and developing conceptual models, and the information from those will be evaluated by the TAP and included within the FEP that is currently being drafted.

We will also include any other conceptual models developed by independent researchers, and, using the council's guidance, or guidance by independent researchers that is seen fit by the TAP, combine and stack conceptual models for a better understanding of the effects within ecosystems for the U.S. Caribbean.

Finally, the last sub-section of the conceptual model section will be to understand the applications for using the information from these conceptual models.

Section 5 will be a review of the present status of the ecosystem, and so this will be a review of all current ecosystem research and work done in the U.S. Caribbean, and this will refer to and summarize the ecosystem status report that is currently being prepared by the SEFSC, as well as undergo a risk analysis of the threats and pressures to the ecosystems.

Sub-Section D will include other reports and documents that include time series and long-term analysis on the ecosystems, things like EPA bio criteria analysis and NCRMP status reports that are ongoing within the territory, and, finally, a description of the applications of the information and how they can be used in management.

Section 6 will describe future prospects, and this includes the possibility of research on other quantitative models that can be used in ecosystem-based fisheries management, as well as information on restoration and mitigation needed to improve the functioning within ecosystems here in the territories and the commonwealth.

Section 7 will include assessing current fishery and ecosystem conditions, and this will be a large bulk of the work that's going to be undertaken by the TAP, which will be looking at data availability, needs, and strategies for either procuring more data necessary for better EBFM or combining and looking at all the data available in a context that makes it useful for decision-making by the council, understanding how that data works within an assessment of an ecosystem context.

Finally, the last three are developing group for biomass-based assessment approaches, assessing essential fish habitat, and understanding the uncertainty and variability of environmental changes and human activities on ecosystems and fisheries resources. These all represent new approaches that we feel can be used to inform the decision support system and decision-making system for fisheries management within the U.S. Caribbean.

Section 8 will be coordination of ecosystem approaches to fisheries management in the U.S. Caribbean, and this is where it includes a lot of the considerations for management, including MSA revisions, FMP amendments, and CFMC policy statements, as well as the process for bringing the EBFM information to the

council.

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What we want to make clear is that the TAP is still in discussion on this, and we understand that this is, first and foremost, an advisory panel, and so the process and the way that EBFM information designed by the TAP will be used by the council is ultimately a council decision, and we will require your input into how this should go forward.

Sub-Section C of 8 will identify potential management strategies, and Sub-Section D will be looking at an integrated ecosystem assessment. This will clearly take a lot of time to do, and we're unsure if this will be possible during the current timeline for developing an FEP under the TAP, but we thought it would be best to include it, as this is a goal that we want to move towards under ecosystem-based fisheries management for the region.

Finally, Sub-Section 9 will focus on research needs, what are we doing and what could we be doing to better inform ecosystem-based fisheries management, looking at all of the data that would be compiled, where are there gaps in what's going on, and what kind of information is needed by the council to make better decisions or make more informed decisions towards ecosystem-based fisheries management.

Finally, the performance evaluation, looking at how we measure the performance, and this is uniquely tied to Step 4 in that Lenfest loop, which is understanding the measures for how well this does, creating a management strategy evaluation, a process by which the council can look at management strategies informed by EBFM and understand how well they did, and, finally, understanding the timeline and needs for a review and revision schedule, implementing changes to current management strategies, assessing them, and understanding the timeline that it would take to go back and change, fix, reassess and redo and inform the decision support system.

Those are the ten sub-sections that we envision for the FEP. Next, we have the draft goals and sub-goals for the TAP that were designed during our meeting, and, right now, what we have stated is the overarching goal of the fishery ecosystem plan, or the FEP, is to promote ecosystem-based approaches to ensure healthy, resilient, and productive marine ecosystems and the fisheries resources dependent upon those ecosystems. All of this is within the context of the unique biological, ecological, economic, social, and cultural characteristics of those fisheries resources and the communities dependent on them.

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I think it's important for us to note that we are looking at a fishery ecosystem plan, but a large purpose of EBFM is to incorporate many of the things that drive uncertainty in fisheries that are currently not measured or understood, and those do include unique biological, ecological, economic, social, and cultural characteristics of the fisheries and the areas that surround them.

Within that larger overarching goal, we have developed a list of sub-goals that we are trying to implement along with those as we design the FEP. These are a mix of both what things that the FEP strives to do, but also things that can be achieved using ecosystem-based management, and so we haven't separated those out, as yet, but they are kind of mixed in together, and so I would ask you to kind of take that under advisement as you read through them.

The first is increase human community resilience within the context of changing ecosystems. Two is to promote ecosystem resilience within the context of changing ecosystems. Three is to define present ecosystem status and functionality. Four is to understand the dynamics of fisheries and ecosystem services. Five is to describe key ecosystem linkages. Six is to identify research priorities.

Seven is to identify additional ecosystem-essential species in need of conservation and management. Eight is to understand the risks to the fishery ecosystem and tradeoffs from different management strategies. Nine is improve the data and information needed to support marine ecosystem management. Ten is to prevent overfishing and/or ecosystem overfishing.

Eleven is to achieve optimum yield. Twelve is to incorporate ecosystem considerations into stock assessments. Thirteen is to bring ecosystem considerations into the decision-making process. Fourteen is to promote adaptive management policies, like revising the MSA, the National SSC, and the CCC.

With that, those are the goals and sub-goals, as well as the outline to the FEP that we had approved as draft motions in our last TAP meeting, and, with that, I will take any questions and clarify anything.

45 MARCOS HANKE: Thank you, Sennai, for your presentation. Any 46 questions from the group?

GRACIELA GARCIA-MOLINER: Mr. Chair, if I may, you should have

received a Word document with the outline and the overarching goal and the sub-goals, and so this is just the beginning of the development of the FEP, and it's really the council, as you did with the island FMPs, to direct staff and the TAP towards what goals do you want to see presented in this fishery ecosystem plan.

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We already started talking about the objectives, the measurable objectives, for each of these goals, but we first need to really work in the goals that the council members see as part of the FEP, and so that's the kind of direction that we need from you.

The other thing is that the outline shows the great effort that has been taken in order to get collaboration and coordination of all the efforts that are taking place in the U.S. Caribbean, and so this includes bringing to the table, for example, the DAP from St. Thomas and other regulatory agencies that have jurisdiction over the marine environment.

It's a huge task, as you can see, and Sennai has done a wonderful job at presenting this, but we need your input to fill in the blanks. Are we going in the right direction? Do you see any other goals that you would like to achieve? Do you want anything specific to be included in the FEP that we don't have there yet?

MARCOS HANKE: Go ahead, Miguel.

MIGUEL ROLON: Graciela, can you put on the screen the section of the memo that you sent, so that people will understand what you're talking about, so the Chair can direct the discussion?

**GRACIELA GARCIA-MOLINER:** Give me a second. Do you want the Word document, because it was basically what you saw on the screen, the outline and the --

MIGUEL ROLON: The one that you believe will guide the council the best for the decision that you want us to take as a council. For example, I like the one that you sent with the little circles, and then you have the list that you have here, so the council members can look at it. If I may, Mr. Chairman, you have goals and sub-goals, and they should be turned into goals and objectives, and that's what Sennai and Graciela are addressing.

The main point here is that the AP serves at the discretion of the council, and they, in turn, need direction from the council as to how the council would like them to continue working in developing the fishery ecosystem plan. By the way, it's not a plan, and it's a source document that will be fed into the decision-making process, and, again, that has to be presented to the SSC and so forth.

At this time, what we need, and you don't have to take a final decision on everything here, but at least give some direction to Graciela, as the coordinator of this effort, and to Sennai, who is the chair, how you would like to see this developed.

MARCOS HANKE: Graciela, I am sorry about not knowing the meaning, but once you express a corollary goal to provide the framework, what do you mean by that?

**GRACIELA GARCIA-MOLINER:** Hold on a second. Let me put the Word document first.

MARCOS HANKE: Yes. I will wait for it.

GRACIELA GARCIA-MOLINER: Thank you. What we're showing on the screen is the Word document that we sent to everyone with the instructions. This basically follows the same process that you followed when you developed the island-based FMPs, and so the idea is that you look at the information that we have here, both in terms of the outline, and see if there is anything missing from what the TAP has discussed.

Here, we have included everything that the SSC and the DAPs have been looking at over the past couple of years, and, specifically, for the goals and sub-goals, it's to make sure that we include everything that you want to consider under the ecosystem-based approach to fishery management, and so the idea is that you go through these fourteen points and see if there is anything missing, and you can compare them to the island-based FMPs, because some of them will be like the island-based FMP goals, and let us know if there is anything else that you need to include in here.

If we need to include more goals, or if you have specific objectives that you would like to see, and, for example -- This is not an example necessarily to be included here, but what Tony Blanchard had mentioned earlier about the ACLs and the monitoring of that ACL and the evaluation of those ACLs, and that's something that he would like to see in terms of the evaluation of the ecosystem function, for example. Can I have you repeat the question that you had, or have I answered your question?

 MIGUEL ROLON: Carlos Farchette has some comments.

GRACIELA GARCIA-MOLINER: Okay.

**MIGUEL ROLON:** Marcos?

MARCOS HANKE: Yes.

**MIGUEL ROLON:** You have Carlos Farchette waiting for a turn, 10 Marcos.

MARCOS HANKE: Yes, I will go there, but just can you clarify what "corollary" means in that context?

GRACIELA GARCIA-MOLINER: Sennai, do you want to take this one?

**SENNAI HABTES:** Can you repeat the question? When you say "currently", what are you --

MARCOS HANKE: On the part of the text where it says, "A corollary goal is to provide a framework that promotes the following sub-goals".

SENNAI HABTES: I think the reason we have it in here as a corollary goal is there's a larger overarching goal, which is what we want to promote for ecosystems-based fisheries management, but the corollary goal is to provide the council with, as Miguel said, a source document, something that you can use to review the current information and approaches to ecosystem-based fisheries management within the U.S. Caribbean as well as all of the information needed to implement management strategies based on ecosystem-based fisheries management.

I would say that there is a larger picture of trying to promote EBFM approaches into management, but also to provide a framework for how to do it that we are trying to develop for the council.

MARCOS HANKE: Okay. Thank you. Anybody else? Carlos.

**CARLOS FARCHETTE:** I just had a question. How is this FEP going to affect our island-based plans? Is it going to be incorporated into the plan, or is it going to be like an annex to the island-based plans or what?

MIGUEL ROLON: Marcos, let me answer that. The TAP was created to incorporate everything that Sennai just presented to us, and so, this document, we have the information that we need to make the ecosystem-based management plan, to make the island-based

FMPs, stronger in terms of the ecosystem management approach.

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In other words, you have, in the island-based FMPs, a classical approach to fishery management, where you have identified the management unit, and you have minimum sizes and everything, but you also need to incorporate, in the decision-making process, and then in the regulations that you have, the ecosystem components, and the TAP is going to look for that information and look for the models that we can use, et cetera, and supply that to the SSC.

Then the SSC will give the council the advice on the best available methodology and models that we can use to incorporate into the decision-making process in the island-based FMPs, and so it's kind of a toolbox that you have. It's a live toolbox with experts that will look at all of this information for the council and, for lack of another word, digest the whole thing and send it to the SSC, so they can continue the process, and then they will tell the council that, okay, this is the best available information regarding this ecosystem management component, and you should incorporate into the island-based FMP A, B, and C.

In addition, the TAP will borrow from the Lenfest project, because the Lenfest project is going to look, for three years, look at the qualitative and quantitative connections with the ecosystem sectors that we have, and the most important part that the council members have to understand is that neither the Lenfest project or the TAP are prescriptive. I mean, you don't have to follow exactly what they say, because the best available information is determined by the SSC.

Nobody is trying to trump anybody else, but what Sennai and Graciela are presenting to the council is the question in terms of guidance, and what is it that the council would like the TAP to continue doing?

 The fourteen corollary goals that you have here, some of them could be construed as objectives, and remember the difference between a goal, sub-goal, and objective is that the objective has to be measurable. Otherwise, it's not an objective, and so the question that Graciela and Sennai are posing to the council is, if you look at this, and you don't have to do it right now, and you can later send your comments to Graciela, but, when you get back home and you think about this, and you say, oh, they forgot about this other part, then you can send it to us, and Graciela will then coordinate the meeting with Sennai that will occur between here and the next meeting in August.

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If you look at the first one, increase human community resilience within the context of changing ecosystems, that's a goal. How you're going to do it, that's another point, but the promote ecosystem resilience within the context of changing ecosystems is another goal or sub-goal, and you have to look at in ways in your mind that you can do it.

The thing is that we should not have goals and objectives here just because they are motherhood and apple pie. We should have goals and objectives here that are achievable in a way, but at least you will have a document that will tell you why you cannot achieve that goal at this time, because you have data gaps, and that is the question that Graciela and Sennai are presenting to the council.

For developing the record, I believe that we should hear from the council members as to their reaction to this outline, and, also, you can finetune your answers at the next August meeting, because now the council decides -- I believe you will decide that we have the TAP, and we need to prepare a charter for the TAP, and the charter should be composed of X many members, and we have a chair and all that, and it seems that we have to make it official, let's say.

MARCOS HANKE: Thank you, Miguel. I have Alida to speak, and, after Alida, I want to make a comment.

ALIDA ORTIZ: I am going to address Carlos's question, which is one that we have been having all the time, and this is from my wide outreach perspective. The fishery ecosystem plan that, as Miguel says, it's not a plan. It's a source document, and, to me, it is probably the best strategy, or the best instrument, to explain to the wider community, fishers, consumers, legislators, whatever, the issues that are taken into a management plan, and that's the way it is used.

 That's why, for the other actions of the fishery ecosystem, we have to reach many, many, many other stakeholders that will see these things that we discuss in the DAPs and in the SSC and in the fishery ecosystem and see how they can enrich the island-based fishery management plans, but they are not regulatory, and, like Miguel said, they are not prescriptive, and so I think that's where sometimes we get confused with the type of project. That's it.

MARCOS HANKE: Thank you, Alida. I want first to say that I really believe, in a fishery ecosystem-based management plan, if

there is one place in the world that this has to take place, it's the Caribbean, for our characteristics here and the amount of species and habitats that we have.

Once that is said, I have a question and a suggestion at the same time. For example, I cannot fit the development of best ecofriendly fishing practices and/or gears that promotes socioeconomic resiliency to the fishing community into the future into any of the sub-goals presented there. Is that something that can be included?

MIGUEL ROLON: Marcos, you can include that, and that's exactly the question that Graciela is asking. If you have topics like that that you would like them to consider, you can add them at this time, and, also, the TAP has to go back to the drawing board and look at whatever the council submits, so they can fine-tune the document that they are preparing.

Remember that this -- The ecosystem is not a choice. The National Marine Fisheries Service has to follow the guidelines, and, a long time ago, it was decided that, nationwide, we need to consider an ecosystem-based management approach to fisheries management.

GRACIELA GARCIA-MOLINER: So exactly that, and thank you, Miguel, and thank you, Marcos. These are the kinds of things that we need to take to the TAP, to see where it will fit into the development of the FEP, and so any other suggestions that you might have are definitely most welcome, and so this would include -- It would have to include the revision of the current allowable gears, for example, and then a revision of anything that can be done in the future to be implemented via the island-based FMPs regarding changes, for example, to the type of hooks being used or the release mechanism for catch-and-release fisheries, et cetera. Correct? That's where we're heading with that?

MARCOS HANKE: Yes, I agree with that, but there's an extra angle on my statement, which is the fishing industry does not necessarily have the drive to develop ecofriendly practices that produce the same outcome, in terms of landings, but with less adverse effect to the environment, and I think this group should promote or be some way, somehow, the vehicle, the way, for the fishing industry to have access to new ways of doing business on the water that are beneficial for the fishermen and for the environment.

MIGUEL ROLON: But that's not the charge of this group. What

you need to tell the group is, along those lines, to please consider the best practices and outline the best practices that you have and show it to us, so the council can include that in any management plan, and so the question to Marcos is, Marcos, can you just say that in one line, that you think that it will encompass what you just said, so they can use it as one of the goals?

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MARCOS HANKE: Promote the development of -- Maybe there is a best wording for it, but promote the development of best ecofriendly fishing practices and gears.

MIGUEL ROLON: That's it, fishing practices, including gears.

15 MARCOS HANKE: Okay.

**GRACIELA GARCIA-MOLINER:** Thank you.

19 MIGUEL ROLON: Anything else for Graciela?

21 MARCOS HANKE: Can you repeat that, please, Miguel?

MIGUEL ROLON: Any other council member that would like to add to the --

MARCOS HANKE: Actually, I have an observation about this, and I am not seeing anybody asking to speak right now, and I think everybody is digesting the presentation, and I think we should maybe revisit this in August, because I am not hearing anybody else participating in such an important presentation.

MIGUEL ROLON: You mentioned digesting, and it's 12:09, and probably they want to digest lunch at this time, and so they can look at it, and, when we open the meeting after lunch, we will have the Secretary, and perhaps, if anybody has a comment to add, or a line, like you just did, then Graciela can take it to the TAP in the meeting that they are planning between here and August, and she will be able to present to you the outcome of that meeting, so you can fine-tune it. Also, at the August meeting, we can have a draft charter document of the TAP that you can consider.

43 MARCOS HANKE: That sounds like a plan. I have Carlos asking to 44 speak.

**CARLOS FARCHETTE:** I had enough time to digest it when I got the email from Graciela, and so I'm ready to move forward with this, but I will go to the rest of the members after lunch, if they

want to discuss any more on this.

MARCOS HANKE: We have Marcia Taylor.

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MARCIA TAYLOR: I just wanted to say that this is the first time that I am seeing this, and I'm not a council member, but I am a member of the DAP, and I guess I would like some more time to digest this, and I think it should also be circulated to the other members of the St. Croix DAP, and the others as well, so that they can make comments.

MARCOS HANKE: Thank you very much. Sennai, please.

SENNAI HABTES: Just to follow up, I wanted to say, Marcos, thanks for the comments, and I would like to say, to other council members, when you're thinking of recommendations, like the one that was just presented, please think of if it is possible to fit them into other sub-sections, either if it's within the outline for the plan or for the sub-goals.

Also, I would like to point you guys to, in the FEP outline, Sub-Section 8, where we are asking you guys to give us an idea on the process for bringing the EBFM TAP information to the council, and this is somewhere that I think the council members should think about a little bit and maybe present it to us in the next August meeting.

We have ideas on how we can inform management decisions, but, ultimately, this is a council decision, how you guys use the information and the process by which the information is going to come to the council, and I do think that we would like to hear some input from you guys on what you think about that as well.

MARCOS HANKE: I think we are ready to go for lunch, and I am aware that we received the email, and I just want to make sure that we hear the opinions and the comments, positive or neutral or adding to the text and to your request. For the council members, I think we are ready to go for lunch now, and we will come back at 1:15. Does that sound good, Miguel?

MIGUEL ROLON: Yes. 1:15 it is.

MARCOS HANKE: At 1:15, we are back. Let's recess for now, and we'll see you guys at 1:15.

(Whereupon, the meeting recessed for lunch on June 23, 2020.)

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TUESDAY AFTERNOON SESSION

June 23, 2020

The Caribbean Fishery Management Council reconvened via webinar on Tuesday afternoon, June 23, 2020, and was called to order at by Chairman Marcos Hanke.

MARCOS HANKE: Hello, everyone. Let's start the meeting again. It is 1:17 p.m. The Secretary of DNER is on the way to the Department, and Damaris is waiting for him. As soon as he arrives to the Department, we will give a chance for the DNER Secretary to speak to us, but, for now, we have space for the presentation made by the Chair of the TAP and to hear about comments or anything to add to the goals and objectives that he presented, and I would like to hear from the council members if they have anything to add on that presentation.

MIGUEL ROLON: I have in the chat Vanessa Ramirez and Carlos, and they said that they read it, and they are ready to move on.

MARCOS HANKE: Yes, and I saw that earlier, before we reconvened. Julian, do you want to speak?

Yes, and I would like to request that this JULIAN MAGRAS: presentation be given to the DAPs, and I think it's very important, before final decisions are made, that the DAPs have a chance to look at it and be able to give input on any changes that need to go to the plan, especially that we still haven't had that meeting with the government bodies, as requested, and I know Miquel and myself had some conversation of doing a meeting sometime in July or early August, before the next council meeting, but I think it's very important that the DAP members, like Marcia Taylor from the St. Croix DAP said earlier, that we have an opportunity for us to all look at this and sit down and discuss it and make any recommendations to the committee and to the council.

Marcos, for the record, Graciela and I already MIGUEL ROLON: discussed this, and, for the next three DAPs, we are going to have this presentation, and, in the case of the St. Thomas/St. John, Julian and I were talking, and the first half of the day will be to move forward with the agenda items that were pending from the meeting in November and March. Then that will be followed up in the afternoon with a presentation, exactly the

same presentation, so we can get the input from the DAPs on each one of the items that the TAP presented today.

In addition, we may also touch on the stakeholders list that we are preparing in coordination with all the other Sea Grant and Lenfest, et cetera, and so those two items will be in the agenda of the Puerto Rico and St. Croix meetings, and then the three items in the agenda for the DAP. That probably will be the second half of August, after the council meeting.

MARCOS HANKE: Thank you, Miguel. We have a comment from Marcia Taylor, that she agrees with Julian, and you clarified that that's the intention of the council, and that will happen. We have now Carlos Farchette.

CARLOS FARCHETTE: I just had a question on the document that was sent to us with the information. On Number 3, when it says environmental settings, A4, it speaks about connectivity, and it says a note here that this establishes the framework for a hierarchical spatial approach, and I wanted a little explanation on that spatial hierarchy, and who can tell me how that is going to function?

MIGUEL ROLON: Graciela, can you answer?

GRACIELA GARCIA-MOLINER: Yes, and I'm trying to share the screen, so that you can see what they are talking about. As you can see, I mean, the setting is for each of the islands to have its own information included here, and so one thing that --Spatial hierarchical means that you are going to have things going from connecting from one island to the next, et cetera, because there is that influx of information among the islands.

This will be the beginning of anything that has to do with connectivity, and so there is connectivity, for example, in what you've seen in the council from the larval dispersal. From St. Croix, some of the larvae are going to Vieques and Culebra and the east coast, and some of it goes all the way to the southwest of Puerto Rico, et cetera, and so, basically, what that means is that there are differences in the distribution, in the site distribution of things, and so it's not only St. Croix, because St. Croix is not isolated from any other connection to everything else, but that we are all connected, and that has to come in somewhere, and so, instead of repeating this all over the place, it just means that this is the way that we foresee these connections being made.

St. Croix has more of a Puerto Rican population than any of the

other islands, well than St. Thomas and St. John, and so that's one of the sociocultural differences, but, at the same time, similarities, correct, and so that is kind of the spatial distribution of the different sections in this Chapter Number 3. Does that make sense?

CARLOS FARCHETTE: Yes. That makes a lot of sense. Thanks.

**GRACIELA GARCIA-MOLINER:** We are separate, but we are also connected to each other.

CARLOS FARCHETTE: Absolutely. Okay. Thanks.

**GRACIELA GARCIA-MOLINER:** I just wanted to say a couple of things. one, first to Natalia, because she was the one driving. Actually, I wasn't driving earlier, and so she did all the presentations and the motions and everything else.

Second, that the TAP information -- What has been presented here is just the seed for everything that is going to come, and so we are at a very good stage, because we are, at the same time, collecting information from the SSC and the DAPs, and that's in the form of the conceptual models, and, at the same time, we're providing this information for the setup of what is to come, and so we have planned not only the DAP meetings that Miguel was talking about, but we also have two meetings of the SSC that have to come to fruition, one to finish all the sub-models and the other one to actually make all the connections.

Then there will be another one or two for the TAP to keep working on this outline and on the goals and objectives, but, in order to do that, we need the input from council members, and one of the ones that we heard from you earlier -- We come to the goals and sub-goals, and so promote the development of best ecofriendly fishing practices, including gear. That is the kind of information that we need to input into this work that is being done.

MIGUEL ROLON: Graciela, do you need anything else from the council at this time?

 GRACIELA GARCIA-MOLINER: At this time, if anyone has one more goal, or some objectives, or they want to include anything else, can do that right now. If not, we will be contacting, again, the council members, and you can provide us with information as we are moving along, and, during the island-based FMPs, if I remember correctly, these goals and objectives were taken back to each of the islands and discussed among the FACs and the

government officials, et cetera, and so that can happen also and then bring into the council the proposed, or the draft, goals and objectives.

MARCOS HANKE: Any council members have any comments before we move along on the agenda? Hearing none, I think we are ready to move along. The next item on the agenda is the District Advisory Panel, and, Graciela, do we have a presentation, or are we going to --

MIGUEL ROLON: Marcos, each one of them will give a presentation of what they have, unless they have something they want to produce, but Diana sent the summary minutes to each one of the chairs as to what happened. Remember, in the case of the DAPs, mostly we met through -- They received a presentation by Maria Lopez on the island-based FMP process and just what you heard this morning, and, also, a presentation -- (Some of Mr. Rolon's comments are not audible on the recording.)

What we want to hear is the comments by Julian and Nelson and Eddie on the differences that they found in each one of the island areas, and so, at this time, we just need to follow the agenda, whenever they are ready, so they can tell the council.

MARCOS HANKE: Okay. I have an order to start with St. Thomas/St. John.

## DISTRICT ADVISORY PANELS REPORT, INCLUDES COVID-19 IMPACT ON LOCAL FISHERIES ST. THOMAS/ST. JOHN

JULIAN MAGRAS: Good afternoon. This is Julian Magras, DAP Chair, St. Thomas/St. John. We had a very good meeting on June 8. It was the first opportunity that the members got involved in a virtual meeting, and it turned out pretty good. Some of the fishers on the committee were able to go by Winston Ledee's house, and we set up the computer, and we were all able to see what was going on and watch the different presentations and have some good discussions.

At that time, one of the first things that we were talking about was the COVID-19 and how it affected the fishers, and the fishers who were present at the time were able to explain their experience, and that experience was we found that the lobster sales was a lot more difficult, due to the fact that hotels are closed, and a lot of the businesses are closed during this period, and so the fishers had to be creative, and they go to St. John on the weekends to try to sell their catch, and, also,

they had to reduce their prices for the lobsters, in order to get rid of them, and, also, they had to scale back on fishing.

As far as the fish aspect of it, the fish sales actually was very good for the limited times we were going out, due to the fact that, when all the schools closed and a lot of people were out of work, a lot of people were eating more at home, and so they were ordering more fish for their houses, or buying more fish for their houses, than they usually do, and so now that is changing slowly. With stuff opening up, we're seeing the shift, where the sales are dropping, and some restaurants are buying, but a lot of the restaurants are still closed.

Overall, we had to become very creative with using social media to get the message out there of which markets fish will be at and what times on different segments of the island, and so, at the end of the day, it helped us, and we were able to play a very important role in the government, with them leaving us allowable to still fish, and by providing fresh product for the local people.

On another note, as we refer to COVID-19, we heard the presentation from Cedric Taquin from Puerto Rico, and it was similar to our zone, but you guys over in Puerto Rico had to be a lot more creative, and it was good to hear the good things of what was taking place over there, and that was good to hear, and also what was taking place in St. Croix.

As far as presentations, there was supposed to be a presentation given by Nicole Greaux that was done on behalf of the council, and we stopped that presentation, due to the fact that, when the fishers were interviewed, the fishers were told that the interview was being done for the Corps, and we found it very funny that they were doing an interview for the fishermen on the COVID-19, and we repeatedly asked her, are you sure this is who you're working for, and she says, yes, and I haven't started my liaison position, and I don't start until August, and I refused to do the survey, and Mr. Blanchard was with me and some other fishers, and we were all told the same story.

Come to find out, she actually did the survey for the council, and now the fishers are like, well, if this is a new person that's going to be the middle person between the government and the fishers, we find this to be a problem, and so we don't want to have anything to do with this young lady, because, once you break the trust of the fishermen, and the scientists know this, and the council knows this. It took them almost sixteen years to build a relationship where we ought to be, but, when you

start to lie to the fishers, and you're supposed to be working with the fishers, that becomes a serious problem, a serious problem, and that's coming from my committee, and we refused to have that presentation given.

Next, we had the presentation by Adyan Rios on SEDAR 57, the same one that was given this morning, and it gave a lot of good information to -- Especially, we had three of the largest lobster fishers at the table, plus we had Mr. Blanchard online, who is also a lobster fisher, and so that presentation helped them to understand the process and what's been ongoing, and they were able to walk away feeling somewhat comfortable, a little disappointed on the years that we were using, but, looking at the projections for the future numbers, they said they will wait and see how it all plays out, and hopefully we get to revisit this in a couple of years, and we'll see if the numbers need to shuffle around on that.

Then we got an update from Maria Lopez, and that also was a very good update, and the fishers are well engaged, and we're able to carry the word around to our members and back to the other fishers, and so that was also great.

Of course, Ms. Duval's presentation on the strategic planning survey, that also -- We are still discussing it, and we might have some more comments, but the fishers are onboard and looking forward to working with all the different groups, so we can all achieve the same thing, what's the ultimate goal, and that's to have a healthy fishery for future generations, and that's my report. Thank you.

MARCOS HANKE: Thank you, Julian. The next report is from St. Croix.

## ST. CROIX

**EDWARD SCHUSTER:** The virtual meeting was something to get accustomed to. We got a quorum onboard, and Carlos did most of the outreach to the fishermen in regard to COVID and how they were coping to it, and, to sum it up, the fishermen became innovative.

 I mean, when the government implemented a total closure lockdown stay at home, the fishermen saw a spike in sales, and everybody was staying away from large crowds and more going to their known fishermen, and the fishermen became innovative, and they were masks, and they were looking toward their regular customers.

What actually happened was, when the restaurants closed, the sales dropped a little bit, but, as they opened to takeout orders, it picked back up again, and even some fishers moved fish sales and lobsters and other fish that couldn't be sold by other fishermen that were not as innovative as they were.

The presentations given were very informative, especially Adyan's, and I had some questions to it, and other DAP members had some questions, in regard to some of the graphs and why the spikes and the dips, and maybe those are things to be considered, and she took notes as well.

It was very interesting to know what Puerto Rico was encountering, and there were a lot of similarities in regard to COVID also with all three islands.

I mean, some of the fishermen on St. Croix weren't as innovative with using Facebook and social media that we know of, and maybe there were some, but pelagic sales and stuff like that were out of the water, and so, where people would come and buy ten pounds, there were people that were just buying whole fish, and I guess splitting it between family members or whatever they did at home.

The other presentations and surveys, everyone on the DAP St. Croix had their own input into the pros and the cons, and more pros than cons, and so that would sum up my report, in a nutshell.

MARCOS HANKE: Thank you, Ed. The next report is Puerto Rico. Nelson, please.

## PUERTO RICO

NELSON CRESPO: Good afternoon, everyone. The COVID-19 has been something that, in one way or another, has touched everyone in the world, and we the commercial fishermen have not been the exception. Initially, when the curfew was implemented, we did not know what to do with the restaurants closing and most of the people in their houses. We had no way to sell our catch.

 We were allowed to continue fishing, but, with no market, it was a few days of uncertainty. Little by little, ideas began to emerge, and the fishermen of the island began to advertise on social networks and the internet, and the fish houses began to take orders by phone and bring the products to the car, to reduce the contact with the people, and others started making deliveries to the houses, and some announced the sale of fish

through loudspeakers. Everyone is looking for a way to reinvent themselves and sell their fish.

I have to acknowledge the great help of Christina Olan in promoting the sale of the fish by the council's Instagram and Facebook pages, and this was really helpful.

There were also people, like Cedric Taquin, restaurant owner, who gave a hand to a group of fishermen by buying their catches and offering to the public a carryout menu. The vast majority had to reduce the price to make them more accessible to the community and to be able to motivate them to buy. Remember that is another type of market, with people who have a limited budget.

On the other hand, there was a group of fishermen that just sold their catches to a single fish house or reseller, and they were limited to sell their fish, and they did not have a very good time at all. The way the fishermen were able to reinvent themselves was impressive.

As of today, the local government makes the curfew more flexible, and it allows businesses to close at 10:00 p.m. and operate at 50 percent capacity, and the sales are starting to improve a little.

The presentations given by Maria Lopez and Adyan Rios and Michelle Duval were really good ones, and all questions were answered for all the DAP members. I really want to recognize, again, Christina Olan and all the help that she gave to all the fishermen in announcing their catches, because that was the key to moving forward and improving our sales, and that's all I've got.

MARCOS HANKE: Thank you, Nelson. After the presentation of the three DAPs, I have, as the Chairman, a question to them. I had the opportunity to hear the meetings, and, for the rest of the group, I also worked with some fishermen in Puerto Rico in developing some efforts, and pretty much I have identified three steps.

One is, when the curfew was in place, a little confusion, and there was no sale and a lot of confusion, and then, in the second month, there was some normality in the adaptation process, and, for the three months on, we have more stability. Give or take, that's the three steps that I have observed on the fishing industry and with the people that I have been interviewing. My question to the DAP, for each of them, is do

you think that we are fishing nowadays at the same level that we were fishing before the pandemic or the curfew being adopted?

That's question number one, and question number two is are we fishing the same species, or targeting the same species? Question number three is are we fishing -- Are we selling the fish at the average price of the catch? Are they stable or similar or higher or lower than before the pandemic and the curfew? I would like to start with St. Thomas with those questions, and I can repeat the questions, if you need.

JULIAN MAGRAS: Could you repeat Question Number 1?

MARCOS HANKE: Do you think that we are fishing at the same level nowadays, after three-plus months after the pandemic and the curfew being in place? Are we fishing nowadays the same, after the adaptation process?

JULIAN MAGRAS: No, we are not. We are selling at the demand of the market. Like I said earlier, even though we have seen some of the restaurants opening back up, people are still afraid to go out, and so the sales are still down. All the hotels are still closed, and so the sales are down, and so we are fishing for what we see -- The fish are selling good, and so whatever we catch is sold most of the time.

What has happened here over the last two weeks is we're starting to see a spike in the COVID cases, and so, as of this morning, we have five and five pending, and it's drawing a lot of concern, and the governor is threatening to shut everybody back down again, and it was on the news this morning, and so people are very worried on what they are spending, because they don't know what is going to happen.

As far as the prices, the prices of the fish have maintained, in most cases. In some cases, like the queen triggerfish, because we were catching -- In some of the catches, we were catching some more of those, and what we had to do was we had to actually fully clean the fish for the people, in order to sell them, instead of them giving it to the fish cleaners and they pay the fish cleaners to clean the fish. In some cases, we have been cleaning the fish for free, to maintain the same price of the fish and get it sold.

Lobsters went from ten-dollars a pound all the way down to seven-dollars a pound, and some guys have moved back up to eight, and some have moved back up to nine.

As far as targeting certain species, the line fishermen have been doing a little bit more line fishing, and so we were able to see some yellowtail snappers and some blue runners on the market, but it's been a hit and miss, because the tides haven't been running good for them. They had two good weeks, and they had three bad weeks. As far as the trap guys, we don't target one individual species, and we catch several, and so, like I said in that case, we will go out and pull as many traps for the week as we think we can sell.

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MARCOS HANKE: Thank you, Julian. Thank you very much. That's exactly what I wanted to hear from you. Eddie, can you answer the three questions, please?

**EDWARD SCHUSTER:** Before I speak, can you repeat Question Number 3, please?

MARCOS HANKE: I am going to repeat the three questions. Do you think that nowadays your island, the fishermen, are fishing at the same level as before the curfew was implemented? The second question is are you fishing the same species, or is there a little difference on target species? Number 3 is the price, the average price, of the fish are stable or went up or went down? Those are the three questions.

Okay. Question Number 1, there was no curfew EDWARD SCHUSTER: in the U.S. Virgin Islands, and so it's much different than The only thing, during the first phase of COVID, Puerto Rico. is the total shutdown, and then restaurants were shut down, and there was no dining anywhere, and it was takeout orders only, and so that slowed the sales down a little bit, when it was a total closure to the restaurants. Then, when it was takeout only, it spiked up again, and now, within the last two weeks, two-and-a-half weeks, where you could now dine-in and the restaurants had some sort of -- The employees had to wear face masks, and patrons didn't have to wear them, and this picked the sales up for more species like lobsters and pelagics and stuff like that.

 Question Number 2, they were still fishing for the same species as usual, and we still don't have FADs, but the fishermen here on St. Croix, innovative as they are, were putting out attractors on their own and targeting mahi and tuna, when they were available.

Question Number 3, the prices are pretty much the same, and the only -- Some fishermen that would take and move a product would put a little markup on the sale for the species that he was

selling, to compensate him for the gas and whatever else he had to do for the other fishers couldn't get their product moved, and so he would buy it and resell it for a slight margin.

MARCOS HANKE: Thank you, Ed. Nelson.

NELSON CRESPO: Definitely we are not fishing the same level that we were fishing before the COVID. We are just going to catch one, and we can sell -- More or less the species are the same that we are targeting, with the difference that we are now trying to process the fish in different ways, because it's for our local customers, to their houses, and maybe we have to clean the fish, like a fish market, and we have to fillet them. If we are using our reseller or a fish market, they are dedicated to that, and we have to do that ourselves.

There is a little difference, and so the species, I would say, are more or less the same ones, and the price -- Definitely we have to lower the price for all the fish types, and now, with the opening of the 50 percent of capacity of the restaurants, the prices are starting to stabilize again. It's not the ones that we are used to selling before the COVID, but we are trying to get into that maybe in the next month.

MARCOS HANKE: Thank you very much, Nelson. I think this was very good, and it's the way to synthesize what you guys discussed on your meetings, and I just think that helped the whole group to understand better what is going on around the Caribbean, U.S. Caribbean, on that matter. Thank you very much for all. Are there any questions?

GRACIELA GARCIA-MOLINER: Mr. Chair, if I might, you have the following people in the queue: Shannon, Maria, Christina, Nelson, and Vanessa.

MARCOS HANKE: Okay. Shannon.

SHANNON CALAY: I didn't have a question, and I apologize, but I was just letting the group know that Adyan very much appreciated the feedback, and she very much valued working with the DAPs, and hopefully we can continue those collaborations in the future.

MARCOS HANKE: Thank you, Shannon. I had a question from Maria Lopez.

MARIA LOPEZ: I have two questions for the DAP Chairs. One is I am interested in knowing what was the experience from the

recreational fishers throughout these past months that we have been experiencing the COVID and the closures? Also, I want to know about the charter industry and how it was affected, and is it back up? My second question will be if anybody can elaborate if they have had the experience of persons fishing illegally and how they deal with that.

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MARCOS HANKE: Let's answer island by island, and let's start the question to Julian.

JULIAN MAGRAS: As far as it pertains to the recreational and charter industry, that was completely shut down. They were shut down, and there were no tourists to take out, and they were not allowed to run their operations during the shutdown. As things started to open up over the last couple of weeks, some of them are going back out. June 1, we allowed the tourists to start coming back in, and so we have been seeing some charters, but very, very minimal.

As it pertains to the pelagic guys on the commercial side, I want to bring that in, because we have some of the guys that do both charters recreationally and they do commercial fishing for the pelagics, and they were not fishing the pelagics either, except for one fisherman that we know of, due to the fact that there was no one to sell the product to, with the restaurants and the hotels being their main customers, and, with them being closed, they were not able to go fishing.

The one guy, he became creative also, and he had three different locations at three different times of the week, where he would sell the tuna and mahi-mahi and wahoo that he catches, and he would advertise it on Facebook, what he had, and you could place orders, and he had everything all chopped up and everything bagged out in bags, in portions, and so you just come and pick up what you want.

As far as illegal activity, I don't know of any illegal activity that was taking place here in St. Thomas/St. John, and I don't know if enforcement had any interventions with that, and they would have to speak on that, but, as far as the fishers, I didn't see any complaints for illegal activities on St. Thomas and St. John.

MARCOS HANKE: Okay. Now Eddie, to Maria's question.

EDWARD SCHUSTER: To Maria's question, I would imagine everything was shut down, and there was no tourists here on the island, and so, therefore, charter boats couldn't take anyone

out, especially with the social distancing that they had.

In terms of illegal activity on St. Croix, I don't think they would have any, because even the beaches were closed, and so, in terms of anyone -- I didn't hear anything through the grapevine, through Howard or through nobody, that there was any illegal activity, and then there was one more question that you had, Maria?

MARIA LOPEZ: I was just curious about recreational fishing, like locals fishing recreationally, if you saw an increase in that activity, now that people were pretty much in the house.

**EDWARD SCHUSTER:** Pretty much everybody was in the house. Me myself, I was not out there scouting the beaches or anything, and everything was closed, and so, therefore, I would imagine recreational fishing was down as well.

MARIA LOPEZ: Thank you.

EDWARD SCHUSTER: Carlos, did you hear of anything? I don't know.

CARLOS FARCHETTE: All the beaches were closed, and so recreational shoreline fishing was completely cut off. When it comes to in-water, I don't think there was much recreational fishing out there either. Just like the charter industry, it all collapsed, and I don't even think that they're back up and running right now.

MARCOS HANKE: Thank you, Carlos. Let's give the turn to Nelson Crespo for Maria's question.

**NELSON CRESPO:** Recreational are not allowed to go fishing since the curfew was implemented, and they are back in business about, more or less, two weeks ago, but the charter boats are not in business, at least in my area, yet.

 Regarding the poachers, they are always with us, and they announce themselves by the internet and selling their catch, because we have no -- We don't have enforcement available at the moment, and they are like the -- They are always with us.

MARCOS HANKE: Thank you, Nelson. To Maria's question, I would like to -- I am a charter operator, and the charters in Fajardo are shut down, and they can go back to the water in the last week or so, but the problem is that tourist companies give you one instruction, and DNER gives you another guidance, and the

executive order gives you another guidance, and it is very confusing, and, myself, I haven't been fishing with a charter since then. It's pretty much totally stopped on the industry. Does that respond to your question?

MARIA LOPEZ: Yes. Thank you very much to all.

MARCOS HANKE: Thank you, Maria. Any other questions?

GRACIELA GARCIA-MOLINER: Christina, Nelson, and Vanessa.

MARCOS HANKE: Nelson already spoke, and we have Christina Olan.

CHRISTINA OLAN: Thank you to all the fishermen, and thank you, Nelson, for your words. This is not only a job, but a service to all the fishermen, and thanks for all the information and the feedback that we have been receiving throughout the last couple of weeks, especially after the first weeks of the pandemic. Thank you.

MARCOS HANKE: Thank you, Christina. Vanessa.

VANESSA RAMIREZ: I just want to comment on things about the questions that you asked before, at least from our point of view on the west side, in my own, Cabo Rojo, as you know. We are, by square mile, I think, the biggest one, community, of fishermen, and we have ten fish markets, and practically 250 active fishermen.

There are two things that I want to say here. First, the fishing level continues. Right now, we are practically needing more fishermen to at least work with the lobster and queen conch and snapper, and those are the species that restaurants are asking for, and, second, what we have experienced here is the war between the price with the stakeholders and the people that have started new businesses during this pandemic time.

 They start underpricing, especially on the lobster, and I have the experience of doing \$2.14 per pound, but the thing is that the fishermen continue between \$7.00 and \$7.50 per pound, and so I think those are the most practical things that we experienced during this time.

Right now, the sales are moving good, at least in my town, as I say, but I think that we need more enforcement also in this area, because, practically, once also the recreational starts fishing, they make practically a direct competition with the commercial fishermen, because they are not supposed to take

their catch, but they are doing it, and they sell for less, or they just stop buying from the fish markets or the fishermen directly. Thanks.

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MARCOS HANKE: Thank you, Vanessa. Thank you for your comments, and I want to highlight for sure that Vanessa's area is a very particular area in Puerto Rico that has a lot of fishermen, and it's good to hear her input on this. Any other questions about the DAP reports?

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Hearing none, we have to move then to the next item on the agenda, and I didn't hear anything from Damaris or the Secretary Am I right that we are in public comment, of DNER yet. Graciela?

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GRACIELA GARCIA-MOLINER: Let me check the agenda. Yes.

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MARCOS HANKE: We are going to open for public comment. there anybody from the public? Damaris just wrote that the Secretary hasn't arrived yet. Thank you for informing us. Public comment, and is there anybody from the public that would like to make a comment?

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MIGUEL ROLON: Marcos, you are muted.

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MARCOS HANKE: Thank you, Miguel. Carlos, do you have something to say?

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CARLOS FARCHETTE: Yes, if you're finished with the five-minute public comment period.

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MARCOS HANKE: Yes. Nobody asked to speak.

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CARLOS FARCHETTE: I just wanted to make some remarks here. pandemic has really given me an opportunity to log on to various meetings, and, in doing so, I got to learn a lot more about Puerto Rico council member Vanessa Ramirez and the efforts that she undertakes to educate the fishers of Cabo Rojo.

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didn't realize the number of commercial fishers fishermen's associations in the Cabo Rojo area until I logged on and heard from Vanessa about her involvement in helping the fishermen, particularly those that are not computer literate or smartphone savvy, and also those that are less fortunate of an education.

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47 With the numbers that Vanessa just mentioned, with 250 fishermen and ten fishing villages, or fish houses, I think that's

valuable information for the council to take in during their decision-making in these island-based management plans. When you add the recreational sector that she also educates, Vanessa is deserving for a big round of applause for the hard work that she is doing in her area.

I want to take this opportunity to commend Vanessa Ramirez for her hard work in educating and assisting the fishermen of Puerto Rico, particularly in the town of Cabo Rojo. If this meeting were face-to-face, I would ask everyone to give her a standing ovation for all her hard work. Thank you, Vanessa.

# (Applause)

MARCOS HANKE: Thank you, Vanessa, and I agree with the words of Carlos, that he just mentioned, and I was really encouraged to see the process of Vanessa engaging with the council, because of the support that she has from the fishermen and her knowledge and the quality of person that she is, and thank you very much for your job.

MIGUEL ROLON: Mr. Chairman, from the chat, I believe that Roy agrees with Carlos regarding Vanessa, and we the staff feel the same way. I believe that you have Tony Blanchard, Mr. Chairman.

MARCOS HANKE: Yes, I just saw it. Tony Blanchard.

MIGUEL ROLON: And Alida Ortiz.

 TONY BLANCHARD: I believe, speaking as let's say a public individual, and somebody from the public, and not as a chairman or vice chair or anything else, but as a fisher, I think that we need to look at, seeing as we're going to these virtual meetings, is we need to make this accessible to the general public, and, yes, it is a public meeting, but, at the end of the day, most of us guys, or most of the guys that are into this business, or is into this interest, for lack of a better description, is not into all the technology and the know-how of getting to the meeting online and all the -- Let's say the tricks that we have to perform to get there.

It would be like having a public meeting and you don't have any public access for the handicapped people, and so we need to put things into perspective when we're running through the agenda and we're trying to get the information out there. A lot of times the people that should know, and that should be involved, and want to be, probably don't even have the slightest idea how to get on this Go to Meeting or to get to the meeting, which the

information is supposed to be out there for all of us.

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The other thing is I think, when the council makes a decision, and let's say, for instance, we're making a decision that is crucial to the St. Thomas fishery, that that should be done in an in-person meeting, meaning that we ain't sitting behind a computer or a phone and making those decisions to the public, which is affected, and that's just basically the statements that I wanted to throw out there.

MARCOS HANKE: Okay. Thank you, Tony. Alida.

 ALIDA ORTIZ: I just wanted to make a recommendation to Vanessa. It goes way, way beyond the fisheries and working with the fishermen. Vanessa's role in education, not just a formal education, but the education of the entire community, regardless whether they are fishers or they are whatever position they have in the community, but Vanessa is the center at that part of education, and thank you, Vanessa.

MARCOS HANKE: Thank you, Alida. Does anybody else want to participate on this? Thank you, again, to Vanessa, and that's very emotional to me, to see people recognizing people that deserve it. Thank you very much. This is very important, to talk about the quality of the people that are involved on this council. Vanessa just wrote on the chat that thanks, Carlos and all, for your support and congratulations and comments.

We are very early, and we finished with the core of our meeting, and, Miguel, what do we do now? Do we adjourn?

MIGUEL ROLON: We have a proposal that will save you some time, and I discussed it with Jocelyn, and the closed session that you have today is for reappointment only, and the reappointment has to be announced tomorrow, or today, and so our proposal is that we can -- Because these are all reappointments, just to announce that we have a vacancy on the TAP, and Graciela and the Chair are looking for a possible candidate. If any council member, or anybody present, had a candidate for occupying the position that Bill Arnold left vacant, please contact Graciela Garcia-Moliner.

Then, Mr. Chairman, our proposal is that we can go and allow Diana to read the names of the people who are up for reappointment in each one of the groups, and then you can have a motion and a second and then a vote, and you will dispatch these reappointments, and so you don't need a closed session, and you will have a freer afternoon, until tomorrow morning. If you agree, we can do the process by asking Diana to read the names.

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MARCOS HANKE:

idea. Go ahead, Diana.

Please proceed, Diana. I think it's a great

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### PANEL REAPPOINTMENTS

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**DIANA MARTINO:** Let's start with the DAP St. Croix. Marcia Taylor. The DAP for St. Thomas is Lee Steiner and --

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MIGUEL ROLON: Diana, do it one at a time. The St. Croix DAP, Marcia Taylor. Then we need a motion, or, Mr. Chairman, you can have a huge motion to approve everybody after she finishes. Which way do you want to proceed?

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15 **DIANA MARTINO:** That would be faster.

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MARCOS HANKE: I don't think that it's controversial to do the motion with all the members. If there is anybody that has any problem with that, please let us know, but it's going to be quicker if we do all of these at once.

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22 MIGUEL ROLON: Okay, and so, Diana, just read the two DAPs, the three names, and then we will have a motion for them. 23

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DIANA MARTINO: The DAP members are, for St. Croix, Okay. Marcia Taylor. For St. Thomas, it's Lee Steiner and Collin Butler. Is there a motion?

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CARLOS FARCHETTE: I move to accept for reappointment Marcia Taylor for St. Croix, and, for the St. Thomas District, Lee Steiner and Collin Butler.

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33 MARCOS HANKE: Any second?

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35 TONY BLANCHARD: Second.

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37 Is there anybody opposed? Hearing none, the MARCOS HANKE: 38 motion carries, and they are reappointed. Go ahead, Diana. 39 Diana, can you hear us?

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41 MIGUEL ROLON: She is having some difficulties there, and so let me read the names. For the SSC, the names for reappointment are 42 43 Douglas Gregory, Jorge Garcia-Sais, Richard Appeldoorn, Juan Cruz-Motta, Churchill Grimes, Joe Kimmel, Tarsila Seara, Vance 44 45 Vicente, and Walter Keithly. If they are reappointed today, 46 their term will expire in 2022.

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TONY BLANCHARD: So moved. MARCOS HANKE: Tony just moved it. Any second?

VANESSA RAMIREZ: Second.

MARCOS HANKE: Vanessa Ramirez just seconded. Is anybody in opposition to those names to be reappointed? Hearing none, the motion carries.

 MIGUEL ROLON: Thank you, Mr. Chairman. The other two persons on the SSC are the federal employees, and so we don't need to address those. That concludes the reappointment section for this afternoon, for today.

15 DIANA MARTINO: Miguel, we also have, for the TAP, an opening.

**MIGUEL ROLON:** Yes, and I mentioned that, but can you talk about 18 O&E AP, that we have a vacancy?

**DIANA MARTINO:** Yes, and we have a vacancy for Buddy's place. He will no longer be participating as a member, and so, Miguel.

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MIGUEL ROLON: Well, we need a fisher or somebody, and Diana is trying to get a person knowledgeable about the fishery of St. Thomas/St. John to occupy that position. The idea is to have a person from each area that is in the fishery, like Andy Maldonado from Puerto Rico or Gerson Martinez from St. Croix, and Buddy was from St. Thomas, and that is to get close to the earth when we talk about outreach and education, and so these three members of the O&E AP bring to the table issues that are real-life issues that we can then discuss, so the group can develop strategies for outreach and education.

MARCOS HANKE: Tony Blanchard.

TONY BLANCHARD: Julian Magras.

**CARLOS FARCHETTE:** I second.

MARCOS HANKE: Tony Blanchard, did you have a comment?

42 TONY BLANCHARD: I wanted to nominate Julian Magras.

44 MIGUEL ROLON: For the O&E AP? Then it was seconded by Carlos.

CARLOS FARCHETTE: Yes.

48 MARCOS HANKE: Let's vote then. Is there anybody in opposition?

Hearing none, the motion carries. This is for Julian Magras to be part of the Outreach & Education Panel.

MIGUEL ROLON: The term is three years for each one.

MARCOS HANKE: Okay.

MIGUEL ROLON: That is the end of the meeting for today, Mr. Chairman.

MARCOS HANKE: Thank you, Miguel. Thank you, everybody, for a very productive meeting, and I think we all did a great job, and I am ready to adjourn the meeting. We are closing the meeting. Thank you very much, everyone. I will see you tomorrow, June 24, at nine o'clock sharp, and thank you very much. The meeting is adjourned.

(Whereupon, the meeting recessed on June 23, 2020.)

June 24, 2020

WEDNESDAY MORNING SESSION

The Caribbean Fishery Management Council reconvened via webinar on Wednesday morning, June 24, 2020, and was called to order at by Chairman Marcos Hanke.

MARCOS HANKE: This is Marcos Hanke, CFMC Chairman. Today is June 24, 2020, and it's 9:00. We are going to start the meeting now. It's June 24, 2020, and the meeting is being recorded. Remember to state your name before you speak on the record, and use the chat to request your turn. Today, Miguel and Graciela are going to be helping me with the turns on the chat, to make sure that I don't miss anybody. Be brief and to the point, and it's very important on a virtual meeting, and, above all, be respectful in your comments on the chat and on audio. I will pass it now to Miguel Rolon for the roll call.

MIGUEL ROLON: Before that, if we have a crash on the Go to Meeting, like yesterday's instructions, we are going to stop for ten minutes, and then we will restart the meeting, and so, if you see that the whole thing crashes, just wait for ten minutes after the crash, and the Chair will open the meeting again, and hopefully everything will work. The roll call for today,

1 starting with myself, Miguel Rolon, council staff. Natalia

2 Perdomo.

NATALIA PERDOMO: Good morning. Natalia Perdomo, council staff.

MIGUEL ROLON: Diana Martino.

8 DIANA MARTINO: Good morning. Diana Martino, council staff.

10 MIGUEL ROLON: Graciela Garcia-Moliner.

**GRACIELA GARCIA-MOLINER:** Buenos dias. Graciela Garcia-Moliner, 13 council staff.

15 MIGUEL ROLON: Sarah Stephenson.

17 SARAH STEPHENSON: Sarah Stephenson, NOAA Fisheries.

19 MIGUEL ROLON: Julian Magras.

**JULIAN MAGRAS:** Good morning. Julian Magras, St. Thomas DAP

22 Chair

24 MIGUEL ROLON: Jose Rivera. Marcos Hanke.

6 MARCOS HANKE: Marcos Hanke, present.

28 MIGUEL ROLON: Jocelyn D'Ambrosio.

**JOCELYN D'AMBROSIO:** This is Jocelyn D'Ambrosio, NOAA Office of 31 General Counsel.

33 MIGUEL ROLON: Lauren Remsberg.

**LAUREN REMSBERG:** Lauren Remsberg, NOAA Office of General 36 Counsel.

38 MIGUEL ROLON: Liajay Rivera.

40 LIAJAY RIVERA: Buenos dias. Liajay Rivera, council staff.

42 MIGUEL ROLON: Alida Ortiz.

44 ALIDA ORTIZ: Alida Ortiz, Outreach & Education Advisory Panel.

46 MIGUEL ROLON: Clay Porch.

**CLAY PORCH:** Good morning. Clay Porch, NOAA Fisheries.

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2 MIGUEL ROLON: Christina Olan.

4 CHRISTINA OLAN: Good morning. Christina Olan, council staff.

MIGUEL ROLON: Miquel Borges.

**MIGUEL BORGES:** Miguel Borges, NOAA Enforcement, present. Good 9 morning.

11 MIGUEL ROLON: Nelson Crespo.

**NELSON CRESPO:** Good morning. Nelson Crespo, DAP Chair, Puerto 14 Rico.

16 MIGUEL ROLON: John McGovern.

18 JACK MCGOVERN: Good morning. Jack McGovern, NOAA Fisheries.

20 MIGUEL ROLON: Vanessa Ramirez.

25 MIGUEL ROLON: Martha Prada.

27 MARTHA PRADA: Buenos dias. Martha Prada.

29 MIGUEL ROLON: Carlos Farchette.

**CARLOS FARCHETTE:** Good morning. Carlos Farchette, council member.

34 MIGUEL ROLON: Michelle Scharer.

**MICHELLE SCHARER:** Good morning. Michelle Scharer, independent contractor.

39 MIGUEL ROLON: Marcia Taylor.

41 MARCIA TAYLOR: Good morning. Marcia Taylor, St. Croix DAP.

**MIGUEL ROLON:** Howard Forbes.

**HOWARD FORBES:** Good morning. Howard Forbes, DPNR Enforcement.

47 MIGUEL ROLON: Maria Lopez.

MARIA LOPEZ: Good morning. Maria Lopez, Southeast Regional

Office.

MIGUEL ROLON: John Walter.

JOHN WALTER: John Walter, Southeast Fisheries Science Center.

MIGUEL ROLON: Michelle Duval.

MICHELLE DUVAL: Good morning. Michelle Duval, independent contractor.

MIGUEL ROLON: Helena Antoun.

HELENA ANTOUN: Good morning. Helena Antoun, ERT, NOAA

Fisheries liaison for Puerto Rico.

MIGUEL ROLON: Mandy Karnauskas.

MANDY KARNAUSKAS: Good morning. Many Karnauskas, Southeast 

Fisheries Science Center.

MIGUEL ROLON: Robert Copeland.

ROBERT COPELAND: Lieutenant Robert Copeland, U.S. Coast Guard representative from Miami, Florida.

MIGUEL ROLON: Tarsila Seara.

TARSILA SEARA: Good morning. This is Tarsila Seara, University

of New Haven.

MIGUEL ROLON: María de los Irizarry.

MARIA DE LOS IRIZARRY: Good morning. María de los Irizarry,

present.

MIGUEL ROLON: Orian Tzadik.

ORIAN TZADIK: Good morning. Orian Tzadik, Pew Charitable

Trusts.

MIGUEL ROLON: Matthew Walia. 

MATTHEW WALIA: Good morning. Matt Walia, NOAA Fisheries Office

of Law Enforcement.

MIGUEL ROLON: Carlos Velazquez.

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2 CARLOS VELAZQUEZ: Carlos Velazquez, Naguabo, Puerto Rico.

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4 MIGUEL ROLON: Nicole Angeli.

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6 NICOLE ANGELI: Nicole Angeli, Department of Planning and 7 Natural Resources for the USVI.

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9 MIGUEL ROLON: Ashley Ruffo.

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11 ASHLEY RUFFO: Good morning. Ashley Ruffo with NOAA Fisheries for the USVI.

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14 MIGUEL ROLON: Roy Crabtree.

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16 ROY CRABTREE: Good morning. I'm here.

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18 MIGUEL ROLON: Edward Schuster.

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20 **EDWARD SCHUSTER:** Good morning. Edward Schuster, DAP Chair, St.

21 Croix.

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Manny Antonaras. MIGUEL ROLON:

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MANNY ANTONARAS: Good morning. Manny Antonaras, NOAA Office of 26 Law Enforcement.

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28 MIGUEL ROLON: Damaris Delgado.

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30 DAMARIS DELGADO: Buenos dias. Damaris Delgado, Puerto Rico, 31 DNER.

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33 MIGUEL ROLON: Yasmin Velez.

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35 YASMIN VELEZ: Yasmin Velez, the Pew Charitable Trusts.

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37 MIGUEL ROLON: Mr. Chairman, that is forty-three people that we 38 have as of now.

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Thank you very much, Miguel. Before we start the 40 MARCOS HANKE: 41 meeting, we have a request from Julian Magras to address the 42 group. Julian, you have the floor.

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44 JULIAN MAGRAS: First, Tony is going to give his name.

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46 TONY BLANCHARD: Tony Blanchard, Vice Chair, CFMC.

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48 MARCOS HANKE: Thank you, Tony. Go ahead, Julian. 1 2

JULIAN MAGRAS: Good morning, everyone. After some thought yesterday on my name being forward for being on the Outreach & Education Committee, I have decided that I am going to withdraw my name, due to the fact that I have a lot that's going on, and I sit on a lot of committees already, and I would like to make a recommendation that Ruth Gomez be the representative for St. Thomas/St. John on the Outreach & Education Committee.

TONY BLANCHARD: Motion to put Ruth in the position for the Outreach & Education.

MARCOS HANKE: Any second?

15 VANESSA RAMIREZ: Second.

MARCOS HANKE: Thank you, Vanessa. Any opposition? No opposition, and the motion is carried. Miguel, did you receive the information already, and are you clear, for the record?

MIGUEL ROLON: Yes, and it's being recorded.

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MARCOS HANKE: Okay. Perfect. We can move on then, and, just to make sure that everybody is clear, Ruth Gomez is appointed to the Outreach & Education Panel as a member. The important things that I need to say before the meeting is, first of all, thank you very much for behaving so well to the Chairman yesterday. I wish we have as productive of a meeting today as yesterday, and let's keep going with the first item on the agenda, the island-based fishery management plans by Maria Lopez.

## ISLAND-BASED FISHERY MANAGEMENT PLANS UPDATE

**MARIA LOPEZ:** Good morning. If you give me a second, because I'm going to try to connect through the phone, for the translation.

MARCOS HANKE: No problem. We'll wait for you.

MARIA LOPEZ: It's not working, and so I'm just going to go ahead with the presentation, and I apologize. I can say it in Spanish as well, if you guys want, at the end.

**MIGUEL ROLON:** Just go ahead and do it in English, and then 46 we'll work it out. There is nobody connected anyway.

MARCOS HANKE: Then let's keep going.

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MARIA LOPEZ: Okay. This is Maria Lopez with the Caribbean Branch at the Southeast Regional Office, and I'm just going to give you an overview of the island-based fishery management plan, and this is where we are right now with the progress to date.

As you recall, the council submitted the three island-based fishery management plans, one for St. Thomas/St. John, one for St. Croix, and one for Puerto Rico for secretarial review and approval in December of 2019. Since then, we have been, in NOAA Fisheries, working with the development of the proposed rule and the associated documents, so we can have this implemented.

Now, there are going to be two opportunities for comment coming up, and one of them is the notice of availability, which is a notice that is published in the Federal Register and announces that all of the three fishery management plans are available for the public to review and comment, and we just received a notice this morning that it's going to be published on Friday, and so the comment period is going to be open from this Friday, June 26, all the way to August 25.

This is a sixty-day comment period for the public to have the opportunity to review the document and make comments, and the comments can be made through regulations.gov or through sending us a letter to NOAA Fisheries. All the information is going to be included in a Fishery Bulletin that we are going to be sending out today, and this is information is also going to be on the council website and on the NOAA Fisheries website as well.

The other opportunity for comment that the public is going to have is when we publish the proposed rule, and the proposed rule is what implements these fishery management plans. The proposed rule has a thirty-day comment period, and it's very likely that that will happen close to the end of the publication of the FMP, and so you will have also that opportunity to comment, and we will also be pushing out a Fishery Bulletin that will explain how to comment on that one as well. All of this information is going to be available on the council website and the NOAA Fisheries website.

In the meantime, while all of this happens, we are, in NOAA Fisheries, working, as I mentioned earlier, with associated documents that go with the fishery management plans, and one of them is a biological opinion the Protected Resources Division of the Southeast Regional Office has to prepare to evaluate the

effects of the fisheries that are conducted under each one of the island-based fishery management plans would have. This is something that we always do every time that we make an amendment to our plans, and so that is ongoing right now.

Now, after the proposed rule period ends, we are going to prepare a final rule that addresses the comments, if we receive any comments during the proposed rule, that are going to be addressed in that final rule, and that's going to be published when ready, and then, thirty days later, after the publication of the final rule, then the fishery management plans are going to be implemented.

What we're looking at right now is to have the plans applicable for the 2021 fishing season. We are looking forward to having these plans published and implemented as soon as possible, and this may happen hopefully by the end of this year or the beginning of next year, and so that's what we're aiming for.

Now, in the meantime, the council can continue discussing all of the actions for potential amendments that you are interested in doing through each one of the island-based FMPs as you want or need, and so this is where we are right now, and I don't know if you guys have any questions.

MARCOS HANKE: Anyone have questions? I am not seeing anybody in the chat. Carlos Farchette is requesting to speak. Carlos.

**CARLOS FARCHETTE:** Thank you, Mr. Chair. Maria, on that last statement about discussing actions for potential amendments, when can we begin that process, and how do I go about presenting an amendment to our St. Croix IBFMP?

 MARIA LOPEZ: An amendment will happen after -- We can only amend the plans when the FMPs are going to be implemented, but we can start discussing this, and you guys can bring any actions that you want the council to consider for the council's attention, and, if the council decides to pursue this, they can just task staff to start working on an options paper, a white paper, whatever the council thinks is needed at the time to explore the item and to start working on that, so that, by the time that the FMPs are implemented, we already have made a lot of progress to go ahead and implement those amendments, and so it will be bringing it to the council's attention at the council meeting.

**CARLOS FARCHETTE:** A follow-up. Mr. Chair, would that be possible for me to do at some time, maybe in Other Business?

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MARCOS HANKE: I think in Other Business that it's a place, but it's a very long participation. Otherwise, you can do it right now.

CARLOS FARCHETTE: I guess now would be as good time as any. I don't want to hold us back.

MIGUEL ROLON: Marcos, in order to have more structure to it, let's wait until Other Business, and Carlos will have time to prepare all of this, because, before Other Business, you may have other items that you would like to include in the amendments, and we can hold that until the end, and so, before you leave today, you will have at least two or three topics for amendments, and, as Maria said, the idea is to start working on this, so we will have -- We will task the staff and the Regional Office to prepare those documents.

MARCOS HANKE: Yes, and I agree with that, and let's hold it then to Other Business, and keep going with the meeting, and there is nobody else requesting a turn right now.

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MIGUEL ROLON: We have a comment from Ashley Ruffo. In regard to essential fish habitat, has sargassum been addressed in the island-based FMPs, either being designated as EFH or for cleanup? That's a question for Maria.

MARCOS HANKE: Go ahead, Maria.

MARIA LOPEZ: I believe so, but can you let me see the question again? Has sargassum been addressed, and so it is included for EFH for some of our species in the three island-based FMPs. I can get back to you, and I don't know exactly which species we designated it as EFH, but I can get back to you on that right away, and I just need to look at the plans, and I can write it in here if you prefer.

Marcos, if I may add a couple more things, and I did mention this in the DAP meetings, but, when you guys are reviewing the fishery management plans, I would strongly suggest that you go directly to Chapter 5 if you have questions about what is the action plan, what is the actual fishery management plan implemented, and I understand that this is a long plan, obviously, and we're making really, really big changes, but we have the plan -- The way that the plan is structured is also with an environmental assessment, and so, if you want to -- Once you go through the document, et cetera, and you still have questions about exactly what is it that the fishery management

plan is going to be doing, Chapter 5 is basically the action plan.

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It's saying this is what your FMP includes, and so all of that information about the EFH and what EFH has been identified and designated for species, what are the ACLs, the AMs, what species are going to be included in each plan, are going to be found in Chapter 5 as a summary.

I also want to mention that, although we are looking forward to having these plans implemented as soon as possible, I don't have a date when this is going to happen.

As soon as we -- We are going to be, in the August meeting and in December, we obviously are going to be updating the council as to what plans are going to be implemented and all the updates and the progress to date, but, if you have any questions, please feel free to contact me at SERO. Any other questions?

MARCOS HANKE: Yes, and I have a question, Maria. Just for the benefit of the group, things that we heard before on the council about some people want to address the deepwater snapper license and the gears that they use, the description of the gears and all those details, this is the time for the group to give you the feedback on that?

MARIA LOPEZ: I believe this is the time. It can be here, and it can be at the August meeting, if you want to bring something else to the council, so the council has a little bit more information, but it can be done through here. As I mentioned earlier, the process is that you bring these items to the council and the council decides if they want to consider it for a potential amendment to any of these plans.

If you are going to have several items that you would like to amend -- For which you want to amend one of the fishery management plans, then it can also be considered if they all go together in the same amendment or not, but that's a decision that -- Depending on the progress that can be made with the different islands, of course, and the workload, it's something that can definitely be considered in future amendments that are hopefully happening soon, right after the plan is implemented.

MARCOS HANKE: I was trying to give examples to the rest of the group of things that they should consider. Thank you, Maria.

MIGUEL ROLON: Marcos, that's why I said you have to structure this in a way that will make sense for everybody. You can talk

among yourselves during lunch, and then, this afternoon, when we get into the Other Business, Carlos can have two or three items that can be considered, and then Graciela and I can look at it and maybe a prepare an outline, so you can consider those items at the next meeting in August.

MARCOS HANKE: Okay. My intention on the comments is just for the rest of the council to know and have more examples of the way they can participate and things that they have to think about. Is there anybody else requesting for participation, for a turn, Miguel?

MIGUEL ROLON: No, and that's all we have, Mr. Chair.

MARCOS HANKE: Thank you. Maria, thank you very much. We will keep talking about this later on, and the next item on the agenda is the Outreach & Education Advisory Panel Report by Alida.

#### OUTREACH & EDUCATION ADVISORY PANEL REPORT

ALIDA ORTIZ: Good morning. I am going to try to do the phone call, to see if it works, and Natalia will put up my presentation. Good morning, everyone. We are going to make a very short presentation on the actions that we have taken in the Outreach & Education Advisory Panel since our last meeting.

The first thing that we did, and I think, actually, the very, very initial contacts that we had with the fishers, first in Puerto Rico after the earthquakes, and also the COVID, and what was the situation of the fishers, and we had people, participants, in the O&E AP, Wilson Santiago from Puerto Rico, and Nicole Greaux from St. Thomas/St. John, and Carlos Farchette from St. Croix, that they were very, very useful and very sensitive to tell us about the conditions that the fishers were having in each one of these areas.

In general, and remember that this is probably the first information that we have. When you heard the DAPs yesterday, probably there have been more changes than what we had informed in the Outreach & Education Panel.

In Puerto Rico, and I think in the Virgin Islands, the fishers were considered essential workers, and so they were able to go out fishing whenever they could, but they would find also some problems, and what do they do with the fish they catch, can they have all the help onboard that they usually have, and these things -- They had to adapt for the fishing trips, to adjust

them to the situation.

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To the information that we had at that moment, apparently catch was not reduced greatly, and the fishers had to reinvent themselves and their work and their product and everything, especially in terms of sales practices. Prices varied, but there were not losses in the income. As we heard at this first report, and what we heard in the DAPs yesterday from each one of the islands, probably it's not that simple. They did have losses in their income.

One important aspect that we had, and you heard it yesterday in the DAPs, was the intensive use of the social media. The Facebook and the Instagram managed by Christina was a huge help for the fishers to tell where they were selling, what they were selling, and they really had to reinvent absolutely everything.

When we spoke to Cedric Taquin about how he managed to do that, then we found that activity in the fishers is much more than what we ever thought of, and so I think that probably it would be good as a recommendation, and I don't know if either to the council or to the DNER, that we keep track of these changes and that we can see how the fishing industry recovers and how the fishers' family situation and community relationship changes, because probably some of these things will take a long time and will be not for just today, but probably from now on, and we don't know how far.

The other activity that we discussed were the fishery ecosystem plan and the information of the Technical Advisory Panel, and this is the group that we have been working with the Lenfest and the Pew Charitable Trusts to complete that stakeholder list and the final identification of the fisheries ecosystem components in the conceptual models by the SSC and the DAPs.

At this moment, we have already had meetings with Jocelyn D'Ambrosio to coordinate, or to understand, in terms of stakeholder engagement, what we are doing from Pew and from the Lenfest project and from the TAP that will have to do with the stakeholders, and so we are waiting for the conceptual models of the SSC and the DAPs to be finalized, so we have very clear what are the concepts that we are going to take to those stakeholders.

 The council will be leading the stakeholder engagement to the fishing community, the science community, and the federal government, and we need to have that information, and then we will try to get ways of getting to the stakeholders, and it can

be workshops, and it can be internet communications, but, until we have that DAP and SSC conceptual models finalized, we will be working on identifying the stakeholders. We'll just to develop the questionnaires and make a strategy with the stakeholders.

Besides that, I think that, as part of the outreach and education that is needed to understand this fishery ecosystem plan, we have to work probably a more specific fact sheet, so that every stakeholder -- When we say stakeholder, it's the consumers or the fishers or the government officials or whoever has to do anything with fishing to understand what is the fishery ecosystem plan and that document in the ecosystem-based management of each island plan.

We will have to work more probably to explain that importance for the fishery management, and then, through this social media, promote the involvement of the people who look at the information, if they have more questions or if they want more information or if they ask for information that we do not have, and that will be very important.

MIGUEL ROLON: Alida, a couple of things. We don't have to wait for the model to be finished to go to the stakeholders. The Pew Charitable Trusts is the one who is going to be leading this questionnaire and all that, and I have here that Jocelyn wants to address the group regarding this slide.

ALIDA ORTIZ: Okay.

JOCELYN D'AMBROSIO: Thank you, Miguel and Alida. I was just going to raise the point that Miguel raised, just about how the outreach with Lenfest and Pew will work, where the council is supporting their efforts to reach additional stakeholders, but my understanding was that, if there were any surveys, for example, that that would be done by those independent groups, and the council is just helping identify persons that might want to contribute to those non-council processes.

 Then the Technical Advisory Panel could rely on any of that research, to the extent that it found it useful and helpful for what the Technical Advisory Panel is doing in preparing the fishery ecosystem plan, but just the main point is some of that outreach, if it were conducted by the council, would need to follow a proper process that we have, the Paperwork Reduction Act for surveys, for example, and so that's the only thing that I wanted to note, is I understand the council is helping these other organizations, but they are running the specific surveys, and then the TAP and the Outreach & Education Panel are working

the public meetings to have conceptual models developed for both the DAP model and the SSC, and then other organizations are doing a similar process that might feed into the council process.

**ALIDA ORTIZ:** Yes, Jocelyn. What we are doing with the meetings with the Pew Charitable Trusts is to help them to collaborate in the development of these documents, and then they will do their part, and the council will take the information back.

JOCELYN D'AMBROSIO: Yes. Thank you. That collaboration is more just sort of supporting the work that they are doing, and so, if you're helping identify stakeholders, that would be a useful and helpful collaboration, but then they are running that research, and they are doing that outreach, if there are surveys, for example, and then, if there are stakeholder meetings, if it's a council meeting, it would need to be a public meeting, but, if Pew is having their own meetings, then they conduct it however they see fit, and the same with Lenfest.

ALIDA ORTIZ: Actually, we will have, shortly, a meeting called by the Charitable Trusts with Lenfest and ourselves, so that we can collaborate and see which stakeholders we are identifying and how they are going to get to them.

JOCELYN D'AMBROSIO: Sure, and a coordination meeting is okay, but, if there's a larger meeting that's actually a council meeting, my only point is that would need to be published, but, if you're just talking with others that are working to solve the same problems or in the same space, then, yes, that coordination is okay.

MIGUEL ROLON: The most important part, Alida, is that this is not a council activity. This is a Pew Charitable Trusts and Lenfest activity, and what Alida is trying to convey to everybody is that Alida and myself will participate as just collaborators, but the actual action of having the surveys and contacting the stakeholders and so forth will be between the Charitable Trusts and Lenfest.

Lenfest already identified the summer of 2021 to address the stakeholders within the fishing industry, and so they are going to be talking to the fishers and so forth. The Pew Charitable Trusts is going to go into governance, and they are going to interview government officials and anybody who has anything to say about ecosystems, and so, just for the record, this is an NGO's proposal, or not proposal, but a workload description of what they are going to do, and then the council will be just

providing whatever we have, and we are not going to do any new surveys on anything, because what Jocelyn is saying is that, whenever you mention the word "survey" within the council, you have to meet several laws and regulations that apply.

For the record again, the Pew Charitable Trusts and the Lenfest group and Sea Grant and the council are going to collaborate in identifying those stakeholders, but the actual surveys will be made by the Pew Charitable Trusts and the Lenfest project.

ALIDA ORTIZ: Yes, and, actually, I think we are doing more outreach and education, just to let them know what this is all about.

The other activity that we have been discussing for quite a long time, and we are working on it very intensively, is the Sustainable Seafood Consumption Campaign, and Wilson Santiago and Jeanette and Diana and Miguel have collaborated in distributing the placemats and the posters that we have presented at the council in previous meetings, and we get the information from Wilson, and especially from Jeanette, and the reception of this material has been very, very positive in the restaurants, and they have found people who are asking about the fish that they are eating, where were they caught, and then they have in front of them the illustration.

Our idea, our goal, was that the consumer knows what fish they are eating, where does it grow, what is the ecosystem situation for that fish, and, when they are regulated for some kind of closed season or size limit, that they understand why those regulations are imposed and why it's very important and necessary that the consumer first eats what is probably local, what is available for the catch, if we can call it catch of the day, and that they don't eat or request any species that is under a closed season or if the regulation and size is the one that is that moment, so that they don't violate these regulations, but that they understand what is the reason to have regulations.

Then we will be producing a cookbook for the preparation of underutilized seafood species in Puerto Rico and the USVI, but this will not be only cooking recipes. It will be a book with information on the ecology and identification of those species, what are the management regulations, safe seafood handling, and then the cooking recipes, and we will put there some of the traditional recipes that are very important for our culture, and then, also, the modernization, or the updating, of those recipes, so that they can use the product, the fish, in

different ways, so that they learn how to cook it.

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This book will be working with Diana Martino, and we will have the three chefs that have been collaborating with us in this campaign, and they will be part of this production, and we hope to have it probably by next summer or something like that, and we need recipes from the USVI, so that we can make it as open and wide as possible.

MIGUEL ROLON: Alida, you have a question from Carlos Velazquez.

ALIDA ORTIZ: Okay, Carlos.

CARLOS VELAZQUEZ: (Mr. Velazquez's question was in Spanish and was not transcribed.)

MIGUEL ROLON: Alida, you also have Marcia Taylor and Carlos Farchette.

MARCIA TAYLOR: Hi, Alida. It's nice to hear from you, and it's really nice to hear about your sustainable seafood campaign. You probably know about a similar campaign that we've had here in the Virgin Islands, largely in St. Croix, for the last few years, and I'm just wondering if you've been collaborating with any of my partners on this, because we have a bunch of materials already made and implemented and a bunch of things, and so it's called Reef Responsible.

ALIDA ORTIZ: Yes, Marcia, and we heard -- That campaign was presented to us by Lia quite a few years ago, but it was presented to us when it was all finished, and so we have seen that, and now we are trying to integrate what information you had there, and, actually, I have been writing to Nicole about, when you say "grunts", which are the species that are more popular? Are all grunts? It's this type of thing, and, if you have specific recipes -- The book will include the USVI, and so I will keep in touch with you, and I will send you what we have for now, and it would be good if you can help with that, too. Thank you so much, Marcia.

MARCIA TAYLOR: Okay. Great. Thank you. I know that Nicole has big plans for this, and we're going to be expanding it, but we have a lot of materials already, and maybe you've seen them all, but I just wanted to put it out there and hope that we can collaborate on this.

ALIDA ORTIZ: Thank you. Carlos Farchette.

CARLOS FARCHETTE: My question was answered for St. Croix by what Marcia was talking about, and so I understand that Nicole Angeli was taking over the Reef Responsible portion with Fish and Wildlife, and so I just wanted to -- My question was answered.

ALIDA ORTIZ: Okay. Great.

MIGUEL ROLON: Alida, you have Julian.

JULIAN MAGRAS: Good morning, Alida. That was a good presentation, and I just have a question. I know that we had asked about this a while back, and I don't know where we're at with it, but about getting some of the placemats and stuff for the restaurants here in the USVI, and do you know where we are with those placemats?

ALIDA ORTIZ: Miguel can respond better to that, because, yes, we did receive that request, but, then after this, we had all the closings, with the COVID, and I don't know what has happened. Miguel.

MIGUEL ROLON: We can send the placemats to anybody in the Virgin Islands. Now that we can go to the office, if you need to, Julian -- If you want them, I can send them to you, and Jeanette Ramos and Diana are coordinating this, because some of the boxes are on the west coast, and the others are at the council office.

We are also going to print more that we can send to the Virgin Islands, and it's already six months into the year, and so Natalia has reminded me that we have a box of calendars too, and that some people would like to get a calendar, because of the information they have, and so, Julian, later, we can talk with Diana and see how we can send the placemats and who else can collaborate.

 JULIAN MAGRAS: Okay. That's great, because there is some small, local restaurants that are visited by a lot of tourists and a lot of the locals, and it would be good to get that information started across-the-board out there, for them to understand and see what's out there and going on, and so that would be great, and just contact me, and we can discuss it, and we can do a small amount to start off and see how receptive and everything it works.

MARCOS HANKE: Alida, we are a little tight on time, and we have one short comment from Diana, and then we will keep going with

your presentation, but we're a little behind.

ALIDA ORTIZ: This will be my last slide, but Diana.

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**DIANA MARTINO:** I just wanted to add that I have the placemats with me, and, Julian, I will be in contact with you, to see how I can send you some.

ALIDA ORTIZ: Great. Thank you, Diana. Then the next activity or project that we are going to be developing in the O&E AP is the women's participation in fisheries in Puerto Rico and the USVI, and, at this moment, we have coordinated, and it will be done in July, a newspaper report, Jeanette and Christina and Diana and Miguel are all collaborating with the information, and this one will be for five fisherwomen and their families from Cabo Rojo, Puerto Rico.

It doesn't mean that those are the only women fishers in Puerto Rico, and we have women in Naguabo, and we have women in Ponce, and we have women in different parts of the island that are working with fishers, and they are as important as the men in the fisheries.

Then we will conduct the same idea with the USVI, and so we are getting in touch with Nicole, to see where the families or the women that we can identify and how can we do that in the same way, and, first, it is very open outreach, like a newspaper or some sort of vehicle that will give us more expansion on getting the information to the public.

With this, we're also working on a book on women fishers that Jeanette Ramos will be developing, and she will include there Puerto Rico and the U.S. Virgin Islands, and we will give more information about the development of that project in our next meeting.

In the social media, what we are going to say is it's open, and it has been very, very, very successful, especially in this moment, where the fishers have to find different ways of communication and delivering their product. Facebook has now 3,541 followers, and Instagram has 531 followers, and, the content on Instagram and Facebook, you have it there.

It's Fish Fact Fridays, the seasonal closures, and information that we have given you before. In the YouTube channel, we have eighty-three subscribers, and there are fifteen videos that have to do with commercial fishing and statistics, stony coral tissue, essential fish habitats, fishing in St. 

Croix, and fishing in Puerto Rico.

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We would be very, very grateful if you as council members take a look at this social media and give us your reaction, give us your recommendations, so that we can do the very, very good work, and so this is my last slide. Thank you so much, and if there are any other questions.

MARCOS HANKE: Thank you very, Alida. The questions will have to be sent via chat or directly to you, because we are very tight on time, and we had questions while you were presenting, and I think we covered the majority of it already, but we are open to receiving it via email or through the chat. The next item on the agenda is Carlos Farchette and regulatory compatibility. Carlos.

#### REGULATIONS COMPATIBILITY - FEDERAL TERRITORY USVI

CARLOS FARCHETTE: Good morning. I am going to need to table my discussion on compatible regulations between the local and federal, probably until the December meeting, and I really want to apologize to Maria, because I dropped the ball, and mea culpa for not getting back to you, Maria, to discuss the table that St. Croix Fisheries Advisory Sub-Committee developed.

I know that the St. Croix FAC whole body needs to approve what we came up with and discuss this, and so it will take us a while, and I also know that, without the Commissioner of DPNR's blessing, we cannot go forward, because that's going to be next, and so we'll just work with Director Angeli, and I need to have a little more time to have the commercial and recreational sector have a better understanding about what compatible regs really means and what it's all about.

I know that it's a bit of a sour pill of compatible regs, but it's going to be required. Enforcement is very important, and compatible regulations is going to be a major part of that, and so enforcement of management plans will require a certain degree of compatibility, and so, without it, you really only have a written document with no teeth, and so I will table this until December, and I will make sure that I communicate with Maria hopefully by July or August and discuss the table that we're working on.

MARCOS HANKE: Thank you, Carlos.

**MIGUEL ROLON:** Marcos, you have Julian waiting for a turn to speak.

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MARCOS HANKE: Julian. Let's try to brief, Julian. We are really tight on time now. Thank you.

JULIAN MAGRAS: Thank you. Just to piggyback on what Carlos said, we're hoping to get the FAC back up and running in the St. Thomas/St. John district. We're waiting for the beginning of that, and we're just waiting for the word from the Director, Nicole Angeli, so we can get that committee back up and running.

Before, we had some issues, at the end of the year last year, and that was one of the discussions that was on the table, was to start to look at the compatible regulations also, and it's not an easy task in doing, but I think we can do it by taking a small bite of it at a time and fit them into the island-based management plan as we go, as each island has different compatibility rules, and we look forward to working on that.

It's not something that we can try to do overnight, but take your time and get it done and get it done correctly, and it's not a one-size-fits-all, but we can get it done, and I'm looking forward that our committee also can work with Maria and getting this done and maybe having something to present here in the near future of some of the stuff that we are willing to move forward with, and so thanks, and, Carlos, I give you a lot of shout-out for starting the process, and let's keep it going.

MARCOS HANKE: We are ready to go for -- Miguel.

MIGUEL ROLON: Marcos, you have Edward Schuster, and you have time for this, because, when we dropped the topic, you have time for a couple of questions, and you have here Edward Schuster.

EDWARD SCHUSTER: Good morning. One of the questions that we had when this discussion came up with compatible regs, and it's for legal counsel, but the concerns that we had if we were to overrun our ACLs, and would that affect the ACLs? Would that affect the closure in territorial waters as well?

JOCELYN D'AMBROSIO: You're asking, if there's an ACL exceedance, how does that affect closures in the territory?

EDWARD SCHUSTER: Yes.

JOCELYN D'AMBROSIO: The landings are monitored, and so they monitor the territorial landings as well as the landings from federal waters, because the ACL takes account of all of those landings, and then, if there is an exceedance, the AM looks over

a certain period of years, and, under the AM in place right now, we're looking back over the previous years, and, once the ACLs are in place under the island-based plans, there will be sort of a ramp-up period, where it's a period of one year and then another year, until it gets to a three-year lookback, and so they average the landings over that three-year time period.

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If there's an exceedance, they determine how much to reduce the fishing season, to prevent a future exceedance, and so they make that determination, and then that fishing season reduction applies in federal waters only, and so there could still potentially be fishing in the territorial waters, unless the territory had otherwise had a closure for its own reasons, under its own law, and so the ACLs, and the AMs to ensure compliance with those ACLs, really affect what's happening in those federal waters.

 EDWARD SCHUSTER: Okay, and so, to answer my question, it means that, although you have compatibility, the AM would only be in federal waters and not in territorial waters, unless the USVI government wants to piggyback or join along with having a closure as well in territorial waters.

JOCELYN D'AMBROSIO: Yes, that's right, and so, right now, the way it is, the fishing season reduction would be in the federal waters, but, if the territory said, whenever there is a federal fishing season reduction, we'll apply that, then it would apply in the territorial waters, but, yes, there would have to be some additional action by the territory, and I'm not familiar with the territorial rules right now, and so I don't know if that happens right now, but my assumption is that, right now, there isn't, as you're calling it, that piggybacking on the federal closures.

**EDWARD SCHUSTER:** Thanks. That answers my question, and so, basically, what compatible regs would serve is for enforcement, and it would have it on both sides, if we go with compatible regs.

JOCELYN D'AMBROSIO: From my perspective though, when you're talking about compatible regs, there's a lot that you could make compatible or not, and so it depends on what you're trying to achieve with them, and so, if you're looking for compatibility on fishing season reductions, then, yes, they would -- If they're compatible, they might apply the same way, and you could also have compatibility on gear requirements or closed areas, and so I'm not really sure the scope of what we're trying to ensure compatibility with, that that's a question, where do we

want compatibility across-the-board, in particular areas, and so that's something to think about.

EDWARD SCHUSTER: Okay. Thanks. Well, like Carlos said, we're tabling it until December, and we'll talk about that.

MARCOS HANKE: Thank you, Ed. I think we are ready to move, and it's 10:05, and we have a presentation of Marine Recreational Information, MRIP, by Sarah Stephenson.

## MARINE RECREATIONAL INFORMATION PROGRAM (MRIP) UPDATE

**SARAH STEPHENSON:** As Marcos said, my name is Sarah Stephenson, and I'm with the Southeast Regional Office, and I am going to just give you a quick update on the Marine Recreational Information Program, or MRIP, in the Caribbean region.

This is just a quick overview of what MRIP is and how it works. Through MRIP, NOAA Fisheries and its state, regional, or federal partners use in-person telephone and mail surveys to measure the number of trips that saltwater anglers take, which is the effort, and the number of fish that they catch, which is the catch, and those effort and catch data are used to estimate the rate of catch taken by recreational fishers.

While NOAA Fisheries maintains a central role in developing survey methods and establishing best practices, MRIP regional implementation teams are responsible for selecting survey methods and managing data collection.

The original Caribbean Regional Implementation Team included individuals from NOAA Fisheries Office of Science and Technology, the Office of Sustainable Fisheries, the Southeast Regional Office, and Southeast Fisheries Science Center, as well as staff from the Caribbean Fishery Management Council, Gulf States Marine Fisheries Commission, Puerto Rico's Department of Natural and Environmental Resources, and the USVI's Department of Planning and Natural Resources.

The regional implementation teams develop regional implementation plans that identify regional recreational fishing catch and effort data needs and identify, prioritize, and estimate the cost of additions or improvements to those data collection programs.

In February of 2017, the Caribbean team developed a regional implementation plan for the U.S. Caribbean region that included an assessment of the regional data collection programs and a

list of implementation priorities to meet those regional data needs, and the link is provided at the bottom of this slide, and I'm assuming you will get a copy of it, if you want to go read it. It's not too long, and this is the cover of the plan.

This is a quick highlight of the 2017 plan recommendations, and the top priority recommended was to develop a governance structure that could oversee operations, ensure data collection methods, and provide quality data in a timely manner. Two of the objectives in developing this governance structure were to establish a steering committee to guide the subsequent steps of the plan and develop a centralized personnel management mechanism.

The second priority of the plan was to design and implement a recreational data collection program in the USVI, and that entailed developing a sampling frame for an effort survey developing a register of public fishing sites and developing an angler intercept survey design to estimate recreational catch.

The third priority of the plan was to refine MRIP in Puerto Rico, resolving any issues with the type, quality, and consistency of the data being collected. Objectives for this priority included replacing the current phone survey with a mail survey to estimate fishing effort, considering if alternative modes of shoreline fishing, like jet-skis or kayaks, should be added to the survey methods, and including key invertebrate species, such as queen conch and spiny lobster.

The current MRIP only collects data on finfish, and these priorities and objectives are described in further detail in the 2017 plan that is available at the link on the previous slide.

As I mentioned, the Caribbean regional implementation plan was published in February of 2017, and, a few months Hurricanes Irma and Maria caused significant disruption of the fisheries, and that disruption included Caribbean destruction of fisheries infrastructure, including the MRIP sampling sites in Puerto Rico, as well as priority changes for regional partners, and so subsequent events, earthquakes and the current pandemic, continue to impact the recovery of fisheries and MRIP in Puerto Rico, and, to date, surveys and recreational data collection are suspended in the Caribbean region.

There have also been numerous changes in the staff working on the MRIP-related programs in the partner agencies that I mentioned during the past three years, including the retirement of Dr. Bill Arnold, who was the team lead.

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During the past several years, the council and NMFS have been developing the island-based FMPs that, once implemented, would replace the four Caribbean-wide FMPs, and, under the Puerto Rico FMP, annual catch limits were specified for the recreational fishing sector, and so resuming the collection of recreational catch data is important for effective management of the species included in the FMP that are managed with both commercial and recreational ACLs.

MIGUEL ROLON: Sarah, Tony Blanchard wants to ask you a question.

SARAH STEPHENSON: Go ahead, Tony.

TONY BLANCHARD: Good morning. I've got a question for you. I know that there was work being done on the recreational program in the Virgin Islands, and a lot of work was being done by the former Director of Fish and Wildlife as to coming up with a program and reporting and so on and so forth, and is there anything that is being done, or is that on a stand-still?

**SARAH STEPHENSON:** That's actually on this slide that I'm about to talk about, and I think it might answer your question, and so I can go through this and then come back to you, to see if what I say answered that question?

TONY BLANCHARD: Sure.

SARAH STEPHENSON: Okay, and so, to the end of all the events that happened from when the 2017 plan was implemented to now, the Caribbean regional implementation plan was reconstituted with participation from those previously-mentioned partner agencies, and so, where Ruth Gomez was probably on the previous team, now Director Angeli is on our current team, and so, on May 27, the Caribbean team members participated in a virtual meeting, which was the first meeting with this new team, and, along with introductions of who they were, each member provided regional updates that were related to recreational fishing in Puerto Rico and the USVI.

Tony, to answer your question, this is where Director Angeli came in and said these are all of the activities and anything related to recreational fishing that has occurred kind of since the hurricanes hit in the USVI. She provided the team an update of what's been going on in the islands, including that recreational fishing license, and so the team reviewed the

recommendations from the 2017 plan, to determine if they were still appropriate and if the order that they were listed in was still valid, considering that the Puerto Rico program has been suspended since 2017.

Team members were asked to review the plan, the previous plan, and provide comments on how those prior recommendations may be revised or if new recommendations needed to be considered, and then the last item that we discussed was the recommendation from the 2017 plan of establishing a governance structure.

The team agreed to proceed with appointing a small working group to develop an options paper outlining alternative options for a Caribbean MRIP governance structure, with pros and cons of each alternative that could be reviewed by the entire team at a future meeting, and so those volunteers were recently recruited and are working on the draft options paper now. The next meeting has not been scheduled. Before we go to the next slide, Tony, did that answer your question?

**TONY BLANCHARD:** I guess this is more of a question for the Director, as to where we are right now.

SARAH STEPHENSON: Is Director Angeli still on?

NICOLE ANGELI: Yes, I'm here. Are you going to go over what we said, or was that the extent of your presentation, Sarah?

 SARAH STEPHENSON: I just have one more slide, which, Graciela, or whoever is driving, if you want to just go to the next one, and it's just the list of the new team members, and then I was going to answer any questions, and so that's where we are, and so I wasn't going to provide an in-depth recap of what each member said, and so, if you would like to answer Mr. Blanchard's question, feel free.

NICOLE ANGELI: Sure, and this is all in the meeting notes for that meeting as well, but we have worked with the Southeast Fisheries Science Center to gain funding to have additional port samplers that will do both commercial and recreational port sampling in the territory through the end of March of 2022, and so we're very excited about that, and we're processing contracts right now and looking for those folks to do more intense port sampling, so that we can provide the information for MRIP as well as our cooperative statistics programs.

Then the second piece is working with our local government to create a recreational fishing license program, and we're sharing

information with Puerto Rico, and we're looking for ideas. For example, the Gulf Fisheries Marine Council put together a really nice overview of license fees back in 2013 for all recreational fisheries across the Gulf region, and so putting together a reference document like that and then soliciting more feedback from our local fishery advisory committees, once they are reconstituted in St. Thomas, as well as the one in St. Croix, to have a really good program rolling forward. We are working on that currently, and we've been a little busy with hurricane disaster relief, and that's been a priority.

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**SARAH STEPHENSON:** That was it, unless there are any other questions for me regarding MRIP.

MIGUEL ROLON: I don't have any questions, Mr. Chairman, in the chat.

**GRACIELA GARCIA-MOLINER:** If I may, I need to ask a question of Director Angeli. Is the licensing in the USVI still available through the internet for the recreational fishers?

NICOLE ANGELI: Yes, Graciela, the website is still active. People do sign up for the voluntary recreational fishing license, and so we have a record of people who have called, and it's mostly people from away, and not from here, although there are some who have signed up for it here, and that's good, because then that gives us a directory that we can reach out to once we have a more programmatic license.

GRACIELA GARCIA-MOLINER: Thank you.

 MARCOS HANKE: Thank you very much, Sarah. I don't see anybody else in the queue for a question. Thank you very much for your presentation, and we are going to shorten up the break for a quick break for five minutes, and we'll be back in five minutes, at 10:25.

(Whereupon, a brief recess was taken.)

MARCOS HANKE: Hello, everyone. I want to restart the meeting. We have the next item on the agenda is Michelle Duval, CFMC Mission and Strategic Plan Presentation.

MIGUEL ROLON: Before that, Tony wanted to talk and ask a question to Sarah.

 MARCOS HANKE: Yes, and I'm sorry about that, Tony. Sarah Stephenson, are you connected?

SARAH STEPHENSON: Yes, I'm still here.

MARCOS HANKE: Tony had a question, and we missed his request during your presentation. Go ahead, Tony.

TONY BLANCHARD: Sarah, could you bring up the last slide in your presentation?

**SARAH STEPHENSON:** I wasn't in control, but could someone do that for us? Thank you.

TONY BLANCHARD: The question that I have is we only have one representative on that committee for the USVI, and there is six representatives from the Caribbean Fishery Management Council, three from Puerto Rico, and all the rest of them is basically from NMFS or other fisheries, and is there any reason for that?

SARAH STEPHENSON: We used the original list to try to identify members, and so we started kind of at the top, and so, for now, that's why Director Angeli is the only one, but this is not a final list, and new members can be added. I just -- The team didn't want to just assign people without going through the proper channels, and so it's very possible that, next time I give an update, there could be much more representation from the USVI, and so this list is in no way final.

**TONY BLANCHARD:** Okay. I have a question. Is there any way that you are going to ask anybody else from the USVI to participate?

SARAH STEPHENSON: That would be -- We would do that through Director Angeli, and so she would identify and nominate people, but, if there's someone in particular that you're thinking of, you could let us know, and, next time the team meets, I could say is it okay if we add this other person, but, since we're trying to go through the proper channels, I would prefer to go through Director Angeli, but are you nominating yourself?

TONY BLANCHARD: No.

MIGUEL ROLON: Sarah, remember these are recreational fisheries and not commercial, and so Nicole, in the chat, said that they will be presenting at least a charter and recreational fisheries to attend, and I believe the concern that Tony has is to have more representation from the U.S. Virgin Islands on this

committee.

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**TONY BLANCHARD:** Yes, and I would like to see at least one from St. Thomas.

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MARCOS HANKE: Thank you very much, Tony. We heard you loud and clear, and we're going to follow-up on that, and I think we can go back to our schedule for the next presentation, Michelle Duval, and I can see her there ready to go. Can you put up the presentation of Michelle?

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## CFMC MISSION AND STRATEGIC PLAN SURVEY UPDATE

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MICHELLE DUVAL: Thank you, Mr. Chairman and council members, for allowing me the opportunity to provide you with an update on the five-year strategic plan project. For those folks who have been attending the district advisory panel meetings and who attended the Outreach & Education Advisory Panel meeting, this will be a little bit of repetition, and so I will try to be efficient.

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This is just a brief outline of what I plan to cover today. It's just a really quick review of the project, and then I will go over the project status, and then, finally, we'll review the next steps, in light of COVID-19.

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Just really quickly, what is a strategic plan, why would the council want to have one, what is it for, what does it do, and it's really meant to -- A strategic plan is meant to guide an organization towards a clearly stated set of goals.

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the first things that it should do is establish of priorities and future direction, and so the council has been engaged, over the last several years, in moving from a speciesspecific-based management framework to an island-based management framework, and so a strategic plan can help the council to identify what it would like to achieve under the new management framework, and it can be used to allocate resources efficiently, and so your resources are your staff time and effort, and there's usually more to do than you have resources to do it, and so this can help to deploy those resources effectively.

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It can help to plan for uncertainty, and we don't know whether that uncertainty may be in the form of a hurricane or a pandemic, but it can allow the council to do a little bit of scenario planning, and then, finally, it is a decision support tool, and so it provides transparency and accountability for the council's stakeholders with regard to why the council is making certain decisions or why it's allocating its resources in a certain way.

Just the status of the project, back in August of last year, I came down to your August meeting and did just a review of the project and the timeline, and we did a little bit of brainstorming and vision statements, and you all agreed to move forward with a project, and so the project officially started in January of this year.

In February, most of the time was spent developing the strategic plan survey, which I will talk a little bit about later, in both online and paper versions, as well as in English and Spanish, and we launched that survey in mid-March, and, in mid-April, when we realized that the pandemic was going to significantly impact the timeline of this project, we decided to extend the deadline through July 31 of this year, and we recognize that people have a lot of other things going in their lives right now, as you all have discussed yesterday as well as earlier today, and we want to make sure that everybody has the opportunity to participate in the survey.

The deadline has been extended, and then the survey was emailed, and both the PDF copies of the survey were emailed to council members and advisory panel members in both English and Spanish, and then paper copies were also mailed out to folks, and then, earlier this month, I provided a status update to the Outreach & Education Advisory Panel as well as the District Advisory Panels.

I wanted to just thank the council staff for all of their support, in terms of getting the survey out there, to Miguel and Diana for their assistance in translation, to Natalia for making sure that the links to the online survey were posted on the website, in both English and Spanish, to Christina Olan for making sure that the survey is posted on the council's social media platforms, and then also to Natalia and Iris for going to the effort to mail hard copies out to people, and so thank you all to council staff.

I just wanted to talk about the purpose of the survey, and so this is a way to help determine current concerns and future priorities, and so what are the things that stakeholders believe the council should be focused on in the next several years, and it's a way to solicit ideas and improvements, everything from potentially a new management approach to data collection to communication and outreach.

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It's also a way to help understand stakeholder definitions of success, and so what is the vision that stakeholders have for the future of U.S. Caribbean fisheries, and then, finally, it's a tool to help clarify differences between islands, as well as different stakeholder roles, and so what concerns, priorities, and those types of things do people have, and how do they differ among the different islands.

The survey design is entirely anonymous, and so we don't ask anybody for their name or a phone number or an email address, but we do ask for a little bit of general information, and so primarily what are the roles that people play in the fishery, are you a commercial fisher, a recreational fisher, a for-hire captain, a scientist, a government worker, do you own a fish house or provide support shoreside, such as vessel repair and things like that, and are you a representative of a fishing organization or a non-governmental organization, and so what are the roles that people play in the fisheries.

Then another important piece of information that we ask for is location, are folks residents of the U.S. Virgin Islands or Puerto Rico, and then, within that, we also ask more specifically which region among the islands do people live, and that will allow us to make some of those distinctions between the island groups.

Then the rest of the survey is really mostly a series of checkboxes, asking folks to rate the importance of a number of different issues that you see here on the screen in those gray boxes that are divided into resource health, social issues, management, communication, outreach, and ecosystem-based management.

I just wanted to give a quick update on where we are in terms of survey responses, and so this indicates that we had 150 responses as of June 18, which was last Thursday, and I did just check this morning, and we had another response, and so 151 responses, and so these are all responses that have been received online, and so people taking the online version of the survey, as well as any paper copies that have been scanned and emailed to me, and I have uploaded those responses into Survey Monkey as well.

You can see that two-thirds of the responses are coming from Puerto Rico and one-third from the U.S. Virgin Islands, and then I also broke those down a little bit more, so that you could see how responses are coming in from different regions, and so, in

Puerto Rico, the majority of responses are coming from the western and northern part of the island, and, within the Virgin Islands, the majority of responses have been coming from St. Croix, and, on St. Croix, primarily from the east end and northern end.

I do just want to note that the regions that you see in parentheses there were regions that people wrote in, and so, if one of the choices for region was not appropriate to reflect where someone felt they lived, there was an option to write something in, and so those areas in parentheses represent the write-in areas, so to speak.

This is the same information, but it's just in a slightly different format, and sometimes it's easier for people to read numbers on a screen, and sometimes people prefer to see them in a picture, and so this is really just the same information, and I want to give a shout-out to Vanessa Ramirez and Carlos Farchette for the help that they have been providing to fishers, in terms of helping them to fill out paper forms of the survey, and that is very much appreciated. Thank you both so much.

MIGUEL ROLON: Michelle, Julian has a comment regarding this slide.

MICHELLE DUVAL: Okay. Yes.

JULIAN MAGRAS: I have some surveys that are filled out, and how do I get them back to you guys? Do I just mail them to the council's office, because I was sent some surveys, and I have a whole bunch of them that are filled out, and how do I get them back to you guys?

MICHELLE DUVAL: Great, Julian. That's great news, and you can email them back to the council office, and then council staff will do the --

JULIAN MAGRAS: I have the paper versions, and so that's my thing, and I don't have a scanner.

MICHELLE DUVAL: If you can mail them, just put them in the regular mail back to the council office, and then council staff can scan them.

**JULIAN MAGRAS:** Okay. No problem. I will work on getting that 46 to you first thing next week.

MICHELLE DUVAL: Thank you so much, Julian. I really appreciate

your efforts.

JULIAN MAGRAS: No problem.

MICHELLE DUVAL: Were there any other questions before I moved on? These are just my last couple of slides talking about the timeline.

MIGUEL ROLON: Not at this moment.

MICHELLE DUVAL: Okay. Thanks so much, Miguel. This was the original timeline that I presented to you all back in August, and clearly that is no longer going to be possible, and the blue checkmarks just indicate the chunks of the project that have been completed, and, originally, we had hoped to be presenting results of the survey at this time, and we hoped to have a council member workshop at your August meeting, with the draft plan in December of this year and a final plan in April of next year, but we've had to re-work that.

MIGUEL ROLON: Michelle, Marcia Taylor has a question.

MICHELLE DUVAL: Okay.

MARCIA TAYLOR: Just a question. Do you have a way to control for if someone submits more than one survey, just out of curiosity? I mean, I think I filled one out, but I'm not sure, and it would be nice if I went in and they said, oh, you've already done this, or is there no way to do that, because it's anonymous?

MICHELLE DUVAL: If you have completed the survey online, and you try to go complete it again from the same computer, you won't be able to do it, and so, if you click on the link and you try to complete it again, it should come up with a little notification that says that you've already completed the survey. If you filled it out by paper, that's going to be more difficult for me to track, because I'm not -- I am receiving scanned forms that have been sent to council staff, and, because it's anonymous, then there's no way for to tell if you have filled the survey out yet or not.

 MARCIA TAYLOR: Okay, and so is it a specific computer, or like, for example, if I do it on my iPad, you're going to recognize it? That's just out of curiosity, and so it doesn't go by email address, and it goes by device?

MICHELLE DUVAL: Right, and so the device that you fill it out

on has a specific address that is unique and individual, and so, if you filled out the survey on your iPad or your iPhone or a laptop, if you go back to that same device, to try to fill it out again, it will let you know that you've already completed it. If you use a different device, unless it has the same IP address, which I don't think it would, you might be filling it out twice.

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MARCIA TAYLOR: Okay. Thank you.

MICHELLE DUVAL: Yes.

MIGUEL ROLON: Michelle, we have a comment, and it's not a question, but it's that three different fishers have filled out surveys from my personal computer from the same link, because they only have the one of them, and so that's Raimundo's comment.

MICHELLE DUVAL: Could you repeat that for me, Miguel?

MIGUEL ROLON: Raimundo, can you do voice?

RAIMUNDO ESPINOZA: Hi. When I was sent the link, we were sitting down with -- There was three different fishers that wanted to fill it out, and so I let them use my computer, and, I mean, I hope you were able to submit it, and they refreshed it, and so I don't know if it was the same one that was submitted three times or -- I don't know now, and this was maybe like a month ago or so, something like this, or three weeks ago, but I am not sure if either those surveys didn't go through, or maybe the first went through and the rest didn't, or if they were updated, but, anyway, I just wanted to put that out there, because they asked me to fill it out, and so I let them use my computer when they were doing that.

MICHELLE DUVAL: So, if you refreshed your browser, and if you don't accept cookies on your browser, then you would have been able to allow those guys to use your computer to fill it out each time. If it didn't come up with a notice saying that you had already completed the survey, or someone had already completed the survey, then chances are that your browser doesn't store cookies, and so those are three individual responses that were submitted.

RAIMUNDO ESPINOZA: No, no message came out, and so I think they were submitted. Thanks so much. I don't accept cookies, and so I think -- Thank you so much.

MICHELLE DUVAL: No problem. Okay. We're almost done, Mr. Chairman. Miguel and I have worked to try to adjust the timeline for this project, and it's our hope that what you see up here on the screen will be flexible in regard to any other curveballs that the pandemic might throw our way, and so, because we've extended the deadline for participation through the end of July, that means the analysis is going to be backed up into the fall.

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We're hoping to do communication and public outreach in October, in terms of the results of the survey, and then I will be completing a stakeholder input report that we would present the results of that at the council's December meeting.

We are looking towards March of next year to host a strategic planning workshop for council members, and this would be to use the input that you all have received from the public and from the survey to help identify priority areas of focus and a framework, and then a draft plan would come to the council in August of next year, and a final plan to the council in December. I have just two more slides.

Just in terms of public outreach, obviously the pandemic -- This is the piece of the project that the pandemic has impacted the most, and so our original plan was that I would be presenting the survey results to the district advisory panels in person, and I had hoped to be doing that this month, and then we would follow-up with a round of in-person island outreach meetings in Puerto Rico, St. Croix, and St. Thomas/St. John.

Our new plan, which is obviously tentative and dependent on how things go with COVID, is targeting public outreach in October, and our approach was to combine the in-person presentation of the results to the DAPs with public outreach and additional public input, and so we would not have a separate set of public input meetings.

When we gave the update to the district advisory panels, we asked for their recommendations regarding would you want a single island-specific DAP public outreach meeting, one for each island, or would you all recommend one large combined DAP public input meeting, and the DAPs recommended a single combined inperson meeting, but they felt that this would provide them an opportunity to work together collaboratively to provide more constructive input on the project and the process in general.

I apologize that I was late logging into the meeting yesterday morning, and so I missed part of the Executive Director's

report, and I came in on the tail-end, where I believe Miguel was providing some updates on how the council is going to be operating under the pandemic into the future, and so, obviously, it's my preference that we be able to do this in-person, but I understand that's going to be impacted by whatever public health directives are in place for the territories, and so I have one more slide.

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I am just asking everybody if they can help to spread the word about the survey, and, again, it's available on the council's website. As soon as you go to the website, up pops a beautiful banner that has links to the online survey in English and Spanish, and I also have the direct links right here, and so this presentation is posted to the council's website, and so anybody can go back and look at this and click on those links and get to it.

Christina is regularly posting this to the council's social media platforms, and, of course, paper surveys in both English and Spanish are available from council staff or myself, and so there is one final slide that just has my contact information and questions, and so I am available for anything, and, with that, Mr. Chairman, I will stop talking and be happy to take any additional questions.

MARCOS HANKE: Thank you, Michelle. There is no extra questions. Anybody in the group that wants to ask a question now?

MIGUEL ROLON: Marcos, you have Jocelyn.

 MARCOS HANKE: Go ahead, Jocelyn.

JOCELYN D'AMBROSIO: Thank you. I just wanted to note that a process question arose about this survey, because there is various rules regarding soliciting information from the public when the government is doing that, and that includes the council, and it applies to voluntary submissions as well, and so I am coordinating with others within the agency about these rules, which are under the Paperwork Reduction Act to see what we need to do, so that the council can make sure that it's complying with all the rules that might apply here, and so I'll follow-up with Miguel and Michelle, to see what, if anything, we need to do to continue with this survey, but I just wanted to let you all know that I realize that there might be additional boxes we need to check for compliance with the Paperwork Reduction Act here.

MICHELLE DUVAL: Thanks, Jocelyn, and I know we used a similar survey tool approach with the Mid-Atlantic Council, and so I don't know if you've been in touch with any of your contacts in the Northeast, but they might also have some useful information in that regard.

JOCELYN D'AMBROSIO: I have reached out to some of the persons that were working on that as well, and we've talked about what they did, and then I also looked at the stakeholder input report, and I'm trying to use all that information to figure out what steps we might need to follow here.

MICHELLE DUVAL: Great. Thanks so much.

JOCELYN D'AMBROSIO: Thank you.

MARCOS HANKE: Thank you, Jocelyn, and you guys keep working on that part, and, Miguel, nobody else is requesting to speak?

MIGUEL ROLON: No, Mr. Chairman.

MARCOS HANKE: Thank you, and the next item on the agenda is the Queen Conch Aquaculture Project and Megan Davis.

## QUEEN CONCH AQUACULTURE PROJECT IN PUERTO RICO

MEGAN DAVIS: Good morning. Thank you, Mr. Chairman. Thank you, Miguel and Graciela and Chairman, for inviting me to present our Naguabo queen conch hatchery and nursery project that we're very excited to share with you all today.

This is an award that we received from the Saltonstall-Kennedy NOAA Award, and it's to develop a fisher operated pilot-scale queen conch hatchery nursery facility for seafood supply and restoration of wild populations in Puerto Rico.

This is a partnership project, and I am from Florida Atlantic University, Harbor Branch Oceanographic Institute, and I am a Research Professor, and this is in partnership with Raimundo is the Executive Director who of Conservación ConCiencia, who you all are very familiar with, Raimundo, because he has been active in the council, and then Carlos Velazquez, who is the President of the Naguabo Fishing Association, and you're also very familiar with Carlos and his participation as a board member on the council.

We have combined our expertise together, and I have been working with the queen conch and culturing the queen conch for forty

years now, and I was involved as a co-founder of the Turks & Caicos Conch Farm back in the 1980s, and, since that time, I have had several other small hatchery operations that we've put together, and so I'm excited to be able to share my expertise in Puerto Rico and work very closely with Raimundo, who is the co-PI on the project, and, as you all know, Raimundo has a tremendous amount of experience working in the Caribbean and working on conservation projections, and especially fishermenbased projects, and so I'm very excited to team together with my colleague Raimundo.

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Then this would not be possible if it wasn't for our collaborating partner, Carlos, and working at the Naguabo commercial fishing association with the fishermen and with the fishers, both the men and women of the association, and so they will be directly involved in the project, and they will be helping to operate the project, and they will be also paid on the project, to work on the hatchery, and so we're very excited about this partnership.

The goal that we have for our project is the restoration of the queen conch, and we are working on four different objectives. One is to build and operate this commercial conch hatchery, which I will tell you more about, and this will also be open to others to come and learn about the queen conch, other fishers, students, community members, and visitors, to come and see the operation.

 We will release hatchery-reared conch, and I will tell you more about that, and then, as part of the project, we'll also produce a plan that recommends other areas of Puerto Rico for conch hatcheries and potential grow-out areas. This project did start on September 1, 2019, and we're almost a year into the project, and we're likely to get an extension, due to some slow-up because of the COVID-19.

 As you all know, there is quite a plight of the conch throughout the Caribbean region, and Puerto Rico has also seen some decrease in conch fisheries, mainly due to some of the impacts from Hurricane Maria, and so this is part of the reason. We're very interested in helping to restore part of the fisheries, and to be able to put conch back into some of the areas.

It's very exciting, because we are working with many partners, including the Caribbean Fishery Management Council, and we're also working with others in Puerto Rico, which I will share more about, but, as you all know, the University of Puerto Rico in La Parguera, and also with David Valentine and Richard Appeldoorn,

did have some conch hatchery previously in Puerto Rico, and so it's very exciting to reestablish a hatchery in Puerto Rico.

As you all know, this project is taking place in Naguabo. If you're not familiar with Naguabo, as you can see the star, it's about an hour from San Juan, in the southeast area of Puerto Rico, and here's a photo, on the lower-left-hand corner, of the Naguabo Commercial Fishing Association and a little bit more of a closeup, and there's about twenty-two to twenty-five fishers that are part of this co-op, and it's a very active co-op, and they do fish conch as one of the many species that are fished by this fishing co-op, and the big arrow is pointing to the location of where the conch hatchery is located.

In September, I joined Raimundo, and we had a kick-off meeting with all the fishers, with Carlos as well, at the fishing co-op, and then Raimundo and I also spoke with the students and the professors at the University of Puerto Rico Humacao, and they have a marine biology program there, and so we're very excited, and they're only about a half-hour from our site, and so we'll be actively engaging with the students, and we anticipate hiring some as interns and also research technicians, and also having some experimentation and research with the program there.

During the month of December and January, we laid out the hatchery, and we designed where all the various components of the hatchery for raising the larvae from the eggs and the metamorphosis and the phytoplankton, and we did some renovation to the building, and we worked with local contractors, and we have a great space. It's about eighteen-feet-by-eighteen-feet, and it's a perfect size for our pilot-scale hatchery.

The really good news is that, on Friday, we met a major milestone, and we had shipment of our tanks, and that would be the larval tanks and the nursery tanks and the water storage tanks, and they all arrived from Miami to Puerto Rico, San Juan, and then were trucked down to Naguabo and were unloaded, and we're ready to start putting those in place now.

Meanwhile, we have been working on a queen conch training manual, and we have a conch outreach coordinator who is working with us, and we started putting together a very detailed how-to, and that is being translated into Spanish, and this will be a step-by-step on everything from collecting the egg masses to what the development stages look like and all the way through the life cycles.

We also are working on planning some video modules to go along

with it, and we have ordered our microscopes, and they now have cameras for microscopes that are Wi-Fi connected, and so we'll be able to also broadcast real-time what's going on in the hatchery under the microscope.

Just briefly, I'm going to go through the life cycle stages, as a way to share different parts of what we'll be growing in the hatchery, and so, at the bottom, we have our breeding stock that are in the wild, and so we'll be collecting a very small portion of egg mass, and we don't need the whole egg mass, because it's a half-million eggs, and so we just need a small portion of the egg masses, and I understand, from Raimundo and the fishermen, that they are seeing the eggs laying right now in the water, and so that's exciting.

The eggs take about four days to hatch, and then they are in the pelagic stage for about twenty-one days, as veligers, and then they go through metamorphosis and grow into the juvenile stage. Let me just show you a couple more slides on the life cycle, and you can see the collection, partial collection, of an egg mass. In the center is a full egg mass, and so we'll take about maybe one-quarter, or maybe even less than that, and we'll take several, so that we have some genetic diversity in the eggs that we collect.

We will be training the fishers on how to identify the growth of the embryos in the eggs from the day that they are laid, which is Stage 1, all the way to Stage 5, which is when they're ready to hatch, and you can see that they are very detailed at that stage, and they have the little lobes, and they have the eye spots, that are the black dots, and they have the little orange pigments, which are the foot, and so, as soon as we start to see that, and they're spinning in their little egg capsule, we know that they are going to hatch that evening.

We will be growing some microalgae phytoplankton, two different species of phytoplankton, in order to feed the newly-hatched veligers. This an overview of the development of a conch veliger, from Stage 1, when they first hatch out with two lobes. At this stage, they are very small, and they're like the size of the tip of a pen, and so you can still see them as little dots, and, under the microscope, this is what they look like.

Then they develop four lobes by about day-four, and then on to six lobes, and a very long, elongated six lobes by about day-ten, and then, by day-twenty-one, they have these -- They are ready for metamorphosis at that stage. At that stage, they're about one-millimeter in size, which, once again, is very small,

about the top of a pen, and the head of the pen would be about the size of the veligers at that stage.

The veligers, it's very interesting that conch will not go through metamorphosis without a trigger, without a cue, and, in the wild, they typically cue into the seagrass beds, because that's where they end up settling, and they eat the diatoms that are on the seagrass blades, and this is their natural food and their natural cue to tell them that they're in the nursery area.

In a hatchery situation, we can use seagrass blades, or detrital blades, but we typically make an extract out of Laurencia, which is a red algae, and we allow the veligers to go through metamorphosis that way, and you can see the veliger that has metamorphosed on the left-hand side, and it no longer has any lobes, and it takes about five hours for it to go through metamorphosis.

Then, in the bottom photos, you can see the tiny little specks, where they have been eating away at some of their food that we flocculate for them, and then the bigger juveniles that are about a month old on the screen.

This is what the inside -- This is a rendition of what the hatchery will look like in the different stages, and so you can see the round, cylindrical tanks, which is where the veligers will be grown, and the next tank over is where the eggs will incubate for the four days until they hatch, and then the metamorphose trays will be next, and there will be the microalgae area, where we will grow the phytoplankton, not only for the veligers, but for the newly-metamorphosed conch, and we will have also a little desk area, where we'll be able to have the microscope, and then a sink for cleaning any of the glassware.

Then, right outside of the hatchery, in the covered area, will be the nursery area, and this is where we'll raise the juvenile conch for about one year before they are released into the wild, and they will be raised on sand, which will help to strengthen their shell and form their shell. At that stage, we will also be making their food for them from an algae and a fish pellet.

The production of the hatchery is to have approximately thirty-six egg masses, and we have a permit from the DNER, and they have provided us a permit to collect small portions of the egg mass and to also be able to conduct the research that we're conducting, and I won't go into detail on the production, but to let you know that our target for the grant is to produce 2,000

juveniles for release, and I also wanted to let you know that we did not need -- We consulted with EPA, and we did not need an EPA permit, due to the low volume of water that we'll be using and the low nutrient output. We will only be needing about a hundred gallons a day, because most of our systems are on recirculating systems in the facility.

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Then we will be conducting stock enhancement studies, working very closely with the fishers as to what areas to do some restoration, and we will also work closely with NOAA and DNER, and it will definitely be a partnership project to determine not only the best locations, but also some of these different considerations that we'll want to study as we begin to do the restoration, to make sure that we have the success.

I just wanted to let you know that this is a truly exciting project, and I am very honored to be involved in it, and this project will serve as a model that could be transferred to other fishing communities in Puerto Rico and elsewhere, and there's been a lot of excitement around this hatchery, and there have been others throughout the Caribbean that have been reaching out to Raimundo and I and asking us about the hatchery and how they could get involved.

This project is also providing some diversified income for the fishers working on the project, and we're very excited to be building a capacity with working with students and training, and also just building partnerships in general, and we had a very nice visit with Miguel and Graciela in January, and also with the University of Humacao. That is, in conclusion, my presentation, and, if there's time, I welcome any questions that you all might have.

MARCOS HANKE: Any questions?

GRACIELA GARCIA-MOLINER: I have a question, if I may.

MARCOS HANKE: Go ahead, Graciela.

 GRACIELA GARCIA-MOLINER: How is the water quality in the areas that you are considering for restoration or for receiving, because, in talking to Carlos, we've talked about the outflow of things into the bay, et cetera, and so are you going to be monitoring the areas where the receiving is going to take place?

MEGAN DAVIS: Thank you for that question, Graciela. That's a very important question, and I think that that's going to be part of the decision-making on where we decide to do the

restoration. One thing that we have been discussing is that it's very important in the survival of the juveniles when they go out is to have safety in numbers, and so we may be looking directly at nursery areas that are already established nursery areas that have conch, so that the juvenile conch that are established in those areas from the hatchery have that safety in numbers, and so we'll be looking definitely at the substrate and at the water quality, and also the presence of other conch in the area. Thank you for that question.

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MARCOS HANKE: Thank you very much. We have a sequence of questions for you.

MIGUEL ROLON: Mr. Chairman, you have Carlos Farchette first, followed by Eddie, Vanessa, and Clay.

MARCOS HANKE: Yes, and I have the list already. Thank you, Miguel. Carlos Farchette.

CARLOS FARCHETTE: Thank you, Mr. Chair. Maybe about eight years ago, I spoke to an employee of the Ministry of Turks & Caicos, where they were doing aquaculture for conch, and I understand that they had major difficulties, because of the shells.

MARCOS HANKE: Carlos? I think we lost Carlos.

MEGAN DAVIS: Okay, but I can address that comment. Thank you, Carlos, for that. It is really important to make sure that the conch juveniles that are raised are raised not only at the right density -- So, when they're in a hatchery and nursery situation in an artificial setting, they need to be raised in a way that they have plenty of food, and also sand substrate to help build their shell. We will be setting that as part of our project.

MARCOS HANKE: Can you hear me, Megan? Can you please repeat? I have Carlos using my phone, because he lost the internet at his house.

MEGAN DAVIS: Okay. Very good. Carlos, thank you for that question. The shell morphology and the strength of the shell is particularly important in these hatchery-reared conch, and so it will be very important in the Naguabo hatchery that we make sure that we feed them correctly and that we have them growing at the right density, in order to ensure a strong shell, and that will be something that we will be studying as part of the project that we're working on together.

MARCOS HANKE: Thank you very much, Megan. Carlos, I am going to keep you on my phone, to keep listening. The next one is Eddie.

**EDWARD SCHUSTER:** Good afternoon. Do you plan to extend your hatcheries in any way throughout Puerto Rico and possibly to the U.S. Caribbean?

MEGAN DAVIS: Eddie, thank you very much for that question, and that is definitely what our long-term plans are, is to use this hatchery in Naguabo as a model for other hatcheries and to be able to expand to other areas in Puerto Rico, the Virgin Islands, and other places in the Caribbean. We would also like to start an apprenticeship program, where we can have students -

MIGUEL ROLON: That last question answer was not heard, because maybe you have feedback, Marcos, with the other telephone. Megan, can you repeat that again, please?

MEGAN DAVIS: Most certainly. Our goal is to have the Puerto Rico hatchery as a model hatchery and to be able to replicate it in other places in Puerto Rico, and also the Virgin Islands, and one thing that I didn't mention in my first response to this question was we would also like to see a possible regional hatchery developed, and I think Puerto Rico would be in a really great position to have a regional hatchery that could produce juvenile conch for other areas of the Caribbean.

We have been getting a tremendous amount of interest in the hatchery, and we are looking to start an apprenticeship program, where we can train fishers and students and others that are very interested in queen conch aquaculture throughout the Caribbean and using the Puerto Rico hatchery as a training area.

MARCOS HANKE: Thank you very much. Eddie, go ahead.

EDWARD SCHUSTER: I know, several years ago, before Hurricane Hugo, there was something being done on the north shore property, and I think it was -- They did some sort of research, and probably Carlos could piggyback on that, but I would be interested, if I visit Puerto Rico, to see it. Thanks. The presentation was excellent.

**MEGAN DAVIS:** Thank you, and thank you. We look forward to your 46 visit.

MARCOS HANKE: Vanessa is the next in the queue.

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VANESSA RAMIREZ: Thank you. I just want to say a small comment, and I am really impressed with this presentation, and I had the opportunity to talk with Raimundo and Carlos when this was practically starting, and so it's great to see that this is already working, and I just wanted to tell you that the fishermen are ready to work with you together in whatever you need on the west side, and, also, I hope that, in a couple of years, we can have another one on the west. Thanks.

MEGAN DAVIS: Thank you very much for that comment, and we look forward to working with you all as well.

MARCOS HANKE: Thank you very much. The next one is Clay Porch.

CLAY PORCH: Thank you, Megan, and I enjoyed the presentation as well. My question is kind of related to the one that Carlos asked. A lot of times, people do these sort of ranching exercises, but they don't really evaluate how successful the program is, and so I'm just curious how you're going to establish that survival of the released conch is high enough to really make a difference.

MEGAN DAVIS: Yes, and that's an excellent comment and question, because that is part of the challenge for any species restoration, whether it be conch or fish or any species that is restored into the environment, and so there will be -- It will be really important to establish the metrics around the success.

One of the things that I think about, when I think about restoration, is not only reestablishing the juveniles as an important part of the ecosystem, in terms of grazers in the ecosystem, but also to see them mature to an adult stage, so that they are actually outputting eggs into the environment, and so, in many ways, that is going to be one of the greatest successes of restoration, is being able to get brood stock and preserve brood stock for future generations of conch, and for fishing as well.

CLAY PORCH: Marcos, can I follow-up with that?

MARCOS HANKE: Yes, and I was expecting that. Go ahead.

CLAY PORCH: I was curious then. Is there any plan to maybe do a close-kin-type analysis or something, to figure out if the conch are surviving and producing progeny, or are you going to do sort of a mark-recapture-type approach? I mean, how, ultimately, would you establish that the program is working?

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MEGAN DAVIS: Thank you for that question, and that is an area that I would like to have further dialogue on, and so, if we could share some more information together, I would really appreciate it, and I was also going to work with some of the stock enhancement colleagues that are in Florida to design an experiment as well, and so I welcome input on that, to make sure that we do it in the most robust way as possible.

CLAY PORCH: Okay. Thank you.

MEGAN DAVIS: Just one other comment. One of the things that we found when we were working at the conch farm, and I had a graduate student working on this project, was to actually acclimate the conch to the environment prior to release, and so that may mean temporary enclosures, where the conch juveniles go into these enclosures before they're actually released, so they get used to being in their environment, and so not only acclimation of the environment, but also it's also been shown that exposure to predators prior to release can also help to improve survival, and so we've got quite a number of different exciting research areas that we could work on, and I look forward to having students work on the project as well.

MARCOS HANKE: Thank you very much. Let's keep going. It's a very important presentation for the group, and there are many questions. Damaris.

DAMARIS DELGADO: Thank you. I enjoyed a lot the presentation, and I also have liked the idea of the nursery since this beginning, and I believe in that type of effort. This is management and doing something concrete for the environment and for the improvement of our marine resources.

I have also always believed in these type of efforts of nurseries, of marine organisms, because, especially after Hurricanes Maria and Irma, we know that all the impact the hurricanes did, and so this type of effort is very crucial for the restoration of our marine resources, and so I congratulate you and the team for the work, and definitely I look forward to seeing efforts like this in other places in Puerto Rico.

I know of the interest from the fishers in Cabo Rojo to do something like this, as Vanessa expressed, and so I'm looking forward to the expansion of this type of effort, and I also wanted to ask about the monitoring. What are you envisioning about the time for the monitoring of the project in Naguabo? How long do you think that you will need to monitor how well the

conch is doing outside in the water, for example? Thank you.

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MEGAN DAVIS: Thank you so much for your kind comments and your question. We will raise the conch, and I don't know if you can see my screen, but we will raise the conch to about one-year old, and so, for them to flare a lip, it takes about three years, but, for them to reach sexual maturity, it can take four to five years, and a lot of that great work has been accomplished by Richard Appeldoorn and his colleagues and team, in understanding size to maturity.

 They have also done some restoration studies that we will be discussing with Richard, in terms of monitoring, but it could take several years, if we're looking to see that those conch are going to make it all the way to maturity, and so this is something that we really need to think about together as a team and decide on the actual protocols there, but your questions around this are very helpful for us to think about.

DAMARIS DELGADO: Thank you.

MARCOS HANKE: Thank you, Megan. The next person in the queue is Carlos Velazquez.

CARLOS VELAZQUEZ: Hi, Megan, and good morning, everyone. I too am very excited for this project, and the guys are just waiting for that moment for the conch, and it's an excellent presentation, Megan, and congratulations, and I will see you see you soon to start this project, and I'm very, very excited for that moment. Thank you.

**MEGAN DAVIS:** Thank you so much, Carlos. It wouldn't be possible without you and your group, and please say hello to everybody.

MARCOS HANKE: Thank you very much, Megan. Thank you, Carlos. Ricardo, do you have a comment?

RICARDO LOPEZ: Good morning to everyone. Megan, I really enjoyed your presentation, and thanks for that time and for your effort. You mentioned that you are working with DNER, and I would like to know the person from DNER that is working with you.

MEGAN DAVIS: I am going to refer that question to my colleague, Raimundo, because he is doing the work with DNER in Puerto Rico.

RAIMUNDO ESPINOZA: We've been talking about this project for

about maybe two years, since we've submitted the proposal, and, since the permit was approved, the person that DNER assigns to this project, because it's a restoration project was Ricardo Colon, the Protected Area Manager for the Northeast. He's been our main point of contact, and, of course, we haven't been able to go out into the field and collect anything, and so, up to now, he's up-to-date on everything on the project. However, we haven't been in the field, and so there's nothing to report on that front just yet. Our main point person, according to the permit, is Dr. Ricardo Colon.

MARCOS HANKE: Thank you, Raimundo. I have a comment that I want Grisel to state on the record. Grisel Rodriguez.

**GRISEL RODRIGUEZ:** I just wanted to know if the project is also including to do the project on seagrass restoration, so the conch will have a habitat.

MEGAN DAVIS: That's a really good question, and this project, at this time, is not involved in restoration of the seagrass meadows. However, I think that could be a very good companion project to this. We are going to need to look for areas where there is still seagrass plentiful, and conch are there, and I know that, during the hurricanes, that some of those areas were badly damaged and that there is a strong need for some restoration of seagrass, and so that's something that we could certainly look for in the future as a potential companion project, and so thank you for that question.

MARCOS HANKE: Thank you very much, Megan. I want to make a comment to you and to Raimundo. I just finished the fisher resource course at Humacao, through the pandemic, and it was all virtual, which was unfortunate, but we were able to make some field trips and some activities that we had planned, and one of the plans was to visit and to get in touch with you guys at the end of the course, and we couldn't do it, but I kept the list of students, and I made a compromise with them to keep connecting them to the opportunities to learn more and to engage in efforts like yours.

I request to you or to Raimundo to send me like a brochure or a point of contact, which I can share with the students, and most of them are last year's students, and they are making now -- They are checking out what they are going to do in life, and it's a good moment to contact them.

MEGAN DAVIS: Marcos, that's wonderful, and so Raimundo and I look forward to communicating with the students, and we will

definitely follow-up on that. Thank you.

MARCOS HANKE: You are welcome. Let me double-check here, and I don't see any extra questions. Miguel or Graciela, is there anybody else requesting to participate or to ask?

MIGUEL ROLON: We are checking the chat, and so there's nobody there.

MARCOS HANKE: Perfect, and, Megan, we are tight on time, and it's a good presentation, and I wish the best to the project, and we'll keep communicating. Thank you very much.

MEGAN DAVIS: Thank you, Marcos, very much.

MARCOS HANKE: Thank you. The next item on the agenda is Update on Queen Conch Listing Under the Endangered Species Act.

## UPDATE ON QUEEN CONCH LISTING UNDER THE ENDANGERED SPECIES ACT

JOCELYN D'AMBROSIO: Thank you. This is just a quick update, following on the presentation from the last meeting, and I think we gave an update in December. I will just go over some of the background that we've talked about before.

As you might recall, there was a petition in 2012 to list queen conch, and NMFS had conducted a status review to determine if listing was warranted, and they did a determination that it wasn't. Then there was a challenge to that decision, and, last summer, we got the decision from the court saying that the determination that listing wasn't warranted -- They remanded it to the agency to reconsider.

 In light of the ruling, as I let you know in December, NMFS is conducting a status review to reconsider its determination, and we noticed that there was a comment period last December, and that comment period closed this February, and so NMFS has now solicited feedback on the status of queen conch, and they are going to take all of that information that they received and other information that they've been compiling and finalize the status review and prepare a review on the status of queen conch, in terms of looking at how many of the species there are and what threats exist, and there is various requirements for what they are supposed to look into under the Endangered Species Act.

Once they complete that status review, the next steps will be to make the listing determination, and so, if they determine it isn't warranted, they will publish that determination, but, if

the agency determines that it's appropriate to list a species, then the agency will publish that determination in a proposed rule, and there will be another opportunity to comment, and so, right now, we're just waiting for the status review to be finalized, and then the agency has some decisions to make, based on that information in the status review, about listing, and so more to come, but, if anyone has any questions about queen conch, I have the contact persons at the agency that are working on that.

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MARCOS HANKE: Thank you very much, Jocelyn. I am checking the chat, and I don't see anybody requesting participation. Thank you very much. There is no questions so far. We're going to keep going. Thank you very much, Jocelyn. We're going to go to the next item on the agenda.

CARLOS FARCHETTE: I'm sorry, Mr. Chair, but I did submit my name for a comment.

MARCOS HANKE: Okay. Go ahead, Carlos.

CARLOS FARCHETTE: If they determine that the listing is warranted, that would be throughout the conch's range, right, and that would include the whole U.S. Caribbean, or everywhere that queen conch is found?

JOCELYN D'AMBROSIO: I think that's one of the things that they have to determine, is how they want to structure the listing, and so they have to look at whether it's threatened or endangered throughout all or a portion of its range and then tailor the listing.

CARLOS FARCHETTE: Okay. Thank you.

**JOCELYN D'AMBROSIO:** I think you're right that the listing would be throughout its range, but I would have to look into that and get back to you.

MARCOS HANKE: Thank you, Jocelyn. Thank you, Carlos. Nobody else in the queue. Thank you very much. Let's go to the next item on the agenda, which is Spawning of Nassau Grouper in the Grammanik Bank.

## SPAWNING OF NASSAU GROUPER IN THE GRAMMANIK BANK

**JULIAN MAGRAS:** I would like to say a couple of words before Elizabeth gives her presentation.

MARCOS HANKE: Go ahead, Julian.

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JULIAN MAGRAS: Elizabeth Kadison works for the University of the Virgin Islands, and she has been studying the Nassau grouper and the yellowfin groupers and a lot of other species over several years, and she's going to be giving a presentation on findings over the last few years, and the fishermen requested that she give this presentation to the council, and we think it's a very great opportunity to see all the hard work that's been coming out with Elizabeth and her team, and so we're really looking forward -- We haven't seen it as yet, because of everything with COVID, and we were unable to get to see the presentation before, and so we're all going to be seeing it today, and so, Elizabeth, thank you very much for being willing to come forward today and giving this presentation to the Caribbean Fishery Management Council and all the people who will be watching. Thank you very much.

**ELIZABETH KADISON:** Okay. Great. Thank you, Julian. I really appreciate being here this afternoon, and thank you, Mr. Chairman, and thank you, committee members, and thank you, Julian, for bringing us here.

I'm going to be talking about the Nassau grouper, this iconic Caribbean fish that we all know and love, and we've been working on the Grammanik Bank fish spawning aggregation area for the last thirteen years, or, actually, seventeen years, and we all — The gist of this is to look at the status and to perhaps dream about the Nassau grouper becoming a commercial fisheries fish at some point in time, and we know it's been wiped out throughout much of its range, but we have hope here in the Virgin Islands.

This is work that has been done by Rick Nemeth, led by Rick Nemeth, throughout the years, and it's been funded by a variety of funding sources, including the Caribbean Fishery Management Council.

 If you take a brief look at the history, this is a fantastic picture, a *National Geographic* picture, that came out in the 1960s, and you can see Water Island and Saba, and this is right off of our own St. Thomas, and, obviously, this young man has been very successful spearfishing, and he has several Nassau grouper, and so that sort of illustrates how common they were back in the 1960s.

 There have been reported, documented, over eighty Nassau grouper spawning aggregation sites throughout the western Atlantic and the Caribbean, and the majority of those have been extirpated, are no longer there, and, closer to home, in the U.S. Virgin Islands and the British Virgin Islands, we have six or eight historic Nassau grouper spawning aggregation sites, including a few in the British Virgin Islands, the north side of St. Thomas, the south side of St. Thomas, and one on the tip of Lang Bank that we know about. As far as I know, the only one that is still working as a spawning aggregation area is the Grammanik Bank.

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If we look quickly at how management, the grouper fishery and management, has changed over time in the USVI, we know, again, that in the 1960s and 1970s, Nassau grouper were locally abundant, but there was aggregation collapses in the 1970s and 1980s, and, by the mid-1980s, Nassau grouper were considered, at least commercially, extinct in the USVI.

In 1990, the Red Hind Bank was seasonally closed, and then the Nassau grouper was given federal protection in 1993. In 1999, the MCD, the Marine Conservation District, which is a relatively large marine reserve on the south side of St. Thomas, was closed year-round to fishing, and we sort of discovered, or started seeing, Nassau grouper on the Grammanik Bank in 2004, and, subsequently, the Grammanik Bank was closed seasonally in 2005, and that's closed from February 1 to April 30.

The following year, the U.S. Virgin Islands offered territorial protection, as well as federal protection, for the Nassau grouper, and then, soon after, they created a seasonal closure for all the large groupers, red, black, tiger, yellowedge, and yellowfin, in both territorial and federal waters, and so offering further protection to the grouper, and so this is quite a bit of management in twenty years.

If you want to just basically look at the Nassau grouper, we know that they are transient spawners, and they spawn seasonally, as opposed to all-year-round, and they are normally solitary fish, but they travel -- When they are ready to spawn, they travel long distances to very specific sites and gather in very large groups, very large aggregations, to spawn.

 In the Caribbean, it's been documented that they spawn in December, the middle of December, to the middle of May, in water temperature of about seventy-eight to seventy-nine degrees Fahrenheit, and around or after the full moon during those months, and so they're also broadcast spawners with external fertilization, and it's been found that, the larger the aggregation size, the more fish present in an aggregation, the more successful the reproductive effort will be.

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We're working on the Grammanik Bank, and the Grammanik Bank is about fourteen kilometers south of Water Island, of St. Thomas, and it's right along the Puerto Rican shelf drop-off, and you can see that to the south, and it's about four kilometers east of the MCD, the Marine Conservation District, which is a relatively large marine reserve that's closed year-round.

The Grammanik Bank is closed from February 1 through April 30, which is the peak of the grouper spawning season, and it's relatively small. It's only about a kilometer-and-a-half squared.

The Grammanik Bank is a really special place, and not only Nassau grouper spawn there, but also a lot of other species, and we have found grouper species, snapper species, Bermuda chub, a variety of fish, and we have actually documented spawning there, and we also see some mackerels and jacks that we see in very large schools, very large animals, very large fish, and we believe they're spawning there too, and they're slightly off the shelf, and so there's something about the bank that is very appropriate, very attractive, for fish spawning.

This is a really neat bathymetry image of the Grammanik Bank, and you can see there's two reefs that run, two banks that run, along the shelf edge, with a sand channel that separates them, and the aggregation area, where the fish stage and aggregate, is right here, around here, by the shelf drop-off, but there's actually staging that takes place over here on this bank, and as well as to the east, on the south bank, and so the area that spawning occurs is out here, in an area we call The Saddle.

It's a hard-bottom area, and it's sparse coral and sponges. The reef, further up to the east and over on the north bank, is very developed coral reef, and this is where the fish tend to spend the day, tend to feed probably, there is also a deeper reef off the edge of the bank that I'm going to talk about for just a second, and this is something that we discovered, and we know it's very important for the Nassau grouper spawning, and we actually discovered it swimming over the edge one day following large groups of fish.

 We have done, over the last seventeen years, well over a thousand dives in this area, a thousand fish surveys, and we go down with cameras, with notebooks, and we record the number of fish. We do long dives, and we record the number of fish, and we've collected a lot of data over the years.

I am going to talk about this deep Agaricia reef, or lettuce coral reef, very quickly. This is really beautiful, and it's down at 220 feet, and we know the Nassau grouper use this. We were just astonished when we went over the edge and found this. Unfortunately, over the last few years -- We started monitoring this reef in our Coral Reef Monitoring Program, because we were so astonished by it. From 2011 to 2019, we've gone from over 60 percent living coral cover, live coral cover, to less than 15 percent, and so it's just really degraded in the last eight years.

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This is because of -- It's a very fragile coral reef system, and this is because of anchoring, and we've found several anchors on the bottom, and just giant holes in the coral reef now from anchoring, and this reef, which we call Ginsburg Fringe, is within the boundaries of the Grammanik Bank, but, for some reason, it's -- Obviously, it's a favorite spot for fishing, and it's really, really been degraded over the years.

We started working on the Grammanik Bank around 2003/2004, and what we were doing was trying to monitor yellowfin grouper, because we didn't realize that Nassau grouper were using the bank.

We went and found a yellowfin grouper spawning aggregation, but what we noticed was, within the yellowfin aggregation, there were several Nassau grouper, and they seemed to be using the yellowfin as surrogate partners, and there weren't enough of them to really maybe spawn themselves, but they were sort of joining in the party with the yellowfin, and so we got pretty excited about that and started monitoring the Nassau grouper as well.

This is a really great graph right here, and you can see that, in 2003 -- In 2004, we were seeing less than fifty, forty, Nassau grouper in a dive, in a survey, and this has grown until 2020, and the max number we saw in one dive was over 500, and I believe it was about 560 fish in one dive, and so it's been a steady increase over the seventeen years, and this is just incredibly exciting, and I think it shows how well this management that's been put in place has been working, and it also shows compliance of the local fishing community, and so I think it's something to really be proud of here on St. Thomas and the USVI.

In 2015, or, actually, in 2008, we had a heavy recruitment event, and we had a lot of larvae, a lot of juveniles, coming in to shallow water, and the same thing happened in 2015, and we

didn't monitor that year, but we had a very heavy recruitment event, and, after these larval recruitment events, it turns out that we get sort of bumps in the number of Nassau grouper that come to the spawning site over the next few years.

Again, 2015 was a heavy recruitment year, and we had a lot of juvenile Nassau grouper showing up on shallow reefs and in seagrasses, and this is a little video, and this was taken in Brewers Bay, and there's just -- In this video, there is probably eight or ten juvenile Nassau grouper swimming around, and so that was pretty exciting, and that's not every year, but sometimes things line up and we have a heavier recruitment.

We have a territorial coral reef monitoring program, where we go out and monitor fourteen reefs off of St. Thomas/St. John once a year, and we record all the fish we see there, and this is Nassau grouper. Over the years, you can see that not only have the numbers been much higher in 2015 through 2018, but the different colors in the bars are the different sites we monitor, and so, whereas back in 2009 through 2014, all the grouper we were seeing were on the Grammanik Bank and the Hind Bank, and then, in later years, we're seeing Nassau grouper on our more shallow and mid-shelf sites with much more frequency.

These sites are only monitored one day per year, and so these are the fish that we're seeing in that one day, and so this is really exciting too, that not only are fish on the aggregation site in greater numbers, but they're on the other reef throughout the territory in greater numbers.

Some other things we do is we also look at the Nassau grouper size on the aggregation site, to get sort of a size structure, and we use lasers that we have on a bar over a GoPro, and we have them fixed on a bar over a GoPro, and we swim around and laser fish, just film them with these lasers, and then we can take the GoPro video and cut it up into stills and put it into a computer program, and it will give us the length of the fish.

You can see this is two years, subsequent years, 2016 and 2017, and the total length of all the Nassau, and you can see that not only did we get to laser way more fish in 2017, but the size range has changed. The size range has increased, and we're now getting very, very small fish in the aggregation, as well as several very, very large fish, almost a meter long, and so that's also very exciting, another good sign.

Also, we're seeing a lot more behavior. When we first started monitoring, generally, Nassau grouper were down in the coral,

and they were camouflaged up. Now, when we go to see the Nassau on the aggregation sites, we see a lot of this indicative spawning coloration, and we see a lot of behavior, and the fish are no longer down in the reef. They are up in the water column, and they're acting aggressive, and the behavior is completely changing, and we think that's because the numbers have gone up so much that the fish are getting more into the normal spawning behaviors.

This is our visual survey data on the Grammanik Bank from 2016 to 2020, and each colored bar is a different year, and so you can see that we're seeing fish in January and February and March and April, and we don't do a lot of monitoring in May, but, in 2018, we did see quite a few Nassau grouper in May.

The only problem with this is that we're also seeing a lot of fish in January, which is outside the seasonal closure for the Grammanik Bank, and so they're not -- During January, the fish are not protected by the space they're in during that time of year.

I'm going to talk briefly about another project that has elucidated and showed us a lot of things about the Nassau grouper and their movement, and we have conducted a couple of hydroacoustic tagging projects on the Grammanik Bank. We catch fish, and we put small transmitters inside of them, and they have unique codes. They ping, and they can be heard for 300 meters, and they last anywhere from a year-and-a-half to two years.

We put out receivers. In 2007, we put out fifty-two receivers, and we had them deployed along in the Grammanik Bank and also out in the Marine Conservation District and an array between the two, and so we did a project in 2007, where we tagged about twenty-five Nassau grouper, and we also did another study in 2016 where we tagged another twenty grouper and used pretty much the same array.

This is a first study, and you can see these are graphs that show when individuals are caught on the receivers within the Grammanik Bank, and, again, you can see that there are some resident fish that stay all year long. Here, these indicate resident fish, and they never leave, and most of the fish are showing up March through April of every year. Most of these fish do come back, and we've had really good survivorship with them, and they return multiple years, multiple months and multiple years.

You can see, in 2009, 2011, and 2012, there are actually a lot of fish, again, coming in before that February 1 seasonal closure and spawning in January. This is 2016 data, and this is the receiver that's right there on the spawning aggregation site, right where the fish spawn, and the Nassau grouper detections are showing up six to eight days after the full moon, which is what we have also seen in our fish surveys, and this is the full moon down here, and so these are total detections on the receiver right at the spawning area, and so, again, they are peaking six to eight days after the full moon, and then, by eleven days after the full moon, all the fish are gone, and they show up the following month.

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This is 2016 and 2017, months of the year, and this is at that main receiver on the spawning site, and so you can see that the fish are also spawning in May and in January, and so this is actually outside the closed season on the Grammanik Bank.

The transmitters also have pressure sensors, so we can get depth, and we can see how deep these fish are going, and so we know that they're spawning four to eleven days after the full moon, and so this shows that this is sort of the depth of the main bank, and, when they start spawning, they're going up in the water column, and they're also going down and using this deep Agaricia reef. Again, this is just another illustration of that, and so that's why we're very worried about this particular deepwater reef.

I am just going to show some very quick slides of individual fish, and we find a lot of variability in the way fish move and behave, the fish that are tagged, and this is the main receiver where fish spawn, and this is where we catch them and let them go, usually, and you can see, for this particular fish, the different-colored lines are just its movements across receivers.

It spends the majority of its time inside this closed area, the closed Grammanik Bank, but occasionally, in between spawning events and during the day, it might venture out, probably to go feed, and this is the MCD, the large marine reserve that is four kilometers away, and so a lot of these fish use this corridor along the southern edge to go back and forth to the west.

This is a different fish, and this fish spends a lot more time outside, a lot of time inside the MCD, and then it just comes here for a few hours to spawn every day. Another fish, the same kind of thing, and you can see the pattern here. The fish are spending time inside the Grammanik Bank and then moving to the west in between spawning events, and this is another fish.

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Most of our fish show these same patterns. Rarely do we see fish going to the north or fish going to the east, and so this is a density map, and it shows every single hit we get on each of these receivers as a yellow dot, and so you can see that, within the Grammanik Bank, 75 percent of our hits, of our dots, are within this closed area, which is good, and that's 1.5 kilometers squared.

This receiver also gets a lot of hits, and then, as the fish are moving east and west, there are a lot of receiver hits, and, interestingly enough, this receiver was at the historic Nassau grouper aggregate site, and most of our fish go visit that in their furloughs.

If you wanted to capture 96 percent of all the hits on receivers, you could increase the size of the reserve to about 7.2 kilometers, and, actually, this area to the northeast probably would not even be necessary for that, and that would capture 96 percent of all Nassau grouper hits.

However, we do have -- The good news here is we do have the MCD, which is just to the west, and most of our fish, when they leave, when they leave for the season, when they leave in between spawning events, they move into this MCD, and a lot of them we don't see again, because we don't have a lot of receivers out there, and so we think this is acting as a really definite and very effective way to protect Nassau grouper, even after they leave the protection of the Grammanik Bank.

That's pretty much it, and I wanted to show a quick video here of the Grammanik Bank and some of the fish that we see. Again, I think that the Caribbean Fishery Management Council and the local fishers on St. Thomas have done a really, really great job of starting this recovery for the Nassau grouper, and I think it's something to be proud of. That's a lot of fish.

 Can we bring back the Nassau grouper? Maybe, with continued protection and continued compliance. I think perhaps. Up for discussion in the future might be extending the closure to include January and May and possibly extending boundaries to the west, or maybe even to the south, to protect that deep lettuce coral Agaricia reef that seems to be so valuable. With that, thank you very much.

MARCOS HANKE: Thank you very much for a great presentation. I have a very comments and questions. Ashley Ruffo, can you state your comment, please?

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ASHLEY RUFFO: Thanks for the data, and that's really amazing work to see, especially over the years, and I was wondering -- I know you had mentioned about the deep Agaricia reef and its decline in coral cover, and I guess figuring that it's due to all of the anchoring out there, and I was also wondering if you've seen stony coral tissue loss disease out there yet, or if you've been able to go out and do surveys over the last year to monitor for that.

ELIZABETH KADISON: That's interesting. We are just seeing stony coral tissue disease very recently out there. It is out there though, unfortunately, and I don't know -- We haven't been down on the Agaricia reef recently, but we have been up on the Orbicella reefs, and there is evidence of it now.

ASHLEY RUFFO: That's unfortunate.

MARCOS HANKE: Thank you very much. We have another question, a comment, from Vanessa Ramirez that she enjoyed the presentation and great job, is what she is saying to you, and we have a question from Julian Magras.

JULIAN MAGRAS: Excellent presentation, Elizabeth. I can see all the hard work that all of us have put into this has paid off, and it will continue to pay off, and I actually did an interview with a student from the university here recently about the history of the Nassau grouper, and there's going to be a short video that's going to be published here very soon, and I think you were one of the individuals interviewed also.

I really think that -- I listened to your comments about extending the closure, and also extending the time period of the seasonal closure, but, as a fisher, I strongly believe that I see no need for that, for the fact that the fishers will never have an opportunity to fish this species, at least not in my generation, and so I think that it's doing great with all of the protection that's already in place, especially with the MCD being so close.

One other comment is I don't know what's going on in that 200 feet of water, because none of the fishers fish in that depth of water, especially anchoring, and so I'm trying to figure out, really and truly, what would be taking place there, because we don't line fish in that depth of water. My question would be are we 100 percent sure that that's from anchoring, or is it from some other kind of activity?

**ELIZABETH KADISON:** Julian, I probably should have mentioned in this in the presentation, that we really believe it's anchoring because we find anchors out there, and we find line, and there is pretty obvious evidence.

I will say that, and I have seen people out there anchoring, but I have to say that, in all the years that I've been working on the bank since it was closed, I have never seen a commercial fisherman out there, not once. I have seen foreign fishing boats there, and I've seen foreign fishing boats anchored there, primarily from Puerto Rico. Those, I don't want to point any fingers at anybody, but it doesn't seem to be a problem with Virgin Islands commercial fishermen.

There is, was, and I'm not sure it's still operative, a headboat that came out of St. Thomas, and they fished there frequently, very frequently, and I don't know if you know the boat, and I don't know the name, but they were not a commercial fishing operation. This was a headboat with twenty-five or forty people on it, and they would anchor there, and they would fish there. As I said, it is actually within the boundaries of the Grammanik Bank, but that's more of an enforcement issue, and I believe you. I don't believe that the local fishermen, commercial fishermen, of St. Thomas are anchoring out there.

JULIAN MAGRAS: All right. Just to answer back on that, I know exactly what boat you're talking about, but have you seen them this year, because I think they went out of business, and I had some complaints about that boat, and it's a big blue boat, and it can hold about twenty-five or thirty people on it, and they just go all over the place drifting and catching all the different species, but I haven't seen them in operation for a while, and so have you seen them this year?

**ELIZABETH KADISON:** No, and that's correct. It's the same boat, and I have not seen them maybe in two years, and I don't know, but, for a while, they were out there every day.

JULIAN MAGRAS: All right. Thank you for that information.

MARCOS HANKE: Thank you for a very valuable comment and question, Julian. I have Michelle Scharer in the queue.

MICHELLE SCHARER: I just want to congratulate you all in the U.S. Virgin Islands for really showing how these marine reserves can actually work if they are well-designed and monitored. I would like to, for the record, also express that parallel research that we've done at Bajo de Sico since 2012 has similar

results of a need for extending the closure to completely include the time that the Nassau are aggregated there to spawn, but the fact that Bajo de Sico is a seamount is a little bit different, regarding the boundaries, and perhaps that's something that we could discuss, moving forward, with the action plans for the new regulations coming up with the island-based fishery management plans. Thanks for a great presentation, and keep up the good work.

**ELIZABETH KADISON:** Thank you, Michelle.

TONY BLANCHARD: Good presentation. I wanted to ask basically the same question that Mr. Magras asked about the anchoring and the deep water, because, as far as I know, none of the guys go fish in that depth of water, especially anchoring, and so you took care of that question. Thanks.

MARCOS HANKE: Thank you, Michelle. We have Tony Blanchard.

**ELIZABETH KADISON:** Okay. I mean, it's my personal observations, and I have probably seen the anchor claws myself, and there doesn't seem to be -- Well, it's not a disease, and it's more just impact, and this is really fragile, very thin and fragile, coral, and it doesn't take much to tear it up.

MARCOS HANKE: Thank you very much. We have Graciela.

 GRACIELA GARCIA-MOLINER: I wanted to thank Julian for bringing you to the council meeting with this presentation, and so thank you, Julian. My issue would be more in terms of the coordinates where the deep Agaricia reef is found, and, if it's within the Grammanik Bank, it's of interest, both to the council and to enforcement, and so I believe that Miguel Borges is online, and so it would be good for us to, at some time, get together and talk about it.

My other question, my other comment, has to do with whether you know if anyone who is fishing there is actually harvesting Nassau grouper, because, if you have twenty-five or forty people in a boat, anything that goes -- Hooks that go in the water most likely are catching Nassau, and do you or anyone have any information on that?

ELIZABETH KADISON: Graciela, I have watched this particular headboat, and it might be a non -- If the boat is out of business, it may not even be happening anymore, and I have never witnessed them pulling in a Nassau grouper, and I have never seen -- Again, this is -- I think compliance by the fishermen is

huge, and it's instrumental in this.

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Since the bank was closed in 2005, we haven't seen -- We have seen no commercial fishermen, or anyone, bottom fishing. A few, as I said, Puerto Rican boats drift fishing through there, and we approach them, and I have never seen anyone land a Nassau grouper, so far, and we're not out there every day, but I don't think that's a problem right now.

GRACIELA GARCIA-MOLINER: Thank you.

MARCOS HANKE: Next in the queue is Marcia Taylor, and so has a comment and a question.

MARCIA TAYLOR: Great presentation. I haven't seen that site, but I would love to. Just out of curiosity, is that Agaricia tenuifolia we were looking at? My real question is I know you're involved with fisheries also on St. Croix, and I suspect the picture of the Nassau over here is not as rosy, and so what is that, and, also, do you have any recommendations for us on St. Croix?

ELIZABETH KADISON: Well, I think you're going to have to talk to the coral experts, and there are at least three species of Agaricia down there. We have seen a few Nassau grouper out on the tip of Lang Bank. They're not -- The ones that we've seen were not within the closed area, the Hind Closed Area out there, and they were out on the tip.

I saw three in one dive one day, and one of them had spawning coloration, and it was during the spawning season, and there may be some spawning, like very limited spawning, going on off of St. Croix, and it would certainly be wonderful to have the story extend to Lang Bank, for sure, but, in our Coral Reef Monitoring Program off St. Croix, we encounter very, very, very few Nassau grouper, and, as far as I know, and the fishermen could tell me differently, but, as far as I know, it's a pretty bleak story over there.

MARCIA TAYLOR: Thank you.

MARCOS HANKE: Thank you very much. We have Jocelyn.

JOCELYN D'AMBROSIO: Thank you, Marcos, and thank you for the presentation. I just wanted to speak to the anchoring issue, just briefly, just to note that, right now in the Grammanik, anchoring is not prohibited, but anchoring is prohibited in the Hind Bank Marine Conservation District, and so, as of right now,

boats can anchor in the Grammanik. There is a year-round closure for certain fishing gear, and then there's also the seasonal closure, but there is no anchoring closure, as of right now.

ELIZABETH KADISON: Okay.

MARCOS HANKE: Thank you, Jocelyn. We have Clay Porch.

 CLAY PORCH: Thank you, Chair. Just to Jocelyn's point, I wonder if the council should consider a prohibition of anchoring on the bank. It sounds pretty drastic, going from 80 percent to 15 percent, and that coral provides an awful lot of cover.

**ELIZABETH KADISON:** Absolutely, and I have to say that I was ignorant of that. I assumed that, since no bottom gear was allowed, that that prohibited anchoring as well, and so I suppose it's not an enforcement issue.

MARCOS HANKE: Thank you very much, and we have Richard Appeldoorn.

RICHARD APPELDOORN: Thank you. That was a really good presentation. I am rather devasted to hear about the state of the Agaricia, and we did an ROV dive off of there like in the early 2010s, and it was really, really impressive.

To answer the question that someone posed about the species, it's almost certain that, when you have huge stands like that, at that depth and in this area, it's Agaricia undata. Thank you.

ELIZABETH KADISON: Thank you, Richard.

MARCOS HANKE: Thank you, Richard. We have Roy Crabtree.

ROY CRABTREE: It does seem, to me, that we ought to take a look at prohibiting anchoring in at least the no fishing area of the Grammanik Bank, and we have authority to prohibit anchoring, but it would only be by fishing vessels, and so it wouldn't solve everything, but it might help some, and I guess a question for Jocelyn is could we do that through a framework action, or would it have to be a plan amendment?

JOCELYN D'AMBROSIO: Thanks, Roy. I would have to look into that, and, if we were trying to amend the island-based FMPs, obviously it would be under the -- We would look at the framework procedures there, and I think there's a framework

option for gear modifications for conservation reasons, but I don't know if it would fall under that, and so I'll take a look, and I can provide more information on whether we could use a framework or whether we could do a regular plan amendment.

ROY CRABTREE: I guess, Marcos, I would ask that staff look into that and potentially bring us some options to take a look at for putting prohibitions in the Grammanik Bank area that we could talk about in August.

MARCOS HANKE: For sure we need to include that on the agenda for August, and I have some final comments after Julian speaks, but I totally agree on what you're saying, that we should work on something with a little more depth for the next council meeting. Julian.

JULIAN MAGRAS: I am going to bring back to everybody's recollection when the SFA, back in 2005, when we were working on it back in Puerto Rico, and we had the plan in front of us working, where we had a small area closure and the large area closure on the table, and I was one of the instrumental people up there making all the noise, and we managed to get the small area closure, which actually was where the spawning aggregation was taking place.

At that point, we fought to be allowed to anchor in that area with a retrieval anchor system, which we had to display, and Roy Crabtree was present, and I had to put a display on the table at that meeting and how our retrieval system works, and that's why it was allowed in that area, no bottom gear year-round, but, because we fish the yellowtail snapper during the open periods, and it's a very hot spot for the yellowtail snapper, we were allowed to anchor using the retrieval anchor system, and so I wanted to bring that that's how we were allowed to continue to anchor in that area, but the commercial fishers had said earlier that we don't fish in 200 feet of water for yellowtail snapper. We are fishing more in 120 feet of water and shallower, and so I wanted to put that on the table.

Then a question for Elizabeth, or maybe you can make a comment, but I know that you all have been studying the mutton snapper aggregations for a period of time also, and when do you think you would have a presentation available to present to the council, because this also has been a seasonal closure that's been in place from 2006, and we haven't gotten any kind of information on those spawning sites both in St. Thomas/St. John and St. Croix, and so when do you think it would be possible to get some information on those spawning aggregations?

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ELIZABETH KADISON: I think we're working on a project right now on St. Thomas and St. John on mutton snapper aggregations, and there is certainly a lot of -- A lot of work has been done on the mutton snapper bank in St. Croix, and I would think that that is something that could be soon, fairly soon, and, I mean, we're getting more and more information on those mutton snapper aggregations. I think, if you suggest it and request it, that something could happen, as far as presentations.

JULIAN MAGRAS: Well, I would like to request, if possible, if not for the December meeting, then early in 2021, if you and your team can put a presentation together that we can bring forward here to the council. Thank you.

ELIZABETH KADISON: Okay. Thank you, Julian.

MARCOS HANKE: I asked the staff to take note of that request of Julian, and I think totally agree with the need for that. We have Roy Crabtree asking to comment.

ROY CRABTREE: I remember, Julian, back when we looked at those things, although it's pretty fuzzy in my memory, but I guess that's been fourteen or fifteen years ago now, and so I still think it's worth evaluating some options, and maybe revisiting and relooking at some of those things, since we are apparently seeing pretty widespread damage occurring to the bottom, and so I get what you're saying, but let's just take another look at it and see if there isn't some way to improve the situation.

MARCOS HANKE: Thank you for the comment, Roy. I have Omar with the last question for this, and the next questions and comments have to be via email, and then I want to make one more comment before we go to lunch.

**OMAR --:** I want to congratulate on the work that you are doing there, and so my question is if you know or have information about the larval dispersal between the marine protected areas over there.

ELIZABETH KADISON: The short answer is no, we don't have a lot of information, and there have been current and eddy studies that have been done modeling -- Out of Harbor Branch for one place, and they do show that there are eddies that form seasonally off the south shelf, Puerto Rican shelf, that retain particles, retain larvae, and possibly brings them shoreward, as opposed to out to sea.

There has been connectivity studies, genetic studies, or a couple, that do show some retention of Nassau grouper in the eastern Caribbean, and so we don't know a lot about that, but we believe that there is at least limited retention of Nassau grouper larvae, and they have these crazy high recruitment years that come every seven or eight years and really bump up our numbers, and so maybe we could assume perhaps that was some sort of current-related retention mechanism that kept our fish here, but we don't really know.

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MARCOS HANKE: Thank you very much. Sennai, please a short comment. Go ahead.

SENNAI HABTES: Sure, and it's just that we've looked at -- With other species, we've found that there is internal retention within the USVI associated with eddies coming from the Amazon or Orinoco River plumes, such as was discussed in Laurent Cherubin's paper in 2016. However, those time periods don't seem to match well with the large pulses in Nassau grouper retention that we've seen.

 In terms of larval transmission for the Nassau grouper, we really just haven't been able to catch very many of their larvae during the cruises that we do associated with the coral reef ecosystems research project that the NOAA/NMFS Southeast Fisheries Science Center lab and I partner on down here, and so what we've been trying to do is identify where in the water column the spawned larvae go and use models that we're currently developing at UVI to track their dispersal, but we haven't had models of high enough resolution to really create appropriate transport, and so we're working on going -- It's an important area of understanding another uncertainty with returns to Nassau grouper population survival in the USVI, but the answer is we just haven't had enough research focused on that area or enough larvae found to really identify clear transport pathways.

MARCOS HANKE: Thank you very much, Sennai, and we are on time to go for lunch, and this is 12:30, and I have a short comment. I think that we for sure need to follow-up on this, and the whole coast of the south of Vieques has a very similar habitat, and we need to address this in detail at the next meeting.

 I just want to make a comment that, the last five years on the east coast of Puerto Rico, where I operate my charters, we have more and more small juveniles of Nassau grouper showing up, and that's maybe related to recruitment from that area, but the studies will show that in the future, and let's keep working hard on this.

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I want to comment to Julian, for him to think about it, but the little box that is in there, if it's extended a little bit to the outside, to the deep water, and I don't think it will affect the fishermen, and it will prevent people from trying to anchor right on the edge, and that's something that we should explore,

but I will let the local fishermen of the Virgin Islands lead that discussion. We are ready for lunch now, and we will be back in one hour, at 1:40 p.m. Thank you very much for a great presentation that created a lot of discussion and maybe some

Thank you. ELIZABETH KADISON: Thank you very much.

(Whereupon, the meeting recessed for lunch on June 24, 2020.)

June 24, 2020

### WEDNESDAY AFTERNOON SESSION

The Caribbean Fishery Management Council reconvened via webinar on Wednesday afternoon, June 24, 2020, and was called to order at by Chairman Marcos Hanke.

MARCOS HANKE: Hello, everyone. We are restarting the meeting. To follow the agenda, I hope everybody had a chance to have a good lunch, and, right now, it's 1:40 p.m., and we're going to reconvene right now and start with the presentation on the exempted fishery permit and the letter of allowance by Sarah Stephenson.

## EXEMPTED FISHERY PERMIT (EFP) AND LETTER OF ALLOWANCE (LOA) UPDATE

SARAH STEPHENSON: This is just an informational update on exempted fishing permits that the Caribbean Branch has received since the December 2019 meeting. We received one request from NMFS's Southeast Fisheries Science Center lab in Panama City, Florida.

Just as a reminder, an EFP is required for any fishing activity that would otherwise be in violation of the Magnuson-Stevens Act or other fisheries laws or their implementing regulations and that is not considered part of an exempted educational activity. For example, an EFP could allow an applicant to collect fish out of season or outside of the established size limit to get scientific data, so that we can better manage the species.

The NMFS Panama City Lab is requesting an EFP to continue collecting information on the population size and abundance, life history characteristics, and habitats of deepwater snappers off the west coast of Puerto Rico. The applicant was issued an EFP for similar work in November of 2018, and that EFP will expire on August 1 of this year, and so August 1 of 2020.

The applicant would use commercial fishermen and commercial fishing vessels to deploy video cameras on deepwater fishing gear and to collect samples of black, blackfin, silk, and queen snappers.

The proposed collection involves activities that would otherwise be prohibited by the regulations, as they pertain to reef fish managed by the council in the Puerto Rico, and the EFP would exempt the project participants from the following seasonal and area closures, the February 1 through April 30 seasonal closure for those groupers, and I'm not going to read them all, the December 1 through last day of February seasonal closure for red hind grouper off of western Puerto Rico, the October 1 and December 31 seasonal closure for those listed snappers, and the October 1 through March 31 seasonal closure in Bajo de Sico.

 The EFP would also exempt the project participants from the combined grouper, snapper, parrotfish bag limit of five per person per day or, if three or more persons are onboard the vessel, fifteen per vessel per day. The bag limit exemption would apply to any individual without a valid commercial fishing license, such as the applicant or the contracted observers, and this exemption was included out of an abundance of caution, to ensure that all sampling activities comply with the law or have been exempted from the pertinent regulations.

 The project objectives are to describe the habitat of deepwater snappers using updated video imagery methods and to determine life history information of the four targeted species of deepwater snappers, which were queen, silk, black, and blackfin. Sampling activities would occur along the western coast of Puerto Rico.

The applicant anticipates making thirty-nine sampling trips during the one-year project period, of which fifteen would be in federal waters. The rest would be in Puerto Rico Commonwealth

waters. Sampling sites would be located one to twelve miles from the coast, in water depths from 328 to 2,133 feet, which is 100 to 650 meters.

All sampling activities will occur while adrift, which means no anchoring would occur. At each site, two vertical fishing lines would be deployed, one with an attached video system and the other with twelve fishing hooks. The vertical video line would be deployed for thirty minutes, and the vertical fishing line would be deployed for twenty minutes for each site, and then manual reels would be used to retrieve the lines.

The applicants are in the final design stage for the camera system, and so I don't have a picture to show you. However, the camera system would use a tripod design, and so, structurally, it will look like an actual camera tripod, with some weights added to the legs, so it stays properly oriented as it's making its way to the bottom, and the cameras and lights would be mounted at the top portion of the tripod, similar to where an actual camera would be mounted. This is a modification from the GoPro system that they're currently using on the current EFP.

A maximum of 450 of the targeted species would be retained under the EFP, as follows: up 150 queen snapper, 120 silk snapper, 120 blackfin snapper, and sixty black snapper. Additionally, a maximum of 400 incidental species that could also be caught during deepwater fishing activities could be retained under the EFP, as follows: up to 100 vermilion and wenchman combined; up to 100 red hind grouper; up to 100 yellowfin, red, tiger, and black grouper combined; and then up to 100 yellowedge grouper.

During the seasonal closures, the incidental species would only onboard the vessel for enough time to record measurements, and then they would be returned to the water. For the targeted species, during the applicable seasonal closure of the snapper species, after the biological samples have been collected, the remainder of the fish would be given to the contracted commercial fishermen for personal use and consumption. They would not be allowed for sale. All fish caught outside of the closure periods may be retained, consistent with applicable laws.

The request for this EFP was received in April, and a notice was published in the Federal Register on June 16, and the thirty-day comment period is open now through July 16, if you would like to comment. After the comment period closes, NMFS will consider whether to issue the EFP. The current EFP, as I said, will expire on August 1, and this new EFP, if authorized and issued,

would be valid from the date of issuance through August 1 of next year, and so August 1 of 2021.

Both the current and the proposed EFP applications and documentation are available on our website, which is at the link on the bottom of the slide, and, unless there are any objections, NMFS, as the action agency, will continue moving forward with getting the EFP in place, and, with that, I will take any questions.

MARCOS HANKE: Thank you very much for your presentation, Sarah. Can you please go back one or two slides, to the one that is — That one. On the part where you have up to 100 vermilion and wenchman, is there any specific reason why cardinal was not included in there?

SARAH STEPHENSON: I was talking with the applicant during the information gathering stage, and she kind of listed the species that they have caught under their current EFP, and we decided not to include cardinal as an incidental species, because they hadn't caught any. It was included on their current EFP, but she told me that they hadn't caught any, and so that was part of it, and, additionally, cardinal doesn't have an associated seasonal closure, and so that was another reason why it doesn't really need to be included in this list of species.

MARCOS HANKE: Okay. No problem. Actually, I think it's a great project. The rest of the group, are there any questions?

MIGUEL ROLON: Marcos, you have a comment asking how to ensure that no sale of the mentioned catch.

MARCOS HANKE: Okay, and I'm going to put her in the queue. Can you please make your question on the record, please?

MIGUEL ROLON: She may have some problems, but let me read it for the record. Yamitza Rodriguez from Puerto Rico is asking how are you going to ensure that no sale of the mentioned catch occurs?

SARAH STEPHENSON: Thank you for that question. I am assuming that the project applicants, the participants, who are working together under the current EFP are very aware of the laws and regulations, and so they wouldn't do that, but it would be up to the applicant, I think, to really ensure what's being done with the catch, and so, as the action agency that's issuing the permit, we're going to rely on, once we issue this permit with the rules and regulations and what it will allow for, and it

will state in there no sale of the species collected during a seasonal closure, and we will assume that they will comply with that.

The applicants and the commercial fishermen will have to have a copy of this EFP onboard during all sampling activities, and so that's another way that, if enforcement stops them, we can ensure that everything is happening according to laws.

MARCOS HANKE: Thank you very much. Let me see the queue here. Vanessa Ramirez.

 VANESSA RAMIREZ: Thank you. I just want to know how can we inform our commercial fishermen about the boat is going to be around, because sometimes, when they see these big boats around, they also go to see what they're doing, or they just think that they are longliners without permits, and so how can we get this information to them, so that they already know and don't be surprised when they see these boats around? Thanks.

SARAH STEPHENSON: Hi, Vanessa, and thanks for that question. The list of authorized vessels will be listed on the EFP, and that information can be found both in the comment, if you go to federalregulations.gov to make a comment, and on our website, and so you'll be able to actually see the fishing vessels that will be involved in these collection activities, and so you can know that way, and so, if you see anybody out there that isn't on the list of authorized vessels, then you could report that. Otherwise, you would know who exactly will be out there doing the work.

If the applicants want to change the list of vessels, they have to notify us in advance, and we will amend the permit to include those new vessels, and so it won't just be anybody. It will only be the list of authorized vessels.

MARCOS HANKE: Thank you. I don't have any other questions in the queue. Thank you very much for your presentation, Sarah. Let's go for the next item on the agenda, which will be the Enforcement Reports, fifteen minutes for each, and we have Puerto Rico first, the DNER.

# ENFORCEMENT REPORTS PUERTO RICO DNER

**DAMARIS DELGADO:** With regards to enforcement, enforcement cases, in Puerto Rico, the Rangers have been active within all this pandemic time, especially at the coast, and they have

proceeded with twenty-one cases between January of this year until April, and we only have information until April.

From those twenty-one cases, there were several -- Several of them were regarding lobster sizes and limits, releases of non-native species in the wild, and, also, we had a case about licenses, one case of fishing in the Desecheo Marine Reserve, and there were two cases of releases of non-native species, and one case of identifying a vessel, problems with identification of vessels or fishing gear, and they were cases with protected species.

There were ten cases submitted to the Legal Affairs Office, and, also, we had ten cases that were being dealt with at the appealing procedure with the Office of Examiners and Judges within DNER, and there were ten cases worked through that office and one case that was referred to NOAA for attention, and this was a case that was conducted on the  $21^{\rm st}$  of February, and it was regarding the violation of Article 8.1 of our regulations. That is pretty much the information that I have about enforcement.

MIGUEL ROLON: Marcos is switching his internet. Are there any questions to Damaris? If not, Damaris, are you aware of the issue with the gear that uses buoys for vertical lines in Bajo de Sico and the intervention with Mr. Font and other fishers?

DAMARIS DELGADO: Yes, and I was touching base again with the Rangers regarding that case. When we discussed this case in our meeting in the Virgin Islands, I presented the information to the head of the Rangers, and also to the Director of the Legal Affairs Office, and they were working on that, but now we have changes in the heads of those offices, and now we have Eileen Runda, who has attended the council meetings, and she was appointed as the head of the Rangers, and now the Director of the Legal Affairs Office is no longer in the DNER, and so we have been experiencing some changes from those important areas in enforcement within DNER

I have reached out to Eileen Runda again about this case, and she wasn't aware, and she wasn't knowledgeable, about the case, and I have submitted all the information again for her revision, and also two different lawyers within DNER, and what I expect is that we're going to provide and prepare some guidance to the Rangers to make sure that there is no confusion from the Rangers when they interview with the fishers or with anybody else.

My goal is to have a memo of guidance to the Rangers regarding this issue, and I already have some information that is

important to use as reference, and like, for example, the transcript of the discussion within the council meeting, and, also, I will be coordinating with Jocelyn about this case, and so we have all the information that is needed in order to put it in writing, because, in the past, I never saw that type of memo, and I don't know if it was produced, but, if not, we will make sure that that happens, that we provide something in writing to the Rangers, to make sure that everybody is clear on the regulations that apply in Bajo de Sico.

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MIGUEL ROLON: Okay, Damaris, and there are two issues, and I will ask the council to see how they would like to play it. first one is compatible regulations, and the second one enforcement by the Rangers of federal laws, and this is a you know too, whether if the memorandum understanding between the federal enforcement agency of NMFS and the Rangers is enforced at this time, and also whether Puerto Rico is thinking about changing or not the regulations, to make it compatible or not with the federal government, and probably Jocelyn, Mr. Chairman, can shed some light on this one, and we can move forward with it.

MARCOS HANKE: Yes, I have Jocelyn, and I'm sorry to step away for two minutes, and I have a little problem at home, but everything is fixed here. Jocelyn.

JOCELYN D'AMBROSIO: In terms of this issue, just to provide a little bit more information, I understand that this is a follow-up on conversations we had about a person who has been fishing in Bajo de Sico and has been stopped, and there was a question about whether he was using bottom longline gear, which would be prohibited in federal waters of Bajo de Sico, and so the council has discussed this at a previous meeting and was considering whether or not that gear was bottom longline gear, and that's the transcript that Damaris has referenced.

 At that meeting, we had a presentation on the gear and its configurations, and there was discussion that perhaps it was not bottom longline gear, given the way it was being fished, but I think we would want to just continue thinking about that. Bottom longline gear is gear that is capable of maintaining contact with the bottom, and so we would just want to know, again, how is it fished and is it causing problems for the bottom, and so that's one issue.

Bottom longline gear can't be used in that area, but we also need to make sure that the gear is authorized for this fishery, and so there's another area of the regulations that we would need to look at, to say what are the authorized gears for --Right now, it's the reef fish fishery that's managed under the Reef Fish FMP, again, because the island-based FMPs haven't gone into place yet.

We just need to understand a little bit more about the gear and see how to make sure, if the council wants it to be authorized gear, how to do that, and we could give a presentation at an upcoming meeting just about the different gear types that are currently authorized in the fishery and just an understanding of how this gear fits within those gear types, and, if not, what the next steps would be, either -- (Part of Ms. D'Ambrosio's comment is not audible on the recording.)

We can get into a lot more detail on all of that at a future meeting, but that's the other issue, just making sure that the gear is authorized, and not only that it's not prohibited, but that it meets the definition of what is authorized for the fishery.

MARCOS HANKE: Thank you, Jocelyn. I think it's a great idea to include as a main topic for the next meeting, for everybody to be more prepared, in order to be more productive and to find a permanent fix for this. I have Nelson Crespo, and he wanted to have a short turn. Nelson.

NELSON CRESPO: Hi, everyone. It's a lot of confusion regarding the gear they are using to fish deepwater snapper, and that is the main problem, I think, and so we have to clarify the definition of the buoy gear, but we have to express that clearly, so the enforcement agency has no confusion when they are going to implement the law.

MARCOS HANKE: Thank you very much, Nelson. Especially your input is important, because you are a deepwater fisherman, and you know a lot about that, and, Jocelyn, do we have any comment, extra comment?

JOCELYN D'AMBROSIO: I think that would be important, to clarify the definition, and there's a definition that applies to the Caribbean Fisheries in federal waters for buoy gear, and, if this is considered buoy gear, we would want to make sure that that definition matches the gear that's being used, if the council wants that to be the authorized gear, and there would be a separate issue about what the Puerto Rico regulations allow, and that would be a Puerto Rico question, to the extent the person was fishing in waters of the Commonwealth.

 We could definitely discuss it, and, at the next meeting, we can show the definitions of the gear types that are allowed in this fishery and then discuss the gear and see does it fit within these definitions and how would we want to change them if it doesn't, or what are our other options.

MARCOS HANKE: We are really on this, and we really want to fix this, for sure, for the future, and not to keep going around it, and I think it's the intention of everybody. I have a question for Miguel, and maybe for you, Jocelyn. Is there any way that we can create a small group of specialized people that do that kind of fishing, in order to guide us in this discussion or produce a document or a report from the specialists of deepwater snapper, to help us?

MIGUEL ROLON: Actually, you have the people right here at the meeting, and we need to let Pauco talk and see what happened, and there are two or three topics here that you need to address, and you're saying that we will address it at the August meeting, so we will be better prepared for discussion, and Graciela and I will talk to Jocelyn and make sure that we have the three topics.

The first one is the definition of the gear, whether it's allowed or not, and, right now, it is allowed in the federal zone, and the issue came up because the federal zone and the local zone are almost the same. If you put a boat in between, the bow will be in one jurisdiction and the other end of the boat will be in Puerto Rico's jurisdiction.

The other thing is that we need to address compatible regulations, and Graciela has a table for that, and we also need to decide the definition of the buoy, and the issue with the definition of that buoy is that you have ten hooks.

If you -- Then it becomes a longline, a bottom longline, which is prohibited, and so those are some of the issues that we need to discuss, but I believe that we need to develop the record at this time, Mr. Chairman, and allow Pauco and Damaris and the others to give us a little bit more light on this one, so we will be better prepared to present to you at the August meeting the issue with the alternatives.

MARCOS HANKE: Thank you very much. I think that's a good plan, and I will keep in touch with Pauco and communicating with all of you guys, in order to be efficient on this matter. Thank you very much, and I would like to hear from Pauco. Pauco, are you there?

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**JOCELYN D'AMBROSIO:** I just wanted to say something to what Miguel said before we moved off that, and I'm sorry to interrupt, and would it be all right if I said something, briefly?

MARCOS HANKE: Sure. Please.

JOCELYN D'AMBROSIO: Thank you. The issue arose in terms of the context of whether this was bottom longline gear, and so I think having -- If folks at the next meeting could continue to sort of show configurations and tell us more about how the gear is fished, so that it doesn't affect the bottom, and so that's one issue.

Then there's the, if it's not bottom longline gear, or another prohibited gear in Bajo de Sico, does it match what's authorized in the fishery, and that's where we could go through the definitions of everything that's authorized, and so it's hookand-line gear is authorized in this fishery, and that includes buoy gear, but that definition of buoy gear might not actually encompass what the fishers are using, because it's very narrow, and it says that buoy gear, I think, can only have ten hooks, and my understanding is that folks are using twenty hooks, and so that difference would make it not the authorized buoy gear, and so there might be a little bit of a question right now about whether the gear actually is authorized, and that's something we definitely need to sort out and can speak to in more detail at the next meeting.

MARCOS HANKE: Thank you very much, Jocelyn, and I received the definition of the buoy gear, and I will share it with Pauco and with Edwin Font, which is the person that produced the letter, and I would like to hear from him briefly, and we can go from there, and we will be in a much better position at the next meeting.

 I will give the update to him, and I will make sure that I call him today, and, like Miguel mentioned, we have Nelson Crespo and Pauco that will be available to help the group, to sit together and to start this conversation at any meeting or any effort that Jocelyn advises us that is appropriate, in order to help on this issue. Hearing nothing else, I have Vanessa, and do you want to comment something, Vanessa?

VANESSA RAMIREZ: I think that I -- There is a lot of rain now, but, practically, I think if we, at the next meeting in August, explain the different kinds of the use of these fishing nets, or

the fishing that they are using, and explain to the Rangers, it's going to be very useful for all the island.

We are having a lot of problems with the Rangers with the different kinds of fishermen around, and so I think that's a great point for the next meeting. Thanks.

MARCOS HANKE: Thank you, Vanessa. We are ready then to pass to the next presentation, which will be the USVI.

11 USVI

NICOLE ANGELI: I see that Howard is on the call, and I'm sending him a text message, to see if he's having any technical difficulties, because he was going to give this portion of the presentation, and he didn't forward it to me, and so let me just check and see if he's having technical issues.

HOWARD FORBES: I'm here. The U.S. Virgin Islands has nothing to report, because of the COVID pandemic, and all of our enforcement officers were pulled to the local police department, as of March until present, and so no data was collected.

MARCOS HANKE: Thank you very much, Howard. I guess there is no questions for you, and let me see here. No. Then the next report will be the U.S. Coast Guard.

#### U.S. COAST GUARD

ROBERT COPELAND: Good afternoon, everyone. Of note, I have just relieved Lieutenant Commander Jeremy Montes as the Living Marine Resources Officer here at District 7, located in Miami. For the time being, there is nothing really to report from the Coast Guard standpoint. We are still continuing operations as normal, and, pending any questions, I look forward to meeting you all in person, and I look forward to working with you all. Thank you.

MARCOS HANKE: Thank you very much, and we welcome you to the family of the Caribbean Fishery Management Council, and we look forward to working with you. Thank you very much. The next in the queue for the presentation is National Marine Fisheries Service/NOAA report.

#### NMFS/NOAA OLE

MANNY ANTONARAS: Thank you, Marcos. I had a few slides, if we could share them on the page, and it may be helpful.

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GRACIELA GARCIA-MOLINER: I will make you the presenter.

MANNY ANTONARAS: Good afternoon, everyone. My name is Manny Antonaras, and I'm with the NOAA Office of Law Enforcement, and I have a few slides that I'm going to provide the council, and just a brief update on staffing and some case updates and some outreach and education efforts since I believe it was the last brief we did during December's meeting.

This is the slide that I've shared a couple of times, and it's just to provide an update as to where we are with staffing. During the last meeting, I reported that we had three enforcement officers that we were actively trying to bring onboard. One of those three was selected for USVI, and that person will be stationed in St. Thomas. Then I think most everyone has already met Special Agent Miguel Borges, who is assigned to Puerto Rico, but he also covers USVI, the entire Caribbean.

The long-term goal for staffing for the Caribbean is we are looking to hire a third enforcement person, a sworn person, and this will be a uniformed position, and most likely on the western side of the island, for better coverage of the USVI as well, but that position has yet to be announced.

Just for better understanding, we currently have -- We have sixteen Special Agents covering the entire southeastern United States, Puerto Rico, and the USVI and eight enforcement officers, and so, as you can see, we are limited, and we hope to do another round of hiring, and that will bring us possibly more personnel, but, as of right now, as far as pending positions, we are looking at just the three that I just mentioned.

We were hoping to have the officers onboard by this time, but we have had some delays, due to the pandemic. The big holdup right now is physical and psychological exams are required prior to final offers being issued, and, because we work with Federal Occupational Health, they were currently not accepting new appointments, and we're hoping that's going to open up soon.

Moving on to just some case updates here, in January, this past January, of 2020, OLE received a case package from the U.S. Coast Guard. This was initiated from a Coast Guard boarding that was conducted approximately fifteen nautical miles west of Puerto Rico, and, in that particular case, they documented thirty-one snapper onboard, which I believe was -- Miguel may be able to correct me, but I believe it was twenty -- Was it

twenty-six over the bag limit, Miguel?

MIGUEL BORGES: Yes, Manny. They had thirty-one, and the bag limit is five per person, and so he was twenty-six over the limit.

MANNY ANTONARAS: Thank you, Miguel. Miguel issued a summary settlement offer in that case, and it's still pending. There was another case in February of 2020, and that a Department of Natural and Environmental Resources, DNER, case involving a subject that was documented fishing inside the Abrir la Sierra closed area, and that case resulted in issuance of a written warning, and I believe it was one fish that was documented on that vessel in the closed area.

Then we had another case in March of 2020, and that one was also referred by the U.S. Coast Guard, and that involved a boarding off of St. Croix. There were three yellowfin tuna onboard, and the subject had an expired HMS permit, which are open access and can be purchased. Because that permit was purchased the same day, and some other factors, that case also resulted in a written warning.

We had some patrol activity as well during this period. In February, OLE participated in a joint patrol op with the U.S. Coast Guard in the USVI. They patrolled areas of St. Thomas, St. John, and St. Croix. Again, they were focusing on the Hind Bank and Grammanik Bank area closures.

Miguel participated in a joint air patrol with CBP, and I understand that, although several vessels were spotted, there were no violations detected, and I believe there was one potential smuggling vessel that was passed on to the Coast Guard and later interdicted.

We are gradually expanding our presence in the ports. Local agent Miguel in Puerto Rico initiated three separate incidents during this period, where seafood product was imported through the Port of San Juan. In all three of these incidents, we were able to work with the brokers to obtain a required documentation, which is required by the Seafood Important Monitoring Program, which most folks now as SIMP.

As far as outreach and training, we had several training events in December, and, again, Miguel provided HMS training to DNER officers in Aguadilla, and I understand there were a couple of DNER biologists as well that provided the training, and thanks again to them for their efforts with that training. In January,

OLE participated in a Caribbean border interagency group and discussed several topics, to include marine threats in the Caribbean and some upcoming inter-agency operations.

There was another HMS training that was provided in February, and that particular one was in -- That one was in San Juan, and the one in December was on the west side. Then I understand, in March, Miguel also met with the JEA coordinator, Mr. Perez, to discuss some case packages and certain required documentation that we like to have included in the packages before they are referred to the Office of General Counsel.

I received some inquiries on this case, and this has been an ongoing case in Puerto Rico for several years, and it involves the trafficking marine life species that were smuggled out of Puerto Rico, particularly things like ricordia, zoanthids, sea anemones, and so just some high-level facts on this case.

From January of 2014 through March of 2016, Mr. Torres sold at least a hundred shipments of falsely-labeled marine life off the island, and that marine life was valued at over \$400,000, and it was labeled as product other than marine life, and that's a violation of -- The law prohibits the commercialization of these species, and Mr. Torres was one of a couple of folks that were involved in the scheme, and he pled guilty to export smuggling, one count, and two counts of Lacey Act felonies, and sentencing of this case is scheduled to be held in November of this year, and, again, as I just mentioned, he joins another defendant who has already pled guilty in a similar scheme, and he has not yet been sentenced either.

That concludes the highlights, and I just wanted to end off with this is the NOAA Enforcement hotline number, and it's available 24/7, and any information that's submitted through that number is then dispatched to our local agent or officer covering the area in which the complaint was received. With that, I will open it up to any questions. Thank you.

MARCOS HANKE: Thank you very much for your presentation. Any questions? Ashley Ruffo.

ASHLEY RUFFO: I just made a comment, and I'm not saying that you could provide the answer right now, but I think, just overall, there is a big issue with enforcement down here, and so -- Well, in the Caribbean in general, and so I'm just wondering whoever has the power or authority within NOAA to assign and hire people for enforcement, and it just seems like that's a shortcoming within the federal agency, and so I guess I'm just

questioning why we seem to be short-staffed when it comes to enforcement, because that seems to be a major issue down here, in general. I don't know if I'm really looking for an answer, versus rather just making a point.

MANNY ANTONARAS: I appreciate your comments, Ashley, and it's been an ongoing challenge, and I can tell you that, a couple of years ago, we were in a different position, where we didn't have anybody in the Caribbean, and so we tried very hard, and we actually had one agent there for many years who retired, and he was a very good agent, and, when he left, we were left with basically zero presence, and we were trying to cover that area with pulse operations, and, as most of you know, we do partner with the U.S. Coast Guard, and we work with our partners with the USVI and Puerto Rico, but, as far as a federal presence, we have since that time hired an agent in Puerto Rico.

As I mentioned, we are working to bring an officer to the USVI, and we're very hopeful to get a second officer, and, just sort of looking at the global perspective, I mean, we are very limited, and we have -- In terms of just the Southeast Division, we have eight officers right now covering North Carolina down to Florida and over to Texas and the Caribbean and the USVI, and so it's a very large territory, and we're doing the absolute best we can with the resources.

MARCOS HANKE: Thank you very much. I have a comment, or actually a question, from Helena Antoun on the chat. Joint enforcement agreements, any comment about the possibility of the joint enforcement agreement or the status of it with the local government?

MANNY ANTONARAS: I will have to check with our Assistant Director on that, because I understand we are looking at renewals for several of the states, and I don't have a status on Puerto Rico at the moment, and I could get that information here shortly. Then, also, with the USVI, I'm not sure where we stand. I'm not sure if Howard has any updates on that one.

MARCOS HANKE: Howard, did you want to comment? Nicole or Howard, do you want to comment?

**NICOLE ANGELI:** On the status of the joint enforcement 44 agreement?

MARCOS HANKE: Yes.

NICOLE ANGELI: It's not currently executed, but the discussions

are ongoing, so that that can be executed hopefully within the next year, and apologies, but Howard is on another call right now.

MARCOS HANKE: Thank you very much for your comment, and I want to finish this discussion by saying that the joint enforcement agreements have been something that the fishing community has been requesting, because we recognize and we identify this as a very important step, and to make this work better in the future.

 Also, for the past many times, we have heard about the creation for Puerto Rico now of a taskforce of a few agents trained specifically for fishing, and I discussed this with a few people before, and I just want for the enforcement of Puerto Rico and National Marine Fisheries Service to don't forget about this request from the fishing community as an important alternative to creating a taskforce for fisheries in conjunction with state and federal agents. Thank you.

MIGUEL ROLON: Marcos, to that point, Puerto Rico has that taskforce, and it's a matter of reactivating the taskforce again. Actually, I was a member of the committee who put together the document for the taskforce, and we did the same thing for the Virgin Islands, and so I believe, for the next council meeting, like people are suggesting, that we can have the information for you, and so we can contact the local government and the federal government and see if we can put together a report.

Then we will know, number one, the status of the agreements and what is the authority that is given to the local government for enforcing federal regulations. That way, we'll all be on the same page.

There is another thing about this. From my understanding, in some cases, it also comes accompanied with money that National Marine Fisheries Service allocates to the states and territories to help in the enforcement of fishery laws that are shared by the federal government.

 Remember that not all the fishery laws are shared by the federal government, and it has to be 100 percent, 50 percent, or a little bit more shared by the federal government and the local government, and so, if you agree, then the staff can contact the appropriate persons and prepare a report for you at the next meeting in August.

MARCOS HANKE: I think it's a good idea, and let's do so, and

thank you very much for your intervention, Miguel. I am not seeing any other questions, and I think we have finished with the enforcement reports. Thank you to all, and we are going to pass now to the SOPPs, and I would like Miguel to speak to this next item on the agenda.

### SOPPS POSSIBLE AMENDMENT

MIGUEL ROLON: Thank you, Mr. Chairman. The SOPPs possible amendment includes several things, but, as a background, the SOPPs have been in the process of review at National Marine Fisheries Service since the beginning of 2000, and the latest we sent for review was dated 2015, and that was approved by the council, and we're still waiting to see whether it be approved or modified somehow by the federal government.

At this time, the topics that we are going to discuss do not necessarily have to be -- You don't have to wait for the SOPPs, and they can be done outside the SOPPs, via a memorandum of understanding, and we also want to thank Maria Lopez and Jocelyn D'Ambrosio for the help for Graciela and I to put together this document.

This is addressing the creation of officers and their positions in the council. We received several calls and comments in the past as to, now that we have the three island-based FMPs, how can we make sure that one island doesn't trump the other, and so the issue of rotating the officials among the three areas came up, and so you have it in there.

The other was the two consecutive terms for Chair and Vice Chair. Other councils do have rotation, except for Alaska, which is only one state, but they do have elections, an election every two years, and they rotate the officials, so one state doesn't dominate for years to come, and they have three-year terms for each one of them.

One council, and I don't know if there are more, but at least one council, the Pacific Council, has the mechanism of Chair-Elect, and, actually, yesterday, when we had a meeting, they were introduced by Chuck, who is the Executive Director of the Pacific Council, as Chair and Chair Elect at the meeting.

Those are the actions that you have, and Natalia can put it on the screen, and the memo is on our webpage, so you can follow the discussion, and this was sent to everybody. The document has the language, Section 2.3.3, which is the present language, and, also, Maria Lopez sent us the language that is in the SOPPs

of the South Atlantic Council, and they also have three-year terms and a rotation and so forth.

 Mr. Chairman, the only caveat that I want to make very clear is neither Graciela or myself or the staff have anything to do with the way the officials are appointed, and we work with whoever you see appropriate as Chair and Vice Chair, and so we just wanted to bring this to the open for discussion, and, if this — Whatever you decide today will then have an effect on the election in August, coming in August, and for the next years to come, and so, with that, Mr. Chairman, the whole thing is open for discussion at this time. You can take it one-by-one and see what the group decides.

MARCOS HANKE: Yes. Let me start, to see if there is any spontaneous participation. Otherwise, I'm going to ask one-byone. Tony Blanchard.

TONY BLANCHARD: Since I ain't shy to talk, my thought on this whole thing is, if there's not a problem with it, if it's working, why try and change it? My whole thing on it, unless — I'm not saying it can't change in the future, but, as for now, I don't see anything wrong with how it's been running, and so I would take the alternative of no action, if I have to vote at this point in time.

MARCOS HANKE: Thank you, Tony. Carlos Farchette.

CARLOS FARCHETTE: Well, I don't have a problem with considering, since we're moving into island-based plans, for a certain rotation, just to be fair with everyone, but I kind of agree with what Tony was saying, but it all depends on what all the other council members would prefer.

It doesn't really have to -- I was thinking of maybe, in 2021, we start to -- Once we move into island-based, see if we really do need to start this rotation, and I just think that it might be more beneficial for us to rotate for island-based instead of just one person speaking for all, and I'm not sure how everybody feels, but Tony is kind of right. If it ain't broken, don't fix it.

MARCOS HANKE: Vanessa.

VANESSA RAMIREZ: Well, practically, as Tony and Carlos, I'm in the same line. I am very new in this, and I'm the last one that got in here, but I think that things are working as we are doing now, but, if we need to vote today, I will maintain as we are

right now. Thanks.

MARCOS HANKE: Anybody else want to jump in? Damaris.

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DAMARIS DELGADO: I agree with Vanessa, and I think we shouldn't be limited with the terms of the chairperson and vice-chairperson. If we are comfortable with the way we are working, I think we shouldn't get limited in the timeframe allowed for them. I think we should like get a consensus. If we all agree with something, then that should be respected, I believe.

MARCOS HANKE: Thank you, Damaris. Anybody else? I have something to say, if I don't hear anybody else. Did you want to say something, Miguel?

MIGUEL ROLON: Whatever you decide, that's okay, but this is what I have been receiving, and that's why I said the caveat. At the staff, we don't care one way or the other who is the chair, but these are the lines that we receive, why Puerto Rico is dominating the chairmanship, why don't we rotate the islands, because St. Thomas and St. Croix would like to also have a chance to it, and why do we need to have -- This is all the questions that I receive, and I don't have any names, because they asked me not to say the names, and, actually, some people are here on this call.

The other is what will be the possibility of having a chair and a vice chair from St. Croix if you rotate, and, well, that could be it, and that could happen, but my answer to all of them was that this was a point to be discussed today. Whatever you decide, just develop the record for that, and we have two alternatives.

We can leave it as-is, or we can have a memorandum to the record that there was some suggestion made, explaining out what we have, and so just develop the record and then decide whatever you want to decide, so that the discussion is all in the open, and it will serve for future years, so people can then understand why the decision was made. I would like to hear from the group around here, rather than the staff. You have Roy and Julian.

MARCOS HANKE: Roy first, please.

ROY CRABTREE: As I read this language, we could re-elect a chair, and, as long as we do it every year, there's no limit on how many years they can serve, and is that correct?

MIGUEL ROLON: Yes.

ROY CRABTREE: Then Marcos has been Chair for what, Marcos, a couple of years now?

MARCOS HANKE: For two years, correct.

ROY CRABTREE: Before Marcos, who was the chair? Was it Carlos?

10 MARCOS HANKE: Yes.

12 ROY CRABTREE: As I recall, Carlos was the chair for several years, right?

15 MARCOS HANKE: Yes, and, before that, Genio.

ROY CRABTREE: Before Genio, I believe it was Virdin.

19 MARCOS HANKE: Right.

ROY CRABTREE: So I don't think it's true that Puerto Rico has dominated the Chair. I think we've been pretty good at moving it back and forth between Puerto Rico and the USVI. I have been on this council for twenty-something years now, and it doesn't seem like to me that any one island has dominated, but I would leave it up to you guys as to what you want to do. I don't really have a strong feeling.

I can tell you, on the Gulf Council, we just elect a chair every year, and you can't serve more than two years running, but there's no rotation or anything. On the South Atlantic Council, the states take turns, and the vice chair becomes the chair, and they serve two years, and that's it, and so the state sort of decides who from that state is going to serve, and it rotates around. I don't know that either system is necessarily better than the other, and I will leave it at that.

MARCOS HANKE: Thank you, Roy. Julian.

 JULIAN MAGRAS: I agree with Vanessa and Tony and Carlos. I think everything has been working well, and the greatest concern that always arises, if you have to put something in place where you're going to take and remove a chairman to rotate, is does the person that you're going to put in that position, do they have enough experience of coming onboard and understanding the whole process?

I think, right now, that how things have been running, and I've

been involved for sixteen-and-a-half years, and I think how the structure has been set has been good, and I don't see a problem with it being lopsided one way or the other, and I think it's been very good. It's been very good, and so that's what I would say, from my standpoint, is we keep moving in the direction that we're moving in.

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If somebody is doing a good job, keep them there, and, if they're not doing a good job, then it's on the rest of the council members, voting members, to make a decision that maybe it's time for a change, but what if somebody is doing a good job? Then I would say leave them there. Thank you.

MARCOS HANKE: Carlos.

CARLOS FARCHETTE: I just wanted to note that, maybe after a couple of years, when this island-based is in full motion, if the need comes up, where we see that maybe it would have been better to do a rotation or a two-year term, then I guess this topic could be brought back up then, couldn't it?

MARCOS HANKE: Yes, and I want to make a comment now, if you're comfortable enough to make the comment, because I'm on the same lines as Carlos. I think that, once the island-based is approved, we should explore in more detail the rotation of the chairman every two years, but always with the caveat, because sometimes the person doesn't want to be a chairman, and we have to have a system to address that. From my standpoint, I really am honored to work with the group, and, for me, it doesn't matter who is the chairman. The council is going to operate the same.

This council is a small council that works as a group, and, obviously, with different styles of doing things, but it's been working good, from my perspective as a council member, and I didn't want to speak at first, but anything that the group decides for me is fine. Thank you. Does anybody else want to comment?

MIGUEL ROLON: You have Vanessa, Marcos.

MARCOS HANKE: Vanessa.

VANESSA RAMIREZ: I just want to make a small comment, Marcos. I think -- I have been here for two years, and I see that you are doing a great job, and so I know that we also have, in the representatives of the other islands, good candidates to be president, and so I think that it's, as you say, if you can't

continue, or if you don't want to, then we should move, but, if not, I think that it's just that we are doing good, and so I think that maybe we wait until 2021, when the plans are implemented. Thanks.

MARCOS HANKE: Thank you, Vanessa, and I think everything is on the same lines with the council members. I left by accident before the opinion of Nicole Angeli, and I would like her to put on the record her opinion about this issue. Nicole.

NICOLE ANGELI: I think that having the vote every year is important and necessary, and it's up to the group if they think that term limits are necessary, but it appears that we've been sufficiently rotating across the jurisdictions and that people with enough experience are available to hold the chairperson and vice-chairperson positions, and so it seems to me as though everything has been working very well, and it allows people on the council sufficient time and ability to serve in this position.

MARCOS HANKE: Jocelyn, I have a question for you. Hearing what everybody has to say, what do you need from us in order to revisit this once the island-based is approved and to maybe fine-tune those ideas, in terms of the rotation every two years once the island-based is approved? Can you help us on that?

**JOCELYN D'AMBROSIO:** Sure. I think it's just a matter of the council noting that there's a desire to revisit this topic after the island-based FMPs are put in place, and so we can just make a note.

The council can make a note to bring this up at future meetings, and so we'll just keep it on our radar and know that this is an issue that folks want to revisit, and then, at that time, if there's a desire to amend the SOPPs, then we can start the process to do that, which would involve the council taking a vote on what they wanted the language to do and then amending that and trying to get that through the NMFS approval process, but, as of right now, we'll just keep it on our radar and make sure to continue to check in as the island-based FMPs are in place.

MARCOS HANKE: Miguel, did you want to comment something before we close the SOPPs?

MIGUEL ROLON: No, and I'm very pleased with the discussion, and also I have now an answer for the people who keep asking me all these questions, and so, basically, what you're saying is table

this until the time that the island-based FMPs are approved, and you will revisit the issue, and not necessarily change, but you will consider this alternative that we have here.

MARCOS HANKE: Correct.

 MIGUEL ROLON: Then that closes that part of the memo, and you have the other one, which is rather easy, and it's the question about the at-large position. In the past, and let me clarify that there are two seats at every council, and one is obligatory, which means that it's the person who is from Puerto Rico, an obligatory seat, and a vacancy occurs, then we have to pick one from Puerto Rico to fill that position.

The at-large position could be from any area in the U.S. Caribbean, and it could be a person from St. Thomas, from St. Croix, or from Puerto Rico. In the good-old days, the governor of Puerto Rico and the governor of the Virgin Islands came to a gentleman's agreement not to submit names when you have an atlarge position from let's say St. Thomas and not to submit names from Puerto Rico, and so the Secretary will pick a name for the at-large position coming from St. Thomas, to keep the continuity of that representation, and vice versa, when that happened.

At that time, we were only talking about Puerto Rico and the U.S. Virgin Islands, and the issue here comes again with the three islands, and we are going to have a different setup, where we have more than one at-large position on the council, et cetera. When I consulted this with Shep a long time ago, Shepherd Grimes, he told me that would need an amendment to the law, to the Magnuson-Stevens Act.

Then I talked to our representative in Congress about that, and, frankly, what they said is it was that, if they are going to amend the law, in different years that we asked the same question, that is not a priority. When I discussed it with Jocelyn, I got the same answer, that this will require an amendment to the Magnuson-Stevens Act, and it will take a long time to figure this out.

Right now, the status of this is that at-large position can be filled by a candidate of the two areas, the U.S. Virgin Islands and Puerto Rico in general, and then the Regional Administrator and the Secretary of the Department of Commerce follow the procedure for appointing that person, and the procedure is the same that we have so far, three candidates from each governor, or from one governor, to be considered for election as a council member for three years, as an at-large position.

MARCOS HANKE: Miguel, are you finished?

MIGUEL ROLON: Yes.

MARCOS HANKE: Carlos.

CARLOS FARCHETTE: Thank you, Mr. Chair. I've got to admit that this is one thing that I have a real problem with, and I know what the law says, but I believe that, if you have an at-large vacancy on a particular island, that vacancy should be filled by a representative of that island, because I don't think that it would be fair to -- For example, I'm going to use myself.

I should not be chosen as an at-large position that is vacant in Puerto Rico, and that's absolutely not fair, and I know what the law says, and I understand about the gentleman's agreement, but my only issue with gentleman's agreements is that they can be broken just very simply, and it's been tried before, and so, even if there could be an amendment to Magnuson-Stevens for the Caribbean, I would like to see that, but I know that's a whole different ballgame.

MARCOS HANKE: I have Roy Crabtree.

ROY CRABTREE: This one is a whole different ballgame, and I frankly don't think that Congress is likely to change this, and, ultimately, I think we need to remember that we have two territories in the U.S. Caribbean, Puerto Rico and the U.S. Virgin Islands. The fact that we've gone to these island-specific plans doesn't change that.

I can tell you of my experience with the Gulf and the South Atlantic. In the Gulf of Mexico, states go after other states' at-large seats, and there is no gentleman's agreement or anything close to it, and so, every year, multiple states will nominate for the at-large seats. In all the years I've been doing this, which is a long time now, I don't believe we have ever moved a seat in the Gulf of Mexico, or at least I don't remember us ever moving one in the Gulf, even though the states nominate for them.

In the South Atlantic, there is a gentleman's agreement among the states, and they never nominate for the at-large seats, and that has been in place for twenty-plus years, and it almost fell apart once, when one state thought of going after one of the other states, but they didn't follow through on it, and it

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I think, in all the time I've been on the Caribbean Council, and Miguel can correct me if I'm wrong, but I don't remember us ever having a situation where we didn't have a representative from St. Thomas and one from St. Croix. I believe we've always had someone from the two island groups, and maybe that hasn't always been that way, but it seems to me that it has, and we've had three council members from the USVI and three from Puerto Rico in all the time that I can remember.

I hear what Carlos is saying, that gentleman's agreements can be undone and come apart, but it rarely really seems to happen, and so Congress will do what Congress does, and that's up to powers much higher than us, and I think a lot of making this work depends on the governor of Puerto Rico and the governor of Virgin Islands, to ensure that they are nominating appropriately and they're nominating representatively.

I am just not sure there's really a problem here, but my suspicion is that it would be difficult to get Congress to change this, and be careful what you ask for, because, a lot of times, when Congress changes things, they don't quite change it the way you thought they would, and you're stuck with it for maybe another twenty years.

MARCOS HANKE: Thank you, Roy. Tony.

TONY BLANCHARD: I am in the same line with Farchette, because, me personally, I believe in gentleman's agreements, but, you know, if you look through history, there comes a point in time where the faces change, and the attitudes with the faces change, and I believe a man's word is good as long as he gives his word, but, just like Farchette said, I don't think that we could just rely on a gentleman's agreement at some point in time, and I understand where Roy is saying that we never had this problem before, and that it may never come up, and so, just like Farchette, and me and he had this conversation together before, I don't want to see somebody from Puerto Rico or from St. Croix representing my fishery.

I want to see another fisherman or somebody from St. Thomas representing my fishery, and I'm sure that, if it was the other way around, there would be some opposition, or some hard feelings, towards a Virgin Islander representing Puerto Rico on the council, and so, right now, just like Roy said, I have a feeling this is going to be harder to change than we think, and I would have to agree with him. Sometimes you don't get exactly what you ask for, and you may get something that you don't want

to live with.

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I think we should leave it as-is and hope that the gentlemen keep the gentleman's agreement, and, if we have to look to change something in the future, or that gentleman's agreement falls apart, we need to look for another alternative, and maybe that's when you need to address it.

MARCOS HANKE: Thank you, Tony. I want to make a comment. One of the things that makes me very proud of being in this group is that, in the normal situation of discussing things, there are things that we agree or we don't agree, but one thing that we do agree, and we divide into island-based fishery management to add to it, is that we need equal representation from each area or sectors, because we have recognized already that it's different in terms of its cultural operation, habitat, et cetera, et cetera, et cetera, et cetera, et cetera.

I know it's not an ideal situation, but I want to restate that I have hope that there is nobody that tries to break down the because this is what makes the Caribbean Council different, being able to work in a gentleman's agreement like this and stick with your word, and this is an example for our kids, too. I think that we are stuck with that, even though I wish we could fix this permanently, like Carlos says, and, if there is any way we can fix it and change this, I would be in agreement, to make sure that we have representation between islands. That is my comment. anybody want to comment anything else about the SOPPs, about this issue?

 MIGUEL ROLON: Marcos, several years ago, and this started with Omar was Executive Director, there was a proposal actually offered by NOAA legal counsel at that time, that, given that this is something that will take an action by Congress, and I agree with Roy that sometimes the action by Congress is not what you want, but they suggested to have a memorandum of understanding between Puerto Rico and the U.S. Virgin Islands regarding this, and, at that time, the two governors were in agreement.

 That's something that could be explored, but not by the council and not by the National Marine Fisheries Service. It would have to be by the local authorities, and so, if anything, Damaris and Nicole Angeli can start the ball rolling, but this is something that it would seem is the area of authority of the two local governments, and by no way and no means should the council or NMFS tell them what to do or not to do. They follow the law,

and they have this unwritten agreement, but they can go this other avenue, and, of course, that will change every four years, whenever we have elections.

Anyway, the main point is I believe that we developed the record today for addressing these two issues, and the conclusion is that this will take an action of Congress, and just leave it at this and keep it an eye on the issue, and maybe in the future, if something comes up, we can address it.

Regarding the chair and the vice-chair and the rotation, all that will be revisited when the island-based FMPs are implemented, but, as Tony said, if it's not broken, don't fix it at this time, and that's all we need for the record, Mr. Chairman.

MARCOS HANKE: Thank you very much, and I totally agree with you that if Damaris and Nicole can talk among them and help a little more on this effort, and share whatever they decide with the council in the future, that will be really appreciated by all. Thank you, Miguel. Thank you to all. The next item on the agenda is Other Business.

In Other Business, we have two things. We have the e-reporting, and we have also some questions or a space to comment on Maria's presentation earlier, and let's start with the e-reporting.

# OTHER BUSINESS DISCUSSION OF E-REPORTING

 DAMARIS DELGADO: Thank you. Thank you for the time that you have allowed us to share our good news. We are very pleased with the achievements that we have already achieved with the ereporting application, and we are going to have a presentation of a summary of what is the application and several other highlights.

I would like to also highlight that this couldn't be possible without the support from the Nature Conservancy and all the staff from the Fisheries Research Lab that have been champions of the effort of the e-reporting, and I feel so proud of them, and, also, NOAA, because they funded this initiative, through the Coral Reef Program, and so I am very happy about all the things that have been done by the team, the whole team, and we are a family working with the initiative, and we are very happy with this achievement.

In the last three months, only in the last three months, even

with the COVID and all the emergencies, the earthquakes, that we have been facing this year, all the challenges that we have faced, even with all those things, we have been having 1,200 trips, around 1,200 trips, reported in the e-reporting in those three months, with a very high increase in the use from February into May, and we will be providing more details about that.

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Also, I would like to take this opportunity, before Alfredo speaks a little bit more, on a very significant achievement that the staff from the Fisheries Research Lab has conducted, and this is that, for the first time within the past ten years, the Fisheries Research Lab staff are up-to-date with the management of the fisheries statistics.

The people that have followed the work from the Fisheries Research Lab know that, after Law Number 7, we lost a lot of people that were doing the work of the port agents, and that affected the work of the management of the statistics, and, also, you know that there have been a lot of problems in the past with the internet and the infrastructure in the Fisheries Research Lab.

With the help from the e-reporting application and all the commitment and sacrifices of many people, we are very, very proud to say that they are already working with the latest information, the latest landings, of the fishers, and I have no words to express my gratitude to the team and how proud I am about this achievement, and so, with that, I would like to introduce you to Alfredo Sfeir from Shellcatch.

 ALFREDO SFEIR: Thank you, Damaris. Ten years ago, I think I had probably the most important discussion with a fisherman that would really change what was going to be the following ten years of my life, and I came up to him, and he was a very important fisherman in Chile, and I said, look, I really want to apply technology in the fisheries sector, and he said, look, you will have all of our support, but, please, everything you do, have it include the lives of fishermen.

 From then on, we went straight into looking really enthusiastically into the supply chain, and we found ourselves with so illegality, fraud, bycatch, and it just looked like such a daunting process, and we really didn't know where to start, and, really, e-reporting was really -- We found out, after we were very lucky to basically have TNC bring us together, and NOAA and NFWF bring us together, and so many other actors, bring us together with DRNA, which created the ideal mix of fishermen leaders with the DRNA staff, to basically create the fertile

ground to develop this technology.

Over time, we figured -- We started to see how important this technology was as a starting point, not only for statistics collection, but in general for the fishermen, as a baseline of technology for the future.

Here, what I want to tell you is that, really, this system that we created together, with a very important group of all these stakeholders that I just mentioned, was really not only just a mobile app, but really a web app interface for management and to have this real-time data and multiplatform, and, really amazingly, the  $27^{\rm th}$  of February, we were given the green light to launch this with the Interim Secretary. She gave us the green light, and we started working from, after so many meetings with DRNA and the fishermen, to make sure we had the best launch possible.

We started with one meeting with a few events, and with the help of DRNA and the fishermen over there, and we sort of jumped to a hundred, and then we sort of stayed on a hundred until we understood and realized that we had to make several changes, and then, once we were given the green light, it was a tremendous effort jointly to basically skyrocket, especially DRNA staff, to skyrocket the number of users. As you can see on this graph, even as of May 22, we were near 350, and, today, we are close to 450, which represents approximately half of all of the commercial fishermen fleet, fishermen and women.

The trips, we started with 200 trips, and now we're at 1,400, and it's been really neat to see, and it's quite spectacular for us, the fact that the fishermen asked us -- They told us that they didn't want to use paper anymore, and here we go, and the e-reporting system, to date, has really eaten up like 90 percent of what was the paper reporting, and so I think -- Really, I haven't ever seen a rate of adoption of any technology as we've seen here.

 This was a very smart, I feel, plan, given the bright minds of DRNA and TNC and all the stakeholders, where they said, hey, this has to be jointly catered, or accompanied, by an actual communication plan, and these numbers are directly related to the news that would come out in the media, and so you can see really, going back to the data, that May 18 was really one of the inflection points of the data, which is the first communication on March 1, and we're here, and the application is out there, and the second one is sort of a bit the same, on April 3, and then it's sort of starting to say, hey, fishermen

are going to have to use this.

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Then, though it's not an obligation, the last piece of media was like, hey, please use it, because it's going to be super important. It's not mandatory, in terms of paper or app, but it's super important.

Then we did a joint, also, effort on social media, and sort of distributing flyers, and mostly on a digital level, and we're in the COVID world, and that also created a big push for new users.

We've been learning a lot from really the amazing effort of DRNA and stakeholders and fishermen as to like how do we target the percentage of fishermen who are mostly reporting, and it's been really thanks to weekly meetings, and almost sometimes daily communications with the team, and it's unbelievable. We work with several governments, and we're super amazed as to how much time the government of Puerto Rico has dedicated to this system. It is what it is because of that, really.

Who did it? Again, here are the major players. They're DRNA, TNC, Coral Reef, NFWF, and really the input of NOAA and Coral Reef as well and everybody around the system. Here is basically what we wanted to do, and you get up in the morning, and you drink your cup of coffee, and you're looking at sort of where the species are coming -- Where they are being fished, where they're being docked, and the idea is to give DRNA the fastest or best managerial experience possible with the data and no longer having to deal with an Excel sheet or just a physical sheet of data analysis, but really just a really quick analysis on multiple levels.

We also decided to really work on the species, and we felt that having a dashboard for the actual species -- It took us quite a while, because DNRA had really all the clarity on the species, and they have all the manuals, and it's not very easy just to jump into a country and get the species name and the scientific name and the Puerto Rican name and the English name and everything sort of running, and fishermen also had a lot of tremendous participation in the process, and even council members also downloaded the app and gave us some heads-up of things that we have to update and improve.

What do we do? We want to leverage, obviously, the mobile app data collection component, and we needed to make the fishing gear autofill as seamless as possible, so that they're not reinputting data twice, and we were working a lot on trying to understand what other fishing statistics by species, and the

cool thing that we're looking forward to is that just communication overall, and closure management is one of the ways we can communicate, and I think we've just recently launched communicating the request form through the app, and we could do a -- I mean, it seems like, given our new reality, and where we're targeting jointly with the DRNA division, is to turn this app into a communication platform to announce things to the fishermen.

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We have the import and export functions ready, actually, and we're just waiting for NOAA, to re-circle with them and to actually have their API to send the data, and there's a whole platform part, or feature, where DRNA can really analyze the data and work on it right before they send it over to NOAA, and species management, statistics by fishermen, and we're trying to get into popularity rankings of certain species, alerts, fishing maps, database search, and all the stuff that we, as a software and hardware development country, we always have a listening ear, to see how we can modify this to improve as we get more data.

The really amazing thing, which was a complete risk, but very necessary, was creating a collaborative system, so that DRNA could actually service and support the fishermen once launching, and I think this is one of the secrets of our success, and, actually of DRNA's success, but they have their current agents, who are so proactive to -- Overnight, they did a phone number, and you can call that number here on the screen, and please check it out, and actually turn into a call center, and DRNA, I think, in the description of their jobs, it was never to be a call center, and they actually took it on, and the amount of average tickets solved has gone from fifty to now -- Well, this month was ninety, and so I just stated an average of seventy.

They usually get around eight calls a day, and we measure over 1,000 collaborative interventions, and we -- From what I hear, DRNA also gets calls for other things that have nothing to do with their department, but they're happy to get those calls. There is a logging system, and everything is completely tracked, and, if there's any technical issue, we're right there to understand it and solve it.

The statistical reports, this is in progress, and they are — The DRNA team is constantly working on the data and constantly interacting with us, and they're doing performance reports, performance metrics, and they have discussed them, and they work together with TNC, and they have been very successful in recruiting more fishermen, and the whole communication aspect of

keeping this alive is really one of the critical aspects, as mentioned before, to having new technology introduced and a high level of adoption, as we have seen.

Just a few words, and, thanks to the work in Puerto Rico, we actually have this same app, obviously catered to the specific countries, and it's actually growing now, and we're in the process of doing Costa Rica, but it's all based on the platform, and the whole data part is, obviously, catered, again, to what the country needs.

Our vision, since we started ten years ago, has been to work across the whole supply chain, and e-reporting is like the essence of anything you want to monitor. If you want to verify information on the vessel with video, with GPS, or with any other system, the e-reporting app is critical for the legality and the connection with the government database, regardless of what other technologies you use onboard the vessel.

We are implementing in Chile and Ecuador, and we're in a pilot mode in Mexico, and a traceability that links to the actual ereporting app, so that you can actually trace the information off that bag of seafood and into the market. We have added -- We have implemented also a monitoring system on the actual scale, and this is a big problem in emerging markets, where the scale is usually a critical point for monitoring stocks and traceability in the plants, transport, and now, in Chile, we're launching an online marketplace, after a few years of piloting and demoing and pivoting, and that requires all of this data.

We are actually implementing, and hopefully maybe we can do it in Puerto Rico, but we actually have a COVID contact tracing component inside the mobile app, and we're going to do it fishery-specific, and it's still in its pilot mode, so that fishermen anonymously and voluntarily could say, hey, I got infected and then alert all the fishermen they've been in close reach with.

 In closing, we are working in over fourteen countries, and I want to say that Puerto Rico, in its application, has been really critical in our scale-up, and not to get into any detail on the team, but I just wanted to, again, in Damaris's words, really thank them for this unique experience of success, and I want to thank the fishermen, who, without them, we wouldn't have been able to do anything.

If it wasn't for the complete commitment of DRNA, again, we wouldn't have been able to reach the success, and, also, a big

thank you to TNC, who funded this, and NFWF and NOAA and everybody, and, directly, many of you in the meeting had faith that this would work out, and so thank you for the opportunity to present this to you today.

MARCOS HANKE: Thank you very much. That was a great presentation, and I will pass the floor to the people. We have Nelson Crespo, and I want to make a few comments also, later on. Nelson.

NELSON CRESPO: Hi, everyone. Alfredo, I am really happy that that dream came true, because I remember, many years ago, the first time we suggested to the council to move to the electronic reporting regarding the reporting that the DNER lab has, and I know it's a long ride, and a lot of headaches, and I want to say thank you, because you have turned all of our concerns, and we talk a lot, and we passed many hours trying to find out the right way to do it, and you answered all my questions, and I'm pretty happy that this came through, and I know the history is going to be different from now to the future. Thank you.

MARCOS HANKE: Thank you, Nelson. Damaris.

DAMARIS DELGADO: Thank you for acknowledging the work, Nelson, and I appreciate your support. You were one of the key people getting the -- The first people getting your information, your statistics, into the system, and I appreciate that. I appreciate your support to this type of effort every time, and the same with coral reefs and the stony coral disease, and so I really appreciate it.

Going back to the e-reporting, I also wanted to highlight that the application also has the DNER form for the fisheries disaster aid online, so the fishers can also fill out that form and see it within the platform, and so thank you very much again, and I'm sorry I missed NFWF as one of the organizations that supported and sponsored the effort, but I am very grateful to all the partners involved, and Shellcatch, and I'm not sure I mentioned the name, but that is the company that developed the platform and made all the engineering and planning efforts, and so thank you very much.

 I appreciate it, and I hope that many more fishers can be able to try to it and see that it's easy, and it will help us, both DNER and the fishers, to move faster information and it has so many benefits to everyone. We don't have to wait to get the information in the mail, but, also, I know that Vanessa Ramirez has expressed some concerns about the system, that many fishers

have trouble with it, and so we are still retrieving the documents on paper, but we really would like to see all fishers trying to figure it out and a way to submit the statistics using the application.

MARCOS HANKE: Thank you, Damaris. Michelle Scharer.

MICHELLE SCHARER: I would like also to congratulate all of you, because this is a huge undertaking, and, as being part of the council for many years, I also recognize the importance. My question is specifically if and how there are plans to validate this information, and so, in order for us to use them for management decisions, as evidence-based, how do you think that we can perhaps work on the accuracy and validating this, because I know a lot of the common names of the species cause problems, and I think that's just maybe a next step to address the shortcomings when we have SEDARs regarding this data.

MARCOS HANKE: Alfredo.

ALFREDO SFEIR: Thanks. This is the starting point, and thank you for your words, and this is the starting point for actually making sure that the users can actually input the data, and actually get it up and running and that it's actually information that's useful for DRNA.

In terms of like species names and use, that's an ongoing weekly issue with DRNA, and we get constant updates from Daniel Matos, and we get updates from Wilson and from all of them, and this is going to be a work in progress for a while, until like those issues -- When we go on to other issues that have to do with the next level, which is how you validate and this is where we have to enforce this with the team, and we are actually in discussion that, now that the app seems to work, we'll get the fishermen -- In terms of how you do cross-checks and how do you spot-checks. We really have to follow the lead of DRNA.

 Technologically, in terms of name changes and stuff like that, we respond in a couple of hours, and so it's not a technical issue. We just need to make sure that, little by little, the app gets closer to the actual way that DRNA wants to operate and the actual way that they want to actually run spot-checks, so that statistically important -- Those spot-checks can become statistically important for the data. That is definitely a work in progress that we have to do with DRNA.

MARCOS HANKE: Thank you for the answer, and I have first -- If you receive today approval to include charters, remember that,

under Puerto Rico, charters are under the commercial section on our regulations, and, if you can include charters there that have a number, like a license number, permitted by the DNER to report their catch, and how long would it take to include the charters in a system like that?

ALFREDO SFEIR: For the actual forms, for the fundraising forms for them, we actually already included the charters in the database, but we need the greenlight from you to include them and make sure that all the questions being asked are relevant to the charters. The tough thing has already been done, and including the charters, even if they have new questions, would be a matter of a couple of weeks, and it's now a much easier process.

MARCOS HANKE: I really invite you to explore that, and I put myself available to support the effort, because we don't have any specific -- I mean, we have some charter data collection in the past, but I think that will be something that we should consider and something that I believe on it.

Another question that I have, because many people have asked me, is who owns the data? Where is the storage, and the privacy is problematic, that it could be erased, and how was that addressed during the contract and the relationship with the DNER?

 ALFREDO SFEIR: The data is the Government of Puerto Rico's data, and we signed confidentiality agreements, where I can't disclose the information without authorization from DRNA. If not, our company gets into big trouble. All the data is stored in Amazon servers, and so we have been lucky to manage, I think, data from five countries, and we have signed everything that's been put on our desk for confidentiality and data ownership. It's not ours at all. We own the platform, but the data is Puerto Rico's.

MARCOS HANKE: Okay. I heard some comments of people requesting clarification to the benefit of the public here that are attending this meeting, and how possible is it for double reporting, or do you guys have a good handle on it? I know that you received already this input, and what is the status of making sure that the double reporting is not happening?

ALFREDO SFEIR: I think that's the phase where we're actually going into right now, because, really, we're the tech provider, and we focus on the needs of DRNA, and, from what I understand, DRNA has thoroughly checked the data, and this is why we have --Actually, this is a great segue to the point that we have a

feature on the platform that is a pre-revision by DRNA, and there is not one single bit of data that can be finalized without approval of DRNA.

DRNA has the filter, and that goes back to I think Michelle's point. Today, it's a human, or a number of humans, at DRNA, the ones who verify, and they have to press -- There's a check button, or there's an edit button, or there's a decline button, and so we know, and also DRNA knows, who provides how much data, and so it's going through DRNA's human filter, and so it's like a fisherman is going to input twice the same amount of data, because they're going to catch that, and they have to, because they're going to be responsible and liable for that.

MARCOS HANKE: I want to add a quick comment before I pass the floor to the rest, and I had a positive experience, because, in exploring the app, I got in and put my boat registration number and so on, and, the next day, I received a call asking me if I was a commercial fisherman and so on and explaining to me that, being a charter, for now, I couldn't be part of the application, and the system checked, and some quality control is already being taken care of, and I just wanted the group to hear my experience. Right now, we have -- I have many comments here that is stated on the chat. Ricardo, do you want to make any comment? I see many different comments that you are making there.

**MIGUEL ROLON:** Marcos, you have Clay Porch that wants to address the group.

MARCOS HANKE: I'm sorry, Clay. There were so many in line that I was not very clear, and I was trying to read all of them. Clay Porch.

CLAY PORCH: That's fine, Chair. I think that comment kind of stood on its own, and I was just responding to Michelle and agreeing with her that this is a very nice program, and I'm excited to see that the fishermen are excited about it, and it's very important to validate this data, using port sampling. That way, we can use it in the assessments and management, and so I was just basically agreeing with the comments already made. Thank you.

MARCOS HANKE: Thank you very much, Clay. Ricardo Lopez, you have many comments, and do you want to make an audio intervention, or do you want to leave the comments on the chat?

RICARDO LOPEZ: Thanks for the turn. I believe that I answered

some of the doubts or questions through the chat, but, basically, the validation will be, as always, part of Daniel Matos and the port samplers, and they will be working with all this data, and the only new change is that the data will come immediately to their computers, and they will work on that every day.

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MARCOS HANKE: Thank you very much. Graciela.

GRACIELA GARCIA-MOLINER: Thank you. I have a question regarding the data that are being collected now, and so the fishers who are actually filling out the e-reporting are actually also filling out the forms that go to DNER, and those forms then go to the Southeast Fisheries Science Center, or are these data being kept separate from everything else?

RICARDO LOPEZ: Alfredo, do you want to answer that?

ALFREDO SFEIR: Sure. The data is basically -- Since we don't have access to the NOAA API, we almost did, initially -- There have been changes, I think, but, initially, back in the day, with Steve Turner, we had access to the latest API, like a year-and-a-half ago, and now we're waiting to have conversations with David Gloeckner and his team, to see where they are with their developments, because I know they have been developing their side of the technology, and so we're ready and able to send the data out.

What we agreed for now is that DRNA gets all the data, and they can copy and paste it, which is not that efficient, but it works, from our app to the actual current data inputting system, and so it's actually the answer is, yes, it's going there, but it's going manually, and so we're waiting to get the thumbs-up from the NOAA team to connect with them, so they can have the data once DRNA releases it online.

GRACIELA GARCIA-MOLINER: Thank you.

MARCOS HANKE: Thank you very much. Clay, do you want to comment anything about what was just mentioned?

CLAY PORCH: No, and I just -- I noticed that there was a comment that port samplers will continue to do their jobs, and I guess I just wanted to clarify that the idea is that you would need to be able to match when they actually sample trips with the particular day that an electronic report was filed, and it's either that -- That's one way. If you can't do that, then you just need to make sure you have representative samples of trips

and then see how it matches up, in terms of catch composition and all those details, with what is being self-reported, within reasonable statistical levels of certainty, and that's all.

MARCOS HANKE: Thank you. I have another question that I keep receiving by stakeholders, and that is the data that you are collecting is exactly the same data, in terms of the details and quantity of data and species and all the details on the original paper form, versus the digital, or is that changed for more detail under this format, or how does it work?

ALFREDO SFEIR: We modeled exactly along that document, and I don't know if, thinking out loud here, if price was an additional question, and I think that was an add-on, and I think that wasn't in the form, and I'm not sure, and I don't want to give a wrong answer, but the whole thing of this was completely to emulate and make more efficient that paper document. There is some additional stuff, for example, that has nothing to do with that, which is we enabled the form for the funding request, which has nothing to do with the form, and so it's almost one-to-one with that document.

MARCOS HANKE: Thank you very much, and I don't have any questions or comments. I have Graciela in the queue.

GRACIELA GARCIA-MOLINER: I have one more question. The local government doesn't have annual catch limits in place, but the federal government does, and the fishers fill out these forms. Is there any way of having like a gauge that tells you where the ACL for each of the groups is going for the whole island? I think we talked about this like ages ago, but I was wondering if that's coming into line at all.

 ALFREDO SFEIR: Graciela, you were always a visionary from dayone, and thank you for actually having us in your office and sharing your ideas, and also in all of the meetings. This is the point where we can start including these things, which are very easy to implement, and so now we're at the point where we can base development on reality and implementation, but we've done the hardest part, which is the mobile app and the web application running, which it is, and now it's a matter of what data you want to see.

Hopefully that will be one of many things that you want to see, and we work together on a weekly basis with DRNA, to get their feedback, and TNC as well, and so, if we have a meeting with Daniel and his team, and you guys give us the green light, that can be done fairly soon, and other things as well, and that's

the beauty of this process.

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GRACIELA GARCIA-MOLINER: Great. Thank you.

MARCOS HANKE: Thank you very much. Thank you for your time, and we extended a little more, because I think it was a very important presentation for all, and we have much more details now, and don't forget about the charter. Don't leave the charter hanging. We need the information of the charters.

The next item on the agenda is we have a space reserved on the end now on the presentation that Maria Lopez gave to us, another opportunity for the group to bring to the record any recommendations and any ideas on Maria's presentation. Nelson Crespo.

NELSON CRESPO: Hi again. Yes, I just want to bring to the table to take the possibility to take into consideration to implement the compatible regulations, and, on the same line, try to -- I don't know if the federal government can adopt the deepwater snapper permit, or create a similar permit for federal waters.

Also, I think it's very important to define the buoy and line gear for the deepwater snapper people, because that is the key to resolve all the headaches that we have around Bajo de Sico. Also, if it's possible to consider the land-based pollution. Thank you.

MARCOS HANKE: Thank you, Nelson. You stole the thunder of all my comments, and I endorse everything you said, and that has to be explored. In the queue, we have Carlos Farchette.

## FURTHER DISCUSSION OF ISLAND-BASED FISHERY MANAGEMENT PLANS UPDATE

CARLOS FARCHETTE: Thank you, Mr. Chair. I would like to propose an amendment to the island-based plan for St. Croix, and how do I do this, as a motion, or I discuss what the topic is? I've got a motion written up, but if I want to read the motion and then discuss it.

MIGUEL ROLON: Mr. Chairman, if I may, Carlos, what is the topic of the motion?

CARLOS FARCHETTE: The recreational snapper bag limit.

MIGUEL ROLON: Okay. In that case, it's one thing, one item,

and you can go ahead and add the motion now, but then we need to collect the ideas from Nelson and the others, from the public, so we can present them at the August meeting, but this one you can advance if you want to, and remember that Maria said something very important, and Roy too.

Even though we believe that the island-based FMPs will be approved next year, we are betting that it's going to be approved, and so, if you have any action that you want to take to amend any of those management plans, we can start today and, following the August meeting, we are going to be ready to tell the staff this is what we want and please provide us the documentation for moving forward. I believe the motion is in order, if that's what you want, as a member, Carlos.

CARLOS FARCHETTE: Okay. Sounds good.

MARCOS HANKE: Proceed, Carlos.

CARLOS FARCHETTE: I do remember Maria saying that amendments take a long time, and so I wanted to rig the gate from now. Here's my motion. It's to amend the recreational aggregate bag limit of the snapper, grouper, and parrotfish complex by separating the yellowtail snapper from the snapper complex and giving the yellowtail snapper its own recreational bag limit of fifteen/thirty in the EEZ geographical area of St. Croix.

MIGUEL ROLON: Graciela and Natalia, can you help us by writing that?

**GRACIELA GARCIA-MOLINER:** Carlos, while Natalia puts the Word document up, can I ask you about the -- What do you do with the other species, or is just the yellowtail the one that's going to be pulled out?

CARLOS FARCHETTE: Just the yellowtail.

MIGUEL ROLON: Let's do one thing at a time. Carlos, can you dictate to Natalia your motion slowly, so we can put it on the screen?

CARLOS FARCHETTE: Sure.

44 NATALIA PERDOMO: If you can, send it through the chat.

**MIGUEL ROLON:** If you copy and paste it to the chat, we can copy it and put it on the screen.

**CARLOS FARCHETTE:** Okay, and so you want me to put it in the chat?

MIGUEL ROLON: Yes, and that would be easier.

CARLOS FARCHETTE: Okay. It's a lot of typing.

NATALIA PERDOMO: That's okay. You can dictate it to me.

CARLOS FARCHETTE: To amend the recreational aggregate bag limit of the snapper, grouper, parrotfish complex by separating the yellowtail snapper from the snapper complex and giving the yellowtail snapper its own recreational bag limit of fifteen/thirty in the EEZ geographical area of St. Croix.

TONY BLANCHARD: Second.

MARCOS HANKE: Carlos, your motion was seconded by Tony Blanchard.

CARLOS FARCHETTE: Okay. So, here's my reasoning. Presently, the aggregate bag limit for the snapper grouper complex is five fish, when it comes to snapper, and it doesn't matter the species, and the yellowtail snapper is a very abundant species around the island of St. Croix. It has been said by the Chair of the DAP, and other fishers, for many years at council meetings that the yellowtail snapper is self-protected.

Fishing for yellowtail snapper is only conducted at night, and you cannot successfully fish for yellowtail snapper every day, and it's also a targeted species. When fishers here on St. Croix go out for yellowtail, that's what they're going after, and they are not going after any fish they catch.

When fishers go for yellowtail, it's what they are targeting. Any other snapper, which is usually mutton, is considered a It takes a perfect storm to have a good catch of the yellowtail species, the right moon, the right current, and the right bait. That perfect storm is needed to have a successful yellowtail catch, whether you fish commercially recreationally. The most important criteria there is the Without the right current pulling the right way, as simple as that deviation sounds, your fishing night will be over before it gets started. That's the reason why I want to separate those and give them a higher catch.

MARCOS HANKE: Maria Lopez.

 MARIA LOPEZ: I just have a suggestion for the motion, and it's that we need to probably say that this is going to be an amendment to the St. Croix FMP, to consider amending bag limits, and that option that you have in there is what -- That will be one of the options that would be analyzed, and that's the desired option that Carlos is presenting, but that will be one of the options analyzed and included in the amendment, but, right now, the motion, the way that it's written right now, it doesn't say that it's going to be an amendment to the St. Croix FMP, and that's just to clarify that, and it's not understood that it's really amending the bag limits, but it's just amending the plan to look into this.

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MIGUEL ROLON: Maria, can you help us here, to say to amend the island-based FMP of St. Croix, regarding recreational?

MARIA LOPEZ: To amend the St. Croix Fishery Management Plan to consider amending bag limits for the snapper, grouper, parrotfish complex. I don't know if we should probably say to consider the yellowtail snapper separately.

MIGUEL ROLON: Bag limits for the yellowtail snapper.

MARIA LOPEZ: To consider amending the bag limits -- I think the way you have it right now in the first part is fine, and I would just say, at the end, by considering the yellowtail snapper separately. I don't know if anybody wants to step in and -- I don't know if you want to leave that other part of the sentence saying what limit you want. Go ahead, Graciela.

GRACIELA GARCIA-MOLINER: Carlos, is this information that you have discussed with the FACs in St. Croix? The reason why I'm asking is because it's very important to keep the bag limit, if that's what the group had considered.

MIGUEL ROLON: Graciela, just a point of order. It doesn't matter. What we need now is to make sense of his motion and make sense that we include Maria's comments to make it a workable motion, and so the question to Carlos is do you agree with the amendments of the language by Maria at this time, before we go into further discussion?

CARLOS FARCHETTE: Yes, I agree with how Maria rephrased the motion. Also, I don't have a problem removing the quantity of bag limits and then leave it for discussion whenever it comes up.

NATALIA PERDOMO: Can you please tell me how you want the motion

to read?

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MIGUEL ROLON: Carlos.

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CARLOS FARCHETTE: It will end where it says, "and giving the yellowtail snapper its own recreational bag limit.", and then you can delete the fifteen/thirty. I guess, the way Maria phrased it, we know that for St. Croix means the geographical area, and so I won't need that sentence either.

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MARIA LOPEZ: If I may, just where it says, "by considering the yellowtail snapper separate from the snapper complex", I would say "from the complex", because this is not just a snapper complex, and it has two other groups in there, and so just delete that "snapper".

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CARLOS FARCHETTE: Sounds good.

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MARIA LOPEZ: You can say to develop an amendment to the St. Croix Fishery Management Plan, and I think that will make it a little more complete, if you agree.

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CARLOS FARCHETTE: Sounds good.

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25 MARIA LOPEZ: Okay.

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**CARLOS FARCHETTE:** Is it okay that I removed the geographical EEZ area of St. Croix? Is that fine?

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MARIA LOPEZ: Yes, because the St. Croix Fishery Management Plan will only apply to that area.

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33 CARLOS FARCHETTE: Okay. Perfect.

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35 MIGUEL ROLON: A point of order, again. We need Tony to agree.

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37 MARCOS HANKE: Tony, do you agree with the changes?

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39 TONY BLANCHARD: Yes.

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41 MARCOS HANKE: Perfect. Tony agreed with the changes, and I 42 think we are ready for voting. Does anybody else want one last 43 comment?

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45 **MIGUEL ROLON:** Marcos, you need to open for discussion before voting. Any further discussion.

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48 MARCOS HANKE: I just opened. I just asked if there is anybody

that wants to comment.

MIGUEL ROLON: Then Graciela has a comment.

**CAI** 

CARLOS FARCHETTE: And Jocelyn.

MARCOS HANKE: Graciela.

**GRACIELA GARCIA-MOLINER:** I would like to hear what Jocelyn has to say first, and then I will come back to my comment, please.

JOCELYN D'AMBROSIO: Thank you. My comment was addressed by Maria, and I just wanted the motion to clarify that this was to develop the amendment, rather than that the council was actually making the decision to do the amendment right now, because we would have to have that noticed, if we were actually doing an amendment, and that process follows having looked at the amendment document and seeing the analysis, and so I just wanted to clarify that we were having a motion to begin that process to amend the FMP.

MARCOS HANKE: Thank you, Jocelyn. Graciela.

**GRACIELA GARCIA-MOLINER:** Okay, and so, Carlos, I would like some information regarding the number that you had suggested of fifteen and thirty for the record, so that we would know where to begin, and so was that discussed during the FAC meetings, or is that a random number?

CARLOS FARCHETTE: No, and, actually, it was not discussed at all in the FAC. Well, I shouldn't say that. The recreational representative from the FAC sat at the bar with me one day asking about the yellowtail and how it can be changed, and I said, well, I can propose an amendment, although his numbers were 100 and 500, but that's not reasonable, but fifteen and thirty is up for grabs, I would think, but, if you would like, I can leave fifteen and thirty as a starting point.

GRACIELA GARCIA-MOLINER: I just wanted, for the record, to have it in the discussion. Thank you.

MARCOS HANKE: I want to make a comment that I agree with the motion, and, actually, I would not mind if Puerto Rico is included on that. One of the extra rationale for this petition is that, because yellowtail snapper fishing -- It can be very specific, and the bycatch is very minimal, and, with this motion, we are directing people to a sustainable, good species to fish for, with minimum bycatch that fish a lot of the water

column, and there is a lot of good things about yellowtail snapper fishing that this motion could address. This is my comment.

MIGUEL ROLON: If you don't have any further discussion, you are ready to vote.

CARLOS FARCHETTE: I have a quick question. Can I?

10 MARCOS HANKE: Go ahead, Carlos.

**CARLOS FARCHETTE:** This is really for Clay. Is there a yellowtail SEDAR assessment coming up, or is that a couple of years away still?

MARCOS HANKE: Probably he is looking. Graciela, do you know the information? I don't think so.

GRACIELA GARCIA-MOLINER: For the upcoming SEDARs? I don't recall that we have a yellowtail in the queue. We have triggerfish coming up, and then, after that, we have lane snapper. It might be -- If you give me a second, I can look it up quickly.

CARLOS FARCHETTE: Okay. I thought I saw it somewhere, when I went to SEDAR meeting, in the calendar, but maybe it never happened.

MIGUEL ROLON: Anyway, that's separate from the motion itself, because SEDAR is another process, and so we can take note of that, and Graciela and I can make a note of that, and so, at the next SEDAR meeting, we can look at it and decide, but, right now, what we need to do is to vote on the motion.

MARCOS HANKE: Yes. We are going to vote on the motion then, but, before we vote, I have a question to Maria. Maria, if Puerto Rico decides to do the same, what is the process, just to inform you?

MARIA LOPEZ: I would say that it would be to, maybe at the next meeting, if they want to do the same thing, they would have to - The council has to agree with that and put a motion, just like the one that was presented for St. Croix.

45 MARCOS HANKE: Okay. Thank you. Let's vote then. Go ahead, 46 Maria.

48 MARIA LOPEZ: I was just going to say that remember this is

going to be an amendment to each one of the plans too, and so keep that in consideration too, in terms of timing of when would you like this to happen, and, in terms of workload too and what things we can put together.

Like, for example, if we were to do one amendment to the fishery management plan, if we can put different things, depending on the complexity, of course, in that amendment, and, also, before you end, also think about what are the -- What is the task for staff for the next meeting, or for the December meeting, with regard to this.

MARCOS HANKE: Well, this is responding to your request in your presentation for people to give the ideas that we have to start to get ready for the island-based and for the future changes, and I think you are in a better position to guide us on the process.

MIGUEL ROLON: Marcos, if I may, you are still on this motion, and just a point of order. Either vote on the motion or don't vote on the motion. Then, between here and August, Puerto Rico and St. Thomas can take a look at this and decide whether also they would like to consider an amendment to each of their island-based FMPs.

If the three of them have the same idea to remove the yellowtail from the complex, then you can have a motion in August to amend all the island-based FMPs to remove the yellowtail from the complex and have a separate consideration for that, but, without knowing that today, we need to vote on this one and then consider the whole thing at the August meeting, so Puerto Rico and the Virgin Islands have to come prepared for that motion, and it's like Maria is saying.

Each one of these island-based FMPs will be separate, and, if you start developing an amendment during the summer, between here and now and August, then the staff will have some direction as to how to schedule the work to submit the council the appropriate documentation for the following meeting, maybe in December or the first one in 2021.

MARCOS HANKE: Okay. Let's vote then. Any opposition to this motion? All in favor. The motion carries. There is so many comments on the chat, and I have Jocelyn asking for a turn.

JOCELYN D'AMBROSIO: No, thank you. I didn't have any additional comments.

 MARCOS HANKE: Okay. Perfect.

 MIGUEL ROLON: Marcos, the only comments are internal things, and so it's not here for discussion at this time. You don't have any more comments to the council at this time from the chat.

 MARCOS HANKE: Okay. No problem. For my part, I will send my comments, and I am thinking about them, and I will make my comments via email to discuss the next August meeting, in regard to the presentation of Maria, and, hearing nobody else requesting the floor, the next item on the agenda is the public comment period. Anybody from the public? Hearing none, we are at the end of the meeting. Miguel, do you want to say something before we end?

 $\mbox{\bf MIGUEL ROLON:}$  No. The meeting went well, and so adjourn the meeting, and I can close it.

MARCOS HANKE: Let's adjourn the meeting. Thank you very much for the cooperation and for the good participation and discussion of this group. I will see you next time, and one last question I have, and I'm sorry to go back, is do we need to announce the next council meeting date, Miguel?

MIGUEL ROLON: Yes, and it's the  $11^{th}$  and  $12^{th}$  of August. We will send a note to everybody for marking their calendars again.

MARCOS HANKE: Okay. Thank you, and thank you to all. The meeting is adjourned. Thank you.

(Whereupon, the meeting adjourned on June 24, 2020.)

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