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TABLE OF MOTIONS

PAGE 31: Motion that the CFMC accepts and endorses the five-year strategic draft plan as modified and presented by Dr. Michelle Duval and to follow the process to present this to the general public for any comment or suggestions. The final draft document will be presented to the CFMC at the December 2021 meeting for final action. The motion carried on page 34.

PAGE 72: Motion that the CFMC direct staff to prepare an options paper to modify the seasonal closures for fishing for or possession of red hind in federal waters west of 67 degrees, 10 minutes West longitude and for the Tourmaline and Abrir la Sierra Bank red hind spawning aggregation areas. The motion carried on page 78.

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1 **CARIBBEAN FISHERY MANAGEMENT COUNCIL**
2 **174TH REGULAR COUNCIL MEETING**
3 **Webinar**

4
5 July 21, 2021
6

7 The Caribbean Fishery Management Council convened via webinar on
8 Wednesday morning, July 21, 2021, and was called to order at 9:00
9 o'clock a.m. by Chairman Marcos Hanke.

10
11 **CALL TO ORDER AND ROLL CALL**
12

13 **MARCOS HANKE:** Good morning, everyone. It's 9:00 a.m. on July 21.
14 My name is Marcos Hanke, and I'm the CFMC Chairman. We are going
15 to start the meeting, and we're going to start with the call to
16 order. Miguel, is there anybody on the staff that will name who
17 is --
18

19 **MIGUEL ROLON:** Christina will give the record of people present.
20

21 **MARCOS HANKE:** Go ahead, Christina.
22

23 **CHRISTINA OLAN:** I am opening the list of participants. Miguel
24 Rolon, Graciela Garcia-Moliner, Liajay Rivera, Marcos Hanke,
25 Christina Olan, Alida Ortiz, Andy Strelcheck, Angie de los
26 Irizarry, Carlos Farchette, Clay Porch, Diana Martino, Edward
27 Schuster, Guillermo Cordero, Julian Magras, Helena Antoun, Jocelyn
28 D'Ambrosio, Kevin McCarthy, Maria Lopez, Matt Wailea, Michelle
29 Duval, Nelson Crespo, Nicole Angeli, Rich Appeldoorn, Sarah
30 Stephenson, Sennai Habtes, Stacy Williams, Wilson Santiago,
31 Yaritza Rodriguez, and Yasmin Velez.
32

33 **MARCOS HANKE:** That is all, Christina, for now?
34

35 **CHRISTINA OLAN:** Yes.
36

37 **MARCOS HANKE:** Okay. Thank you. If I didn't mention the date,
38 I'm going to make sure, and it's July 21, 2021. It's 9:03 a.m.
39 The next item on the agenda is the roll call that we just did, and
40 now Adoption of the Agenda. Is there any comment on the agenda
41 adoption? Go ahead, Miguel.
42

43 **ADOPTION OF AGENDA**
44

45 **MIGUEL ROLON:** Mr. Chairman, Graciela has a couple of items that
46 she would like to add to Other Business.
47

48 **MARCOS HANKE:** Go ahead, Graciela.

1
2 **GRACIELA GARCIA-MOLINER:** Good morning. To add to the agenda,
3 under Other Business probably, but that's at the pleasure of the
4 council, but the follow-up on the ecosystem-based fishery
5 management plans, the fishery ecosystem plan, and so we have Sennai
6 Habtes to have a short presentation for a follow-up on what you
7 had decided at the last meeting.

8
9 We have -- I don't know if we're going to discuss anything else on
10 the ACLs, and so I'm waiting to see if that would be added to the
11 agenda under Other Business, and those are the two things that I
12 have for my list.

13
14 **MARCOS HANKE:** For Other Business, and any comment from the council
15 members? Hearing none, let's go to Adoption of the Agenda.

16
17 **NELSON CRESPO:** Mr. Chair, if you give me the opportunity, I want
18 to bring to the attention, in Other Business, about the reduction
19 of forage species in the western coast of Puerto Rico and the
20 impact that that is causing to the coastal fishermen.

21
22 **MARCOS HANKE:** Okay, and your name is Nelson?

23
24 **NELSON CRESPO:** Nelson Crespo.

25
26 **MARCOS HANKE:** Thank you.

27
28 **MIGUEL ROLON:** Nelson, for the record, could you state what is the
29 other business?

30
31 **NELSON CRESPO:** I want to bring to your attention, briefly, in
32 Other Business, about the health and decline of forage species and
33 the negative impact that this situation is causing to the local
34 fishing in the west of Puerto Rico.

35
36 **MIGUEL ROLON:** Thank you.

37
38 **NELSON CRESPO:** Thank you.

39
40 **MARCOS HANKE:** We took note of that. Anybody else?

41
42 **ANDY STRELCHECK:** Good morning. I want to add, to Other Business,
43 a brief discussion of the spiny lobster accountability measure.

44
45 **MARCOS HANKE:** We have included that. Thank you, Andy. Anybody
46 else from the council have any comment or anything else to add to
47 Other Business? Thank you very much. We have the follow-up on
48 the EBFM, the ACL pending, if it's not discussed during the agenda

1 items, if there's a little space for that, and then forage species
2 by Nelson Crespo, and spiny lobster requested by Andy Strelcheck.

3
4 **MIGUEL ROLON:** We need a motion to adopt the agenda.

5
6 **MARCOS HANKE:** Motion to adopt the agenda, can anybody help there?

7
8 **CARLOS FARCHETTE:** Motion to adopt the agenda as read.

9
10 **MARCOS HANKE:** Is there a second?

11
12 **VANESSA RAMIREZ:** Second.

13
14 **CONSIDERATION OF 173RD COUNCIL MEETING VERBATIM TRANSCRIPTION**

15
16 **MARCOS HANKE:** Thank you, Vanessa. Is there any opposition or any
17 comment? Hearing none, the agenda is adopted. Now Consideration
18 of the 173rd Council Meeting Verbatim Transcription. Any comment?
19 We need a motion to accept that.

20
21 **NICOLE ANGELI:** Motion to accept it as written.

22
23 **MARCOS HANKE:** Thank you, Nicole. Is there a second?

24
25 **CARLOS FARCHETTE:** Second.

26
27 **MARCOS HANKE:** Thank you, Carlos. Second by Carlos Farchette.
28 Any comment or anybody in opposition? Hearing none, the motion
29 carries. Now the Executive Director's Report. Miguel.

30
31 **EXECUTIVE DIRECTOR'S REPORT**

32
33 **MIGUEL ROLON:** Thank you, Mr. Chairman. Very briefly, regarding
34 the budget matters, we are okay until the end of the year. As we
35 speak, there are a couple of meetings going on regarding the budget
36 for the first quarter of the Department of Commerce, and they are
37 going to start on October 1 and December 1, and, also, they are
38 discussing the budget situation for 2022. There is no effect, at
39 this time, on council operations, and so we are okay.

40
41 The council continues also working with the WECAFC working groups,
42 in coordination with the Office of Seafood Inspection and
43 International Fishery Affairs of NOAA Fisheries and the Office of
44 Protected Resources of NOAA Fisheries Regional Office, Southeast
45 Regional Office.

46
47 We are now in the pre-planning stages of the international working
48 groups that are going to have the two meetings this year, and,

1 also, the meeting in March of the following year. The council
2 contribution is complemented by the funding this year from NOAA
3 Fisheries Office of Protected Resources and International
4 Fisheries.

5
6 That will be used to cover meetings and the coordination of the
7 queen conch spawning aggregation working group and the flyingfish
8 working group, and we will also have a coordinator for a campaign,
9 which is an international campaign, an outreach and education
10 campaign to prepare and distribute documents and materials and
11 radio bits, so that people can be aware, and we want to create
12 more awareness of the fish aggregations throughout the Caribbean,
13 especially Nassau grouper. As you know, it's protected under the
14 ESA, and the mutton snapper. As we said before, a plan has been
15 prepared already, and it is being implemented by the other
16 countries.

17
18 We believe that this is a success story by the U.S. working with
19 the other countries and the WECAFC, which is, as you know, the FAO
20 branch in the western Caribbean, to manage the fisheries, and it's
21 on a voluntary basis so far, but to manage the fisheries at the
22 national, sub-regional, and regional levels within the Caribbean
23 Sea.

24
25 The other thing that we wanted to touch on is that the council has
26 been talking about area-based management, and that includes -- As
27 you know, area-based management is something that we are discussing
28 now and that we have the Executive Order 14008 by President Biden
29 that calls for 30 percent closure of -- Not closure, but 30 percent
30 conservation areas to be established between here and the year
31 2030, and the councils created a sub-committee, and the sub-
32 committee is meeting actually tomorrow, and we will present a
33 report by the CCC meeting in October.

34
35 The idea is to look at all the area-based management, and area-
36 based management includes national parks, and that includes closed
37 areas, et cetera, and we would like to, number one, define the
38 concepts, including conservation, for example. Conservation, for
39 some people, means you close this area, and you don't touch it,
40 and you don't look at it.

41
42 The conservation and management act, as you know, is sustainability
43 of the fishery using management tools, and that includes area-
44 based management, and that includes marine reserves, as the ones
45 in the Caribbean, but it doesn't necessarily mean that you exclude
46 all fishers, commercial or recreational, for an area that you
47 closed. We have to be mindful of the mandates of the Magnuson Act
48 for this type of actions, and so that's what the sub-committee is

1 looking at at this time.

2
3 In addition, we are going to have -- Locally, in the U.S.
4 Caribbean, we are going to have, on February 9, 2022, a workshop
5 on research, and that workshop will invite Dr. Diana -- As you
6 know, she gave us a presentation of the work that she did for us,
7 and other scientists and what the council has so far, in terms of
8 marine reserves, and we, also, Dr. Alida Ortiz is going to present
9 the component of outreach and education and what we have for marine
10 reserves and what we propose to have for marine reserves, or area-
11 based management. The educational component is very important.

12
13 At this meeting, we will invite all council members and the DAP
14 chairs, and it will be virtual, or it will be hybrid, in-person or
15 virtual, so that people that are interested to participate -- It
16 will be a one-day meeting, and we hope that everybody will be able
17 to participate and work on the discussion that we are going to
18 have.

19
20 The morning of the meeting, we will get a presentation, and we
21 also will have the point of view of fishers, and I would like to
22 get, for example, the three chairs of the DAPs to provide to us a
23 fisherman perspective, and that should be included in what we have
24 for marine reserves, and, for example, we have marine reserves off
25 of Puerto Rico, and we have marine reserves off of St. Thomas and
26 St. Croix, and, in the case of St. Thomas and St. Croix, the
27 fishers, especially Julian Magras and others, and Tony Blanchard,
28 met with Alida and I and others, and we are beefing up the outreach
29 and education materials that we have for that area, and it was an
30 initiative from fishers. At this meeting, on February 9, we would
31 like to hear the perspective of the local fishers on what a marine
32 reserve is.

33
34 Internationally, there are some people who would like to have
35 oceanic marine reserves. For people that don't know what that is,
36 there are a couple of videos on the internet about it, and,
37 basically, what you're doing is to create marine reserves that
38 will ensure the spawning, feeding, et cetera, of oceanic species,
39 such as tuna and billfish and everything, and the like.

40
41 This is being done in, proposed in, the Pacific and other areas,
42 but not in the Caribbean so far, and there are some interested
43 people, countries, looking at this possibility.

44
45 The COVID-19 control plan is still on in Puerto Rico, and so we
46 have to follow the Governor's indications for this plan, and that
47 means that we have to be mindful for the December meeting, and the
48 December meeting will be, again, a hybrid meeting. We will be in-

1 person and virtual.

2
3 Those people that come into Puerto Rico, you have to be abreast of
4 the regulations at that time. For example, if you are not
5 vaccinated, or you don't have a COVID-free certificate for no
6 longer than seventy-two hours, you cannot enter Puerto Rico unless
7 you are vaccinated. If you don't have any of those two, you have
8 to quarantine yourself for fourteen days at your own expense. We
9 will have more information for you by November, but this is the
10 situation as if now. Therefore, the meeting in August will be
11 also virtual.

12
13 The council staff also will be teleworking, and we established
14 guidance for telework following the telework.gov of the federal
15 government, and everybody will be required to have at least one
16 day at the meeting present. If there's not a meeting, the office
17 will be open five days a week, as it is right now, but the staff
18 will have the flexibility of prior authorization by the Executive
19 Director to keep working remotely.

20
21 We have found that the staff is doing what they are supposed to do
22 by working remotely, and it's a success story, but we need to keep
23 the office open at all times, and so that's why it is telework,
24 and that will be included in our handbook from now on.

25
26 The next meeting will be in San Juan, Puerto Rico. The next
27 council meeting will be December 7 and 8, and it will be at the
28 Marriott Courtyard Hotel in Isla Verde, and you are all familiar
29 with it, and we will get lunch, so you don't have to venture out
30 if you don't want to, off the premises. That's all I have so far,
31 Mr. Chairman, unless you have any questions at this time.

32
33 **MARCOS HANKE:** Anybody from the council that would like to ask
34 questions? Does anybody from the council have a question or a
35 comment to the Executive Director's report? Hearing none, we will
36 move along for the next presentation, which is the five-year
37 strategic plan, and that's going to be presented by Dr. Michelle
38 Duval.

39
40 **FIVE-YEAR STRATEGIC PLAN PRESENTATION**

41
42 **MICHELLE DUVAL:** Thank you, Mr. Chairman. Thank you, Mr. Chairman
43 and council members. I am happy to be able to present to you today
44 on the complete draft of the 2022 to 2024 strategic plan. Both a
45 copy of this presentation as well as the complete document are
46 posted on the council's website, and I believe Diana emailed those
47 to everybody as well.

1 I just want to start with, as usual, an overview of what I plan to
2 cover today, and so I thought it might be useful, at this point,
3 to just review the rationale for the strategic plan, and then we'll
4 do a quick review of the previous district advisory panel and
5 council actions over the past couple of months, and then we'll
6 walk quickly through the vision, mission, and core values before
7 getting into the goals and objectives, and then we'll wrap up with
8 questions and hopefully council approval for public input.

10 At this point in the process, I think it's always good to review
11 the rationale. In other words, why did we go down the path of
12 developing a strategic plan, and so, really -- And what are the
13 things that a strategic plan allows the council to do, and so,
14 primarily, and I think most importantly, it allows the council to
15 establish priorities and future direction, and so, as I've
16 mentioned in the past, the council has spent a lot of time
17 reorganizing the management framework, through the development of
18 the island-based fishery management plans, and is also working on
19 the development of the fishery ecosystem plan, which will kind of
20 serve as a roadmap, or a guide, for how to incorporate social,
21 economic, cultural, and ecological goals within this new
22 management framework. The strategic plan allows for the
23 establishment of future priorities and direction for these
24 efforts.

26 Another thing that a strategic plan does is it can allow the
27 council to allocate resources, the limited resources that it has,
28 in a way that will be most effective for achieving its goals, and
29 it can also allow the council to plan for and respond to changing
30 conditions, whether that's changing conditions in a fishery or
31 it's changing conditions in the world around us, which seems to be
32 happening a lot these days.

34 It also provides for transparency and accountability in decision-
35 making, and so, as stakeholders are trying to understand why the
36 council made Choice A versus Choice B, a strategic plan can help
37 with that. It also allows for more effective communication and
38 collaboration with both management partners and stakeholders,
39 because people can see what the council's priorities are. Then,
40 finally, it allows the council to track progress of these
41 priorities over time.

43 Just a quick review of previous actions, back at the end of March,
44 the district advisory panels reviewed and approved the draft
45 island-specific objectives and provided some initial feedback on
46 potential strategies or approaches to meet those objectives, and
47 then, at the end of April, at your last meeting, you all reviewed
48 and selected draft vision, mission, and goal statements and

1 approved and the island-specific objectives that were reviewed by
2 the DAPs.

3
4 Then the DAPs met again in June to take another look at the draft
5 strategies, as well as make a few additional tweaks and edits to
6 the island-specific objectives, and so our goal for today is for
7 you all to review and approve a complete draft of the strategic
8 plan for public input.

9
10 Just a quick reminder of how the plan is set up, and so we have a
11 unified vision and mission, and there are four different goal
12 themes, and three of those goal themes are organized according to
13 island-specific objectives and associated strategies, and so these
14 are the draft vision and mission statements that you all selected
15 at your meeting at the end of April, and recall the vision
16 statement is really the aspirational future state, and so this is
17 what we would like U.S. Caribbean fisheries to look like in the
18 future.

19
20 That is thriving and resilient island ecosystems, fisheries, and
21 fishing communities that provide cultural, social, and economic
22 benefits for all.

23
24 Then the mission is really the council's reason for being, and its
25 mandate under the Magnuson Act, and so that is the Caribbean
26 Fishery Management Council conserves, restores, and manages
27 fishery resources in the U.S. Caribbean consistent with the
28 requirements of the Magnuson-Stevens Act. The council is committed
29 to advancing the collaborative stewardship of these fisheries and
30 supporting island ecosystems through education, outreach, and
31 stakeholder input.

32
33 If the vision is the aspirational future state, what we would like
34 things to look like, and the mission reflects why the organization
35 exists, then the core values really reflect what an organization
36 stands for, and so these core values were based on all of the
37 discussions and input from the district advisory panels and the
38 council, as well as management partners and the public, throughout
39 this entire process, and so they are stewardship of marine
40 resources, collaboration with management partners and
41 stakeholders, integrity, and so maintaining the highest
42 professional standards of conduct in fisheries management,
43 transparency in decision-making and ensuring clear communication,
44 fairness in the treatment of all stakeholders, as well as in the
45 making of decisions, and respect for the diversity and unique
46 characteristics of island fishing communities and the needs of
47 stakeholders.

1 We also have four goal themes within the strategic plan, and these
2 represent the major areas of focus needed to achieve the council's
3 vision, and so the management theme is about how the council
4 manages fishery resources to meet goals for island fisheries, as
5 well as meeting requirements for sustainability.

6
7 The ecosystem and resource health theme is focused on how the
8 council will implement the fishery ecosystem plan, as well as
9 address habitat conservation and ecosystem impacts. The social,
10 cultural, and economic issues theme is focused on how the council
11 considers fishing community and stakeholder needs as well as
12 incorporates social and economic information into its decisions,
13 and then the communication and outreach theme is really focused on
14 how the council communicates with fishers and other stakeholders,
15 as well as how it engages and educates and obtains feedback from
16 the public and stakeholders.

17
18 This led to the following draft goal statements that you all
19 selected at your meeting in April. There's management, which is
20 advance management approaches that promote healthy local fisheries
21 and ecosystems, consider the needs of island fishing communities,
22 and foster collaboration among management partners.

23
24 Ecosystem and resource health is promote sustainable utilization
25 of local marine resources in a manner that maintains local
26 ecological structure and function and provides for resilient
27 fishery resources. Social, cultural, and economic issues ensure
28 that management decisions consider the unique characteristics and
29 needs of island fishing communities while promoting fair and
30 equitable resource use. Communication and outreach is engage,
31 education, and inform a variety of audiences to improve public
32 understanding and participation in the council process.

33
34 Now we're going to walk through the draft objectives, goal-area-
35 by-goal-area, and, before we do that, I just want to mention a few
36 things that I have mentioned in the past, which is that there is
37 a lot of overlap in the island-specific objectives, and this has
38 to do with the priority issues that were selected by the district
39 advisory panels as well as objectives that are contained within
40 each of the island-based fishery management plans, as well as input
41 from the Outreach and Education Advisory Panel.

42
43 Because everyone has received a copy of the complete draft of the
44 strategic plan, and that's posted up on the website, I'm not going
45 to walk through each of those strategies and draft objectives in
46 detail, but I'm going to focus on some of the similarities and
47 differences and just kind of highlight an example of the types of
48 strategies that are included within each of the different island-

1 specific objectives.

2
3 We will go ahead and start with Objectives 1 through 4, which are
4 the Puerto Rico draft management objectives. Objective 1 is
5 support the development of accurate, timely, and cost-effective
6 data collection, reporting, and monitoring programs. This
7 includes strategies such as improving fishery-independent and
8 fishery-dependent data, both on the commercial and recreational
9 side.

10
11 Objective 2 is promote fisher involvement and other collaborative
12 research approaches to meeting island-specific science and
13 information needs, and so this includes strategies such as
14 development and prioritization of a Puerto-Rico-specific list of
15 research needs and collaborating with fishers and science partners
16 in doing so.

17
18 Objective 3 is ensure that management measures encourage
19 regulatory compliance and foster effective enforcement, and so
20 this includes the review of the enforceability of management
21 measures and the consistency of those management measures, among
22 other things, and then Objective 4 is collaborate with domestic
23 and international partners to promote adaptive and efficient
24 management that considers diverse community interests. This
25 includes strategies such as development of clear management
26 objectives, as well as things like consistency with local ecosystem
27 productivity.

28
29 Moving on to St. Thomas/St. John, Objectives 5 through 9 are the
30 draft management objectives for St. Thomas/St. John, and you will
31 note that the first four of these are really pretty much exactly
32 the same as the Puerto Rico management objectives, and so, again,
33 the specificity really comes into play with the strategies within
34 each of these objectives.

35
36 I will note that Objective 5 also includes the word
37 "implementation". It's to support the development and
38 implementation of accurate, timely, and cost-effective data
39 collection programs. For St. Thomas/St. John, this includes
40 strategies such as improving the data collection needed to evaluate
41 the impacts of species and area closures.

42
43 Objective 6 includes strategies such as involving fishers in the
44 assessments of the effectiveness of species -- Of closed areas and
45 assessment of species that are impacted by those closed areas, as
46 well as things like development of educational materials to promote
47 fisher understanding of science needs.

Objective 7 includes strategies such as cross-training of enforcement personnel and joint enforcement efforts. Objective 8 includes strategies such as developing consistent regulations, where appropriate, and aligning management with local ecosystem capacity. Then Objective 9 is consider the potential impacts of climate change on the efficacy of management measures.

This includes strategies such as evaluating existing fishery-independent information to try to ascertain trends in that data that might be impacted by climate change, as well as soliciting fisher input on species and habitat distributions. Moving on to St. Croix, and this is Objectives --

ANDY STRELCHECK: Michelle, sorry to interrupt, but I am curious, with Objective 9 -- That is specific to only St. Thomas/St. John?

MICHELLE DUVAL: Yes, and so, you know, Andy, that was, again, because of the prioritization of issues, and so this rose up as a major issue that was selected by the DAP. Now, with respect to prioritization, I will say that, if you look through the complete draft of the strategic plan, you will note that the other island-specific objectives for both Puerto Rico, as well as for St. Croix, include strategies to look at the impacts of climate change in a variety of different areas.

ANDY STRELCHECK: I noticed that, and that's why I wanted to make a note here, as you were going through the presentation, because it did seem a little bit unusual to just have a climate change objective for one island platform and not encompassing all of the island platforms.

MICHELLE DUVAL: Yes, and, again, that was due to the -- We went through a pretty extensive review and discussion of a suite of different issues under each of these different goal themes, and climate change was noted as one of the top-five priority issues for St. Thomas/St. John under that management theme. Anything else?

ANDY STRELCHECK: Thank you.

MICHELLE DUVAL: No problem. Just, again, going back to St. Croix, and so Objectives 10 through 13 are the draft management objectives for St. Croix, and, again, these are very similar to the ones for Puerto Rico and St. Thomas/St. John, with the exception of a specific objective devoted to climate change, as Andy noted.

Objective 10 includes strategies such as modifications to licensing requirements to improve catch reporting. Objective 11

1 includes strategies such as support for joint gear selectivity
2 studies and providing opportunities for fishers to contribute to
3 filling data gaps.

4
5 Objective 12 includes strategies such as development of compliance
6 guides for commercial and recreational fishermen, and Objective 13
7 includes strategies such as support for measures that reduce
8 bycatch and ensuring that management measures consider the impacts
9 of climate change and invasive species.

10
11 I will move on to the draft ecosystem and resource health goal,
12 and, again, starting with the draft island-specific objectives for
13 Puerto Rico.

14
15 Objective 14 is implement the fishery ecosystem plan as a roadmap
16 for future council actions to maintain ecological relationships,
17 roles, and services of Puerto Rico's island ecosystem, and so this
18 includes strategies to -- Objective 14 includes strategies such as
19 evaluating the contributions of existing closed areas to ecosystem
20 integrity and collaborating with fishers and science partners to
21 improve ecosystem information.

22
23 Objective 15 is identify, manage, and protect coral reef and other
24 fishery resource habitats of Puerto Rico, and so this includes
25 development of council habitat policies regarding things such as
26 erosion and sedimentation and other forms of pollution.

27
28 Objective 16 is collaborate with management partners to address
29 the impacts of natural disasters on ecosystem structure and
30 function, and I will note that this was a high-priority issue for
31 Puerto Rico, and this was one of those things, similar to climate
32 change for St. Thomas/St. John, that really rose to the top when
33 the Puerto Rico DAP was having their discussion back in August of
34 last year, and so this includes strategies such as evaluating the
35 ability of management approaches to be responsive to ecosystem
36 impacts from natural disasters and to incorporate those impacts
37 into ecosystem status reports.

38
39 Objective 17 is collaborate with management partners to address
40 enforcement concerns that may affect ecological relationships, and
41 so this includes strategies such as outreach to the fishing
42 community, as well as local agencies, on the impacts of both
43 fishing and non-fishing-related activities.

44
45 Moving on to St. Thomas/St. John, Objectives 18 through 22 are the
46 St. Thomas/St. John draft ecosystem and resource health
47 objectives, and, again, there are several similarities and
48 overlaps here with the objectives we just reviewed for Puerto Rico,

1 including Objective 18, Objective 19, and Objective 21.

2
3 Objectives 20 and 22 are a little bit different, but just to
4 highlight a few of the strategies that are reflected here, and so,
5 with respect to Objective 18, one of the strategies here is to
6 consider ecosystem approaches that are responsive to climate
7 change, and so, again, addressing climate change in a slightly
8 different way, or in a different area.

9
10 Objective 19 includes strategies such as developing outreach
11 materials related to habitat loss and accounting for ecological
12 roles in essential fish habitat designations. Objective 20
13 includes strategies such as identification of habitat enhancement
14 opportunities, as well as funding from other federal agencies that
15 might support habitat creation.

16
17 Objective 21 includes, again, outreach with enforcement personnel,
18 similar to Puerto Rico, and outreach to permitting agencies, with
19 respect to the impact of illegal fishing activities on ecosystem
20 structure and function, and then Objective 22 is collaborate with
21 science partners to identify and address ecological data and
22 information gaps, and so this includes collaboration with partners
23 to prioritize ecological data needs, as well as exploring datasets,
24 to try to fill in some of those gaps.

25
26 Moving on to St. Croix, Objectives 23 through 27, and so, again,
27 you will note that there are -- Several of these objectives are
28 similar to those reflected in both St. Thomas/St. John as well as
29 Puerto Rico, and that includes Objectives 23, 24, 25, and 26, and
30 so there is that Objective 25 that is creation or rehabilitation
31 of fishery resource habitats that support ecosystem structure and
32 function.

33
34 Objective 27 is collaborate with management partners to ensure
35 that ecosystem approaches are responsive to climate change,
36 environmental changes, and natural disasters, and so, again,
37 climate change being incorporated in a slightly different way by
38 one district advisory panel compared to others.

39
40 Just a highlight under Objective 23, and this includes strategies
41 such as, again, identifying and prioritizing ecological data
42 needs, and Objective 24 also includes things like development of
43 council habitat policies, as well as protection of juvenile
44 habitats and supporting modified coastal zone regulations.

45
46 Objective 25 includes additional strategies, such as investigating
47 the use of fish aggregating devices, where appropriate. Objective
48 26 also includes similar types of outreach to law enforcement,

1 fishing communities, as well as other agencies on the impacts of
2 non-fishing, fishing, as well as development on ecosystem
3 structure.

4
5 Then Objective 27 includes strategies such as collaborating with
6 the broader Caribbean community to identify climate change --
7 Impacts from climate change, as well as natural disasters.

8
9 Moving on to the draft social, cultural, and economic issues goal,
10 it's, again, just starting with Puerto Rico, and so there are four
11 objectives here. Objective 28 is to promote the collection of
12 social and economic data that informs management decisions, and so
13 this includes strategies such as engaging with multiple partners
14 to identify and prioritize those social and economic data gaps.

15
16 Objective 29 is evaluate the social, cultural, and economic impacts
17 of management decisions and actions across user groups, and so,
18 for example, documenting the social and economic impacts of the
19 existing closed seasons and areas on all stakeholders and ensuring
20 that management measures address cultural differences.

21
22 Objective 30 is promote efforts that support social and economic
23 opportunity and stability across sectors and fishing communities,
24 and so this includes strategies such as support for a recruitment
25 and training program for new and young fishers. Objective 31 is
26 consider the impacts of enforcement and illegal fishing in Puerto
27 Rico on economic opportunity and social wellbeing, and so this
28 includes strategies such as documenting the economic impact of
29 illegal and unlicensed fish sales.

30
31 Moving to St. Thomas/St. John, the four objectives, 32 through 35,
32 here are exactly the same as those for Puerto Rico, and so I'm
33 just going to highlight a couple of the strategies that are
34 included here. Under Objective 32, this also includes strategies
35 such as incorporating social and economic data needs into funding
36 opportunities.

37
38 Objective 33 includes ensuring that management measures address
39 fishing community differences. Objective 34 includes strategies
40 such as support for infrastructure improvements, particularly
41 landing and selling sites. Objective 35 includes strategies such
42 as working with partners to determine how addressing enforcement
43 needs might improve economic conditions, as well as trust among
44 user groups.

45
46 Similarly, for St. Croix, these four island-specific objectives
47 are identical to those for St. Thomas and St. John, and I will
48 note that the St. Croix District Advisory Panel added Objective 38

1 during their June meeting, and so just some examples of the
2 strategies incorporated here under Objective 36, and they're
3 similar to some of the other strategies for Puerto Rico and St.
4 Thomas/St. John, but also ensuring that any social or economic
5 studies include collaboration with the Department of Planning and
6 Natural Resources.

7
8 Objective 37 includes strategies such as providing -- Ensuring
9 that management approaches provide equitable access for both
10 commercial and recreational fishers. Objective 38 includes
11 strategies such as development of outreach materials regarding
12 social media use for marketing of locally-caught fish, and
13 Objective 39 includes strategies such as educating hoteliers and
14 restauranteurs on the importance of purchasing fish from licensed
15 commercial fishers.

16
17 Now I will move on to the communication and outreach goals, and so
18 this one does not have any island-specific objectives or
19 strategies. Recall that, during development, these were issues
20 that were considered to be important jurisdiction-wide, equally
21 across all of the council's island platforms.

22
23 There are three objectives here. Objective 40 is use a variety of
24 communication tools that consider the social, cultural, and
25 economic characteristics of target audiences, in coordination with
26 the Outreach and Education Advisory Panel, and so there's a lot of
27 strategies in here that focus on tools, such as continued use of
28 the council's social media platforms, identifying those
29 stakeholder groups that might still need -- That might prefer
30 traditional communication tools, such as paper or radio. Then
31 accounting for language-specific preferences, development of
32 sector-specific communications, and things like that.

33
34 Objective 41 is promote participation of a variety of stakeholders
35 in the council process, and so this includes strategies such as
36 increasing the frequency of council communications, particularly
37 in advance of a meeting, to try to promote that participation,
38 expanding some of the virtual opportunities, not only for
39 participation, but also for education. Use things such as online
40 comment forms to provide additional means for stakeholders to
41 participate in the process. Expanding participation by
42 experienced and young fishers, through outreach programs, and so
43 these are just a smattering of the strategies included under that
44 objective.

45
46 Then the final objective is about the education component, and so
47 it is improve public and stakeholder understanding and awareness
48 of fisheries management, current issues, and the council process,

1 and so this includes expansion of the council's non-traditional
2 stakeholder outreach, continued support for the Marine Resource
3 Education Program, development of island-specific outreach and
4 education materials, you know continuing to try to improve the
5 clarity and simplicity of presentations to improve public
6 understanding, expanding the roles of the fisheries liaisons.

7
8 Then coordinating territorial and council outreach, as needed, to
9 ensure that there is a consistent message being displayed to the
10 public. Again, those are just a few examples of the strategies
11 contained under that particular objective.

12
13 With respect to next steps, the plan is to post the draft plan on
14 the council's website and allow for the public to have some time
15 to review that and provide any comments via an online comment form.
16 The council would review that public feedback and provide approval
17 of the final strategic plan. Then after that is development of an
18 implementation plan for 2022, and so this would be presented at
19 the December council meeting this year, and the implementation
20 plan is really what includes the actions that the council will be
21 engaged in over the upcoming year in pursuit of the strategic plan.

22
23 Miguel can speak a little bit more to this, but a sub-committee of
24 the council will be prioritizing the actions needed to implement
25 the objectives of the strategic plan, and the intent right now is
26 that that sub-committee would meet a couple of times a year, in
27 both June and December, and that we review progress and then
28 identify actions for the following year's implementation plan.

29
30 That is all I have for the presentation, and I am happy to take
31 any questions. I do, before we get into questions, really want to
32 extend my sincere gratitude and thanks to all members of the
33 district advisory panels. They really had the heavy lift on this,
34 and this plan would not be possible without their support, and
35 especially to the DAP chairs for their leadership and reaching out
36 to their membership, to make sure that everybody always knew when
37 the meetings were happening and to encourage their participation,
38 and so, with that, Mr. Chairman, I am happy to take any questions.

39
40 **MARCOS HANKE:** Thank you, Michelle. Thank you for a great job and
41 presentation. I think this document reflects the great and hard
42 work that you guys all performed.

43
44 I just wanted to make a comment about Andy's question. I think we
45 have, on every island, elements that are related to climate change,
46 and climate change, for many people, is a new concept, and the
47 relationship with other things, and the fishing community is
48 learning about it and feeling the effects. It's not something

1 that has been with us for a long, long time, at least in a
2 perceptible way, right, and I think Nelson Crespo wanted to add
3 some comments to it. Nelson.

4
5 **NELSON CRESPO:** Thank you, Mr. Chair. I think it's appropriate to
6 bring to Puerto Rico the issues of climate change, too. That is
7 some of the issues that I wanted to discuss with the forage
8 species, and I think it's very important, the impact of the climate
9 change that we have during these times on the negative reduction
10 of these species, and I think we have to put it in our list.

11
12 **MICHELLE DUVAL:** Thanks for that, Nelson, and so you would like to
13 go ahead and sort of like add a specific objective, similar to
14 what St. Thomas/St. John has of considering the potential impacts
15 of climate change on the efficacy of management measures?

16
17 **NELSON CRESPO:** Yes, exactly, the impact of the climate change and
18 everything related to the ecosystem and habitats and everything.

19
20 **MICHELLE DUVAL:** Okay. Great. Thanks, Nelson.

21
22 **MARCOS HANKE:** Any other questions? Thank you, Nelson.

23
24 **ANDY STRELCHECK:** Michelle, thanks for the great presentation and
25 really great job by the DAPs and everyone that contributed to,
26 obviously, the work you've been doing. It's a very comprehensive
27 plan, as you've kind of walked through it, and there's lots of
28 objectives and lots of strategies. I am curious to kind of hear
29 a little bit more from the standpoint of kind of the next steps,
30 the FY22 kind of action plan, that would be developed, because the
31 success, in my view, with so many of these strategic plans really
32 does come down to how they're implemented and, essentially, how we
33 prioritize the large number of strategies that are identified.

34
35 **MICHELLE DUVAL:** That's a great question, Andy, and I appreciate
36 you asking the question. Other councils that have strategic plans,
37 and I am thinking specifically about the Mid-Atlantic Council, as
38 you have indicated, the implementation plan is really where the
39 rubber meets the road, because no council can do everything at
40 once, and not all strategies can be implemented by a council at
41 one time.

42
43 Again, this is a five-year strategic plan, and so having that
44 annual process of development of an implementation plan I think is
45 key, and so I'm certainly not going to be around for the next five
46 years, every year, to help with the development of an
47 implementation plan, but that's part of my charge here, is to work
48 with council staff and work with the sub-group that Miguel would

1 like to set up to develop this prioritized list, and I think, in
2 doing so, it's really critically important to have those activities
3 for the upcoming year aligned according to the objectives that
4 they are meant to address.

5
6 They don't necessarily have to be, I think, lined up under a
7 specific strategy, but I think it's really important for
8 stakeholders and the public to understand the activities and how
9 the activities relate to these objectives, which are important for
10 the council to achieve its vision.

11
12 I will just note that -- I will just give an example of the process
13 that occurs in the Mid-Atlantic region, and so, beginning in
14 October, staff works to review the activities from the previous
15 year, it looks at how those have aligned with the strategic plan,
16 and it develops based on the progress of those activities, and,
17 obviously not every activity that a council undertakes is a one-
18 year-type of activity, but the staff then develops a draft list of
19 activities and priorities for the upcoming year.

20
21 The council reviews that, and then it has a second -- There is an
22 opportunity for the public to provide some input on that, between
23 October and December, and then, at its December meeting, the final
24 implementation plan for the following year is approved.

25
26 I will say that there's always a list of items that are kind of -
27 - It's a little bit of a wish list, and like, if it ends up that
28 we have a little bit more time, or some more resources, here's a
29 list of four or five things that we might decide to tackle, and so
30 apologies for the lengthy response, Andy, but it's an important
31 question, and I wanted to be thorough in my response.

32
33 **MIGUEL ROLON:** Marcos, I want to say something about the next
34 steps, but I would like to call to your attention that Vanessa,
35 Richard Appeldoorn, and Clay Porch would like a turn to speak, in
36 that order.

37
38 **MARCOS HANKE:** Thank you. I have, on the list here, Vanessa. Go
39 ahead.

40
41 **VANESSA RAMIREZ:** Thank you, Mr. Chair. I really want to recognize
42 all the great work that they have been doing with this strategic
43 plan, especially because the objectives are very direct and easy
44 to read, and, of course, Michelle, as you know, we're here to work
45 with you, and we'll be able to make the collaborations with the
46 fishermen, so they can participate in the public presentation of
47 this, and, also, as always, we will ask if we can have a copy in
48 Spanish, so that it's more easy for them and to help them to

1 discuss this. Thanks.

2
3 **MICHELLE DUVAL:** Thank you, Vanessa, and, yes, I am working on a
4 Spanish version as we speak, but I didn't want to finalize it until
5 after the council had the opportunity to review, and so thank you
6 very much for the question, and absolutely the plan is for a copy
7 in Spanish.

8
9 **MARCOS HANKE:** Thank you very much, Vanessa. Next in the queue is
10 Richard Appeldoorn.

11
12 **RICHARD APPELDOORN:** Thank you, Marcos. Let me first start off
13 reiterating what's been said about the work by the DAPs. It's a
14 really tremendous job by them. My question has to do with a little
15 bit of say organization. This is a strategic plan for the council,
16 yet, almost immediately, it breaks down into strategic plans that
17 seem to reflect the island-based FMPs, and, when I am reading, or
18 listening to, the objectives, they really are the same things,
19 slightly tweaked, for all islands, and they really should just be
20 the objectives of the council.

21
22 Where it changes, and this is significant, is the strategies that
23 need to be followed in different islands, because that's when you
24 get into the different cultural administrative governance
25 structures that exist there, and so I was wondering whether it
26 might be better to have all your objectives stated as objectives
27 stated by the council and not island-based, but the strategies
28 would then break down to be island-based.

29
30 This is, again, just an organizational question, and I am not,
31 certainly questioning the work and wisdom of the others, and, as
32 I said, that's a really good job that everyone has done. Thank
33 you.

34
35 **MIGUEL ROLON:** If I may, one of the reasons that we have that is
36 -- Because you are right, and the objectives are all the same, but
37 we wanted to reflect the participation of the island fishers, the
38 island communities, in the work that they did and the work that
39 they are going to pursue, because you're right about the objectives
40 and strategies. If I may, Mr. Chairman, before -- I will wait,
41 and then, when you finish the list, I can add a little bit more to
42 what Richard just said, but this is an important point.

43
44 **MARCOS HANKE:** Thank you, Miguel. I just noticed that Tony
45 Blanchard asked for a turn to speak, but the next one on the queue
46 is Clay Porch and then Tony Blanchard. Clay.

47
48 **MIGUEL ROLON:** You also have Julian, Marcos.

1
2 **CLAY PORCH:** Great. Thank you, first of all, Michelle, for this
3 presentation. I think it was very well done, and I agree with all
4 the comments before. I kind of wanted to follow-up on Andy's
5 comment, and I agree that, if we don't have an implementation plan
6 associated with this, what will inevitably happen is that this
7 basically gets put up on a shelf somewhere, and people kind of
8 forget about it.

9
10 I think, as part of the implementation plan, it's really key to
11 development measurable targets that you can actually track and
12 then have at least an annual process, if not a quarterly process,
13 where you are actually evaluating those metrics, and those can be
14 leading measures, looking at things that are telling you -- Are
15 pointing towards the end result that you want, and so you look at
16 the progress you're making on certain things, or it could be a
17 lagging measure, measuring the percent success that you have had
18 in implementing that particular implementation strategy.

19
20 I think it's just really, really key to do that, and I wonder if
21 Michelle, or anyone on the council, has any advice on how that
22 would be accomplished.

23
24 Related to that, various of us would be working with the council
25 to implement some of those strategies and achieve those objectives.
26 The Southeast Fisheries Science Center actually now had a working
27 strategic plan with an implementation strategy and measurable
28 targets and all that, and so it would behoove us to work with the
29 council to modify our own strategic plan and incorporate some
30 initiatives that are common goals between the council and the
31 Southeast Center, and so I will just leave that open to comment
32 for you, Michelle, and maybe also Miguel and anyone else on the
33 council. Thank you.

34
35 **MIGUEL ROLON:** Marcos, if I may, to that point.

36
37 **MARCOS HANKE:** Go ahead, Miguel.

38
39 **MIGUEL ROLON:** That's exactly why, in the last slide that Dr. Duval
40 put on the screen, we have the sub-committee, and the way that I
41 envision this is that the sub-committee -- If you look at the
42 strategic plan and the objectives, you would need millions of
43 dollars and thousands of people to work on it.

44
45 Therefore, we need to land on reality here, and I believe that
46 this committee should have a sub-committee. For example, Graciela
47 and Richard, as Chair of the SSC, can work with the Southeast
48 Fisheries Science Center to harmonize our strategic plan

1 objectives with the ones that the Southeast Fisheries Science
2 Center has, and then we can do it on a yearly or -- I mean, we
3 need to plan the whole thing through the budget cycle for these
4 four years from now.

5
6 We also need to be real about the things that we can do, and so
7 the meeting in December is very important, because, at that
8 meeting, we will decide how and when this group will meet to submit
9 to the council the plan for the following years. In the summer,
10 we need to check where are we, what have we done, what we said we
11 would do in January or December.

12
13 The process is dynamic, and sorry, Mr. Chairman, and I just wanted
14 to inject that, because what Clay Porch just said is exactly what
15 we are discussing, and, if we can separate the group at the sub-
16 committee -- I have, for example, Alida Ortiz, who will work with
17 the outreach and education part of the objectives and the
18 strategies. That way, when the council meets, you will have a
19 report from the group that is working on the strategy of let's say
20 science, with the Southeast Fisheries Science Center and the SSC.

21
22 You will have a report from the outreach and education and so
23 forth, and then it's very important to have, in the committee, the
24 three chairs of the DAPs, to look at the objectives and the
25 strategies of each island area, and so we will concentrate on what
26 is possible for the following year, what is possible for the next
27 two or three years.

28
29 The core of this plan, and I agree 100 percent with Clay, because
30 I hate to have this document put on a shelf and say we did it,
31 great, and that's it. No, and this is a very dynamic document,
32 and it will spell out the action of the councils to implement the
33 MSA and everything that we do in the following years, pinpointing
34 the priorities and also assign monies to those priorities and
35 actions. Thank you, Mr. Chairman.

36
37 **MARCOS HANKE:** Thank you very much. Next in the queue is Tony
38 Blanchard.

39
40 **TONY BLANCHARD:** Good morning. Sorry for being late to the
41 meeting, and I was having problems getting on. That was a good
42 presentation, Michelle, but I have -- Not really a question, but
43 a comment, or a comment and a question as to putting this
44 information on the website and getting it out there to the
45 community, and I think that's a good idea, but I think we
46 overemphasize that everybody does not get on the websites and look
47 up information. Now, the question is this. Is this going to be
48 brought in an in-person meeting before the public before any

1 measures are taken? That's a question.

2
3 **MICHELLE DUVAL:** Thanks for the question, Tony. I really
4 appreciate that, and so especially the fact that not all members
5 of the public have access to the internet, or may even think to go
6 to the council's website, and so I don't know about an in-person
7 meeting.

8
9 I think that that's something that I will leave for Miguel to
10 address, just given the state of the world as it is right now,
11 but, in terms of ensuring that people have opportunity to provide
12 comment on the draft plan, I don't think it's any problem to send
13 out a hard copy, along with a hard copy of a comment form, to
14 anyone who would like to provide comments on that, and I think, if
15 there are suggestions for how to do that --

16
17 I know that, in the past, Miguel and the staff have graciously
18 made copies of presentations related to the strategic planning
19 process and sent them out to the list of stakeholders that they
20 have that they send out notifications to, and so I might be
21 speaking beyond my authority here, but I do think that is one way,
22 sending out hard copies to folks, along with a hard copy of a
23 comment form, to make sure that they're able to comment. I think
24 I will leave -- I will let Miguel comment on having an in-person
25 meeting to present this to the public before actions are taken.

26
27 **MIGUEL ROLON:** Between here and December, we are not going to have
28 any in-person meetings. However, we can send the material, via
29 regular mail, to anybody interested, and we have to engage, and we
30 already did it, but just to reiterate for the record here, but we
31 are engaging the liaison officers in each one of the island areas.

32
33 We have Nicole Greaux, Mavel Maldonado, and Wilson Santiago, and
34 they will be in charge of also identifying those people who would
35 like to receive this documentation on paper, and they will have
36 let's say twenty sets each, so they can distribute it as needed,
37 and then word of mouth.

38
39 If you know somebody, or someone, who would like to have this on
40 paper, and they do not have capacities or the willingness to go to
41 the webpage, please let us know, and we will send them the
42 documents.

43
44 The other thing that we can do is to send a three-by-five postcard
45 to everybody that we have in our mailing list, and Iris can do
46 that, and Diana, and then announce that we have this available,
47 and, if you want a copy, please contact so and so, and we'll send
48 you a copy. That way, by December we will be able to have a report

1 on any comments that we might receive from today until probably
2 November.

3
4 **MARCOS HANKE:** Thank you. Tony, a follow-up?

5
6 **TONY BLANCHARD:** I'm going to be honest with you, Miguel, and I
7 think sometimes we don't really understand the people that we're
8 dealing with, when it comes to outreach, because -- I'm going to
9 be quite honest with you, and there are some surveys going around
10 that recently we found out that the surveys were being backed by
11 the Pew Foundation, and they are going under Lenfest.

12
13 Now, my question is this. You have surveys going out, and most
14 people don't look into these things, but, when it comes to like
15 who is behind the surveys, how do you think that's going to go
16 with the fishers, number one?

17
18 Number two, the other part of it is, at this point in time, when
19 any surveys goes out, it's going to be a question, and I don't
20 care who it's coming from, if it's even coming from the President,
21 and it's going to be questioned, because of the atmosphere with
22 the fishermen and the state in which the fishermen are being looked
23 at and handled by the government, number one, as well as other
24 user groups, meaning anybody who is willing to use this, and there
25 is a negative stigma towards us, and I don't know if we've got a
26 target on our backs.

27
28 At the end of the day, when these guys hear "survey", they're going
29 to take it and they're going to put it in the garbage can, and so
30 my take on having an in-person meeting, even if they could read
31 and comprehend, because we have been accused of being illiterate,
32 and even if they could read and comprehend the material on that
33 document, some will not do so, and they just won't grasp it.

34
35 There needs to be an explanation behind the documents in order for
36 this to work. Now, we could push it off any other way and downplay
37 it, but, if you're going to ask my opinion as to how I think this
38 should go, knowing the type of people that we are dealing with, I
39 think it needs to be an in-person meeting with an explanation
40 behind any questions that they might have concerning the
41 presentation, because what we are doing for outreach is not
42 working, and I will get into that later, when outreach and
43 education comes up, but that's just my take on it. I mean, at the
44 end of the day, this is above my paygrade, and so, whatever
45 everybody else decides to do, go ahead.

46
47 **MIGUEL ROLON:** Duly noted, Tony, and we will proceed with the
48 process that we set, and we will take into consideration your

1 comments, and, as soon as we can do it, provided that COVID allows,
2 we will have in-person meetings to explain this further.

3
4 Remember that this document is dynamic, and so it doesn't mean
5 that we decide between here and December will be locked in stone
6 and that will be it. The document is dynamic, and so, when we
7 have the mechanism, we can have in-person meetings, and we can
8 have workshops and continue the work, so that everybody that has
9 an interest will be able to participate effectively.

10
11 I hear what you're saying, and we have to take it into
12 consideration, and we have done it, Alida and I, and so, hopefully,
13 if we are allowed, in 2022, to have more in-person meetings, we
14 will take this into consideration and continue the conversation
15 with the public, because the first thing that we need to do, once
16 the plans are implemented, and I am talking about the island-based
17 FMP and any other plan, and this is a strategic plan, and it's not
18 a fishery management plan, but it's a plan, and we need to meet
19 with the people of Puerto Rico and the Virgin Islands and explain,
20 very clearly, what this is all about.

21
22 Then we can get the feedback from those groups and individuals
23 present and present it to the council in due time, and so it's a
24 good point, and we will take it, of course, into consideration.
25 Mr. Chairman, I believe you have Julian and a couple of others.

26
27 **MARCOS HANKE:** Yes, and I have Julian Magras.

28
29 **JULIAN MAGRAS:** Good morning to all. Thank you very much. First
30 off, I would like to start by saying a special thank you to Dr.
31 Duval. You did an awesome job with pushing this plan through and
32 working with our advisory panels, and a special thank you goes out
33 to all my members for the St. Thomas/St. John District.

34
35 The way this plan was put together I thought was awesome, because,
36 with Dr. Duval's leading the group, it was a very easy process,
37 and she was there to listen to what we had to say, and she took
38 everything into consideration and worded it and made sure that we
39 accepted the wording, and so a special thank you to everyone
40 involved in this process.

41
42 I am looking forward to where this plan is going to be implemented,
43 like everyone else out there, and we did so much work on this, and
44 I am looking forward to see where we're going to go with this,
45 and, to just chime-in with Tony, and I know my counterparts think
46 the same way, but, as soon as possible, once COVID can ease all of
47 this, to get this to the public in-person would be very well
48 accepted, I believe, but, as far as how social media works, not

1 everyone is there as yet, but, for right now, we understand the
2 circumstances, that we cannot do that, and so I look forward to
3 when we can, and so let's continue the hard work and push forward
4 this plan as it was created. Thank you.
5
6 **MARCOS HANKE:** Thank you, Julian. Is there anybody else in the
7 queue, Miguel? I don't see anybody.
8
9 **MIGUEL ROLON:** Helena wanted to ask a question before, but I don't
10 know whether she is still interested in that.
11
12 **MARCOS HANKE:** Helena, go ahead.
13
14 **HELENA ANTOUN:** Thank you, and I was just curious, regarding the
15 objectives that were being presented. In terms of the fishermen
16 that you want to engage in collaborative research, I was just
17 wondering if there are any plans to include funding for those
18 fishermen, and that's all.
19
20 **MICHELLE DUVAL:** Thanks for the question, Helena, and so it's --
21 I think that remains to be seen, and so it's really -- The objective
22 is about using fisher involvement and other collaborative research
23 approaches to meeting these needs, and, once those needs are
24 identified, to see if there are funding opportunities where those
25 needs can be included as priorities, and so I am thinking about
26 like cooperative research programs, which is unique to the
27 Southeast.
28
29 Typically, those types of cooperative research programs include
30 compensation for the fishers who are participating in the research,
31 but I don't personally have a specific funding source in mind or
32 something like that. I think things like that will come into play
33 with the development of the implementation plan, if that makes
34 sense, really getting down into the weeds of the actions that would
35 be necessary to get these things rolling.
36
37 **MIGUEL ROLON:** Marcos, if I may.
38
39 **MARCOS HANKE:** Go ahead, Miguel.
40
41 **MIGUEL ROLON:** In the case of Helena's question, for every proposed
42 project that we have here -- For example, we are working now with
43 the outreach and education that we would like to have a video
44 regarding the mutton snapper. I talked to Carlos Farchette and
45 others, and he talked to fishers, and we can incorporate the cost
46 of let's say a rented fisherman's boat, because, if you have one
47 or two days, they will not be able to go fishing, and so you need
48 to compensate.

1
2 The other thing is that this implementation plan doesn't mean that
3 the council will pay for everything and that the council will do
4 that, or the Southeast Fisheries Science Center, and it's just
5 that we are able to identify the different needs and prioritize
6 them, and then we can touch base with anybody interested in
7 pursuing that as a project.

8
9 It could be an independent person, or it could be a fishermen's
10 association, or it could be anybody who is really interested and
11 has the means to do it, and then we need to connect the people who
12 are donors, the people with the money, with the people who are
13 going to do the actions.

14
15 That is the beauty of having a plan like this, because we are able
16 to -- Probably, at the end of 2021, the only thing that we will
17 have is the plan itself and the committee appointed. The work
18 really starts in the first half, the first quarter, of 2022, when
19 we are going to identify each one of the priorities.

20
21 Going back to the way that we did it, the way that the DAPs were
22 incorporated, I expect the DAPs to also be included in any
23 prioritization that we have, and so that's why it's important that
24 we have this committee, and I'm sure that, when you talk to
25 fishers, that they will say the same thing, that I will be willing
26 to cooperate, but, also, I need to feed my family.

27
28 It's not an easy question to address sometimes in the budget, but
29 it's an important one, and so that's why we -- I am glad that
30 Helena brought this up, because it's the kind of thing that we
31 need to convey to everybody that is going to be working for the
32 next years, with the scientists and the fishers jointly working
33 together.

34
35 **MARCOS HANKE:** We have Michelle Duval to respond to the comments
36 and questions, and then we have Richard Appeldoorn. Michelle.

37
38 **MICHELLE DUVAL:** Thank you very much, Mr. Chairman. I just wanted
39 to circle back to a couple of the comments from Dr. Appeldoorn, as
40 well as Dr. Porch, and so I guess, first, to Clay, with respect to
41 the implementation plan and really the need for measurable targets
42 for implementation, to ensure that the plan moves forward and
43 ensuring that there's a process that is timely with respect to how
44 frequently the implementation plan is reviewed, I mean, I -- You're
45 preaching to the choir.

46
47 I agree with that, and I think keeping in mind what types of
48 metrics we will use is key in the development of the implementation

1 plan, and I agree that, because there are -- Because NOAA Fisheries
2 has regional strategic plans as well, that I think are combined,
3 both between the Regional Office and the Science Center, making
4 sure that some of the things that are identified in the council's
5 plan are also aligned with the priorities of NOAA Fisheries is
6 going to be -- It's going to be really critical to accomplishing
7 those things.

8
9 I know that, in the Mid-Atlantic, up in the Northeast, when the
10 Mid-Atlantic Council and New England Council review their
11 priorities for the upcoming year, NOAA Fisheries -- The Regional
12 Administrator and the Science Center Directors up there provide
13 comment on those, and they are involved in that, and so I am happy
14 to reach out to both you and Andy, offline, to get some further
15 input on how to make that a productive and efficient process.

16
17 Just with respect to Dr. Appeldoorn's comments on the organization
18 of the plan, I agree, Rich, that absolutely there are a lot of
19 similarities, and a lot of overlap, with respect to the island-
20 specific objectives, and I think, if you guys recall, back a couple
21 of presentations ago, I presented the tables of the different
22 priority issues that were considered by the council, as well as
23 the district advisory panels, and I showed a chart of where those
24 overlaps were.

25
26 I can pull that up and show it again, so that you can see how those
27 overlaps played out, and I would also note that -- Again, there is
28 two ways of doing this. We can have island-specific objectives,
29 which I think allow for maybe a little bit more individualization
30 of what the priorities are for each of the council's districts,
31 or, as you suggested, collapsing all of the objectives into just
32 one set of objectives and breaking out strategies by island.

33
34 Either can be done, and it was suggested to me, when I first
35 started in this process, that I think, given the way the island-
36 based fishery management plans were developed, where certainly
37 there is a lot of overlap in the objectives and the goals that
38 were developed for each one of those plans, but there are, you
39 know, minor -- There are tweaks to those that reflect the
40 individual needs and priorities of each of the districts.

41
42 I just wanted to have the opportunity to explain a little bit of
43 where that came from, and I don't necessarily think that one method
44 of organization is better than another, and I think there are
45 benefits to either one. Thank you.

46
47 **MARCOS HANKE:** Thank you, Michelle. Richard.
48

1 **RICHARD APPELDOORN:** Thank you, and thank you for that answer,
2 Michelle. I was going to speak back to the question of cooperative
3 engagement of fishers with the research programs. One of the
4 places where the council can help is try to push the programs that
5 are available to facilitate this collaboration, and I will speak
6 to one example from a proposal that Michelle Scharer and I had put
7 forward through the Cooperative Research Program.

8
9 Where it got shot down was we were going to pay the fishermen for
10 the days that they were working on our project, which was days
11 that they would not be fishing, and the critique was that, well,
12 if this is a collaborative program, this should be what the fishers
13 are putting into the program, and, therefore, they shouldn't be
14 charging for their time, and I thought that was, and Michelle
15 thought, was completely wrong.

16
17 If this is really a feature of the collaborative research program,
18 that's going to stop a lot of potential collaboration, and so, to
19 the degree that the council can lobby those programs to amend how
20 they view that, that is one way to facilitate increasing the
21 collaboration with the fishers.

22
23 **MIGUEL ROLON:** Mr. Chairman, we are not allowed to use the word
24 "lobby", but I know what Richard is saying, and certainly Graciela
25 and I will talk to Richard and see if we can provide information
26 to the right people in the right places about the importance of
27 engaging the fishery in these projects and compensating them for
28 their time and effort.

29
30 **MARCOS HANKE:** Thank you. I share your comment and position that
31 is expressed by Richard, and we really need to be effective in
32 this matter. I don't see anybody else in the queue. What do you
33 need from the group? Do you need a motion to approve this language,
34 what is proposed, or what is the next step, Michelle?

35
36 **MICHELLE DUVAL:** Thank you, Mr. Chairman. I think what I've heard
37 is that we would like to add an objective under the management
38 goal for Puerto Rico that is similar to the objective for St.
39 Thomas/St. John that considers the potential impacts of climate
40 change on the efficacy of management measures, and so I can go
41 ahead and do that, so that is part of the draft plan that would be
42 available for review by the public. I think what I'm looking for
43 today is approval of this draft plan for public input, as modified
44 today, if the council is amenable to that.

45
46 **MARCOS HANKE:** Yes. I got it. Do we have to do it through a
47 motion, Miguel, or just ask the council on the record?
48

1 **MIGUEL ROLON:** In the case of this, adding this, we can just go
2 ahead and add this line, because this is something that the DAP
3 Puerto Rico -- We don't have to go back to it, and so the council
4 has the authority to include it. Then the other thing that we
5 need is the motion to approve the document as presented by Dr.
6 Duval and also to follow the next steps.

7
8 **MARCOS HANKE:** I need a motion from council members. Who can help
9 me on that?

10
11 **MIGUEL ROLON:** Well, one thing that you can do, in order to -- If
12 nobody opposes, then the line is added to the DAP Puerto Rico.

13
14 **MARCOS HANKE:** Is there any opposition to add the lines that were
15 just expressed by Michelle Duval? Hearing none, this is the way
16 it will be. Do we still need a motion, Miguel?

17
18 **MIGUEL ROLON:** Well, the motion now is to -- Now that you have
19 heard her presentation, Dr. Duval's presentation, we can go back
20 to the last steps. Michelle, can you put that on your screen
21 again? We can have a motion to adopt the draft plan, as presented,
22 and follow the process, as outlined by Dr. Michelle Duval.

23
24 **MARCOS HANKE:** I need help from the council members for the meeting
25 to move along. Go ahead, anybody.

26
27 **MIGUEL ROLON:** Marcos, I propose to have the language, and Liajay
28 can write it on the screen, and she's an expert on writing stuff
29 on the screen now. Liajay, are you ready?

30
31 **LIAJAY RIVERA:** Yes, I am.

32
33 **MIGUEL ROLON:** Okay. Liajay can share her screen, and I will
34 propose the language, and then, please, council members, add,
35 delete, and modify. **The motion will be for the council to accept
36 and endorse the CFMC -- The draft five-year strategic plan as
37 presented by Dr. Michelle Duval on July 21, 2021.**

38
39 **MARCOS HANKE:** The word "draft" is not there.

40
41 **MIGUEL ROLON:** Let her finish. **And to follow the process to
42 present this to the general public for any comments and
43 suggestions. The final draft document will be presented to the
44 CFMC at the December 2021 meeting for final action.** Thank you,
45 Liajay.

46
47 **MARCOS HANKE:** Thank you, Liajay.

1 **MIGUEL ROLON:** Marcos, that is the proposed language, but whoever
2 makes the motion can change it as he pleases or she pleases.
3
4 **MARCOS HANKE:** Thank you to both for the support. Council members,
5 any changes or to move the language, to move the meeting along?
6 Go ahead.
7
8 **VANESSA RAMIREZ:** Motion presented as it is. So moved.
9
10 **MARCOS HANKE:** Thank you.
11
12 **CARLOS FARCHETTE:** Second.
13
14 **MARCOS HANKE:** Thank you, Carlos. Any opposition?
15
16 **MIGUEL ROLON:** Before that, you need to have discussion, Marcos.
17
18 **MARCOS HANKE:** Go ahead, Andy.
19
20 **ANDY STRELCHECK:** The motion, as worded, doesn't reflect the
21 suggested change for the Puerto Rico objective, and so it seems
22 like we would want to capture that in the motion.
23
24 **MIGUEL ROLON:** We can say as modified and presented by Dr. -- As
25 modified and presented by -- Will that do that trick, Andy?
26
27 **ANDY STRELCHECK:** Yes, and I think Michelle certainly understands
28 our intent, in terms of the medication, and so that will be good.
29
30 **MIGUEL ROLON:** Vanessa, do you accept the modification of the
31 language by Mr. Strelcheck?
32
33 **VANESSA RAMIREZ:** Yes, I accept.
34
35 **MIGUEL ROLON:** If Carlos agrees, then you can continue the
36 discussion and to vote, Mr. Chairman.
37
38 **CARLOS FARCHETTE:** I can agree with what Mr. Strelcheck was saying
39 about the objective and the change for all three islands, but I
40 didn't hear anything from St. Croix, but I don't think, as a
41 council member, that I have any right to change our objectives,
42 but I would like to include that for St. Croix.
43
44 **MIGUEL ROLON:** Carlos, the only thing that they are modifying is
45 that they are to include climate change.
46
47 **CARLOS FARCHETTE:** That's what I am referring to.
48

1 **MIGUEL ROLON:** They don't have it in St. Croix?
2
3 **CARLOS FARCHETTE:** No.
4
5 **MIGUEL ROLON:** If the council agrees, then to modify will include
6 the same as Puerto Rico for the St. Croix component of the
7 strategic plan. Michelle, do you agree?
8
9 **MICHELLE DUVAL:** Whatever is the pleasure of the council, Miguel,
10 and certainly I can add that same objective as a specific objective
11 under the St. Croix section of the management goal for climate
12 change, just noting that there are also other climate-change-
13 related strategies scattered throughout the remaining pieces of
14 the plan as well, and so I will go ahead and add that for both
15 Puerto Rico as well as for St. Croix.
16
17 **MIGUEL ROLON:** Mr. Chairman, I believe it's very clear, for the
18 record, that the intent is to modify the strategic plan to include
19 climate change concern recommendations in the three DAP sub-
20 sections of the objectives and strategies.
21
22 **MARCOS HANKE:** Carlos Farchette, are you satisfied with the
23 clarification and the adoption of your comments?
24
25 **CARLOS FARCHETTE:** Yes.
26
27 **MARCOS HANKE:** Thank you. Is there any further discussion about
28 the language? Go ahead, Tony.
29
30 **TONY BLANCHARD:** I agree with the language, except for the fact
31 where it's going to be a final draft in December, to be presented
32 at the council for final action, because I don't see this being
33 effective as to getting out who it needs to get out to unless we
34 have an in-person meeting, and that's my opinion.
35
36 **MIGUEL ROLON:** The contract that we have with Dr. Duval ends on
37 December 31, and we have taken this to the public in many different
38 ways, and that's okay, but we need to finish this. Mr. Chairman.
39
40 **MARCOS HANKE:** Tony, thank you for your position, but just be
41 mindful of the implementation, and there will be further
42 participation from the groups, and hopefully in-person. Any
43 further discussion about the motion and what is going to be voted
44 on in a few minutes?
45
46 **MIGUEL ROLON:** Let's do a roll call vote by name.
47
48 **MARCOS HANKE:** Miguel, just a moment, please. Hearing no other

1 persons that want to make a comment during the discussion, Tony
2 Blanchard, to vote.
3
4 **TONY BLANCHARD:** No.
5
6 **MARCOS HANKE:** Vanessa.
7
8 **VANESSA RAMIREZ:** Yes.
9
10 **MARCOS HANKE:** Carlos.
11
12 **CARLOS FARCHETTE:** Yes.
13
14 **MARCOS HANKE:** Damaris.
15
16 **DAMARIS DELGADO:** Yes.
17
18 **MARCOS HANKE:** Virgin Islands.
19
20 **NICOLE ANGELI:** Yes.
21
22 **MARCOS HANKE:** Who is representing the Virgin Islands today? I
23 cannot recognize your voice.
24
25 **NICOLE ANGELI:** Nicole Angeli
26
27 **MARCOS HANKE:** Okay. Thank you, Nicole. I was not sure who was
28 on the meeting, and I'm sorry. Nicole Angeli.
29
30 **MIGUEL ROLON:** For the Virgin Islands, the person that can vote is
31 Dr. Angeli or the Commissioner.
32
33 **MARCOS HANKE:** Yes, I agree, and I just didn't recognize the voice,
34 and that's all.
35
36 **MIGUEL ROLON:** For the record, Dr. Angeli just voted.
37
38 **MARCOS HANKE:** Yes. Nicole Angeli just voted. Marcos Hanke, yes.
39 There is no abstentions.
40
41 **ANDY STRELCHECK:** I am a yes.
42
43 **MARCOS HANKE:** Andy, thank you. I just got lost here. Thank you,
44 Andy, for your vote of yes. No abstentions. **The motion carries.**
45
46 **MIGUEL ROLON:** The motion carries, and you have to say six in favor
47 and one against.
48

1 **GRACIELA GARCIA-MOLINER:** One against, right?

2
3 **MARCOS HANKE:** One against, Tony Blanchard, and the rest of the
4 council members voted for the vote, voted yes.

5
6 **MIGUEL ROLON:** The motion carries.

7
8 **MARCOS HANKE:** Yes, the motion carries. Thank you very much.
9 That's all, Michelle, and thank you very much for your presentation
10 and a great discussion. We are ready for the next item on the
11 agenda, but I would like to propose the group for a five-minute
12 break to stretch your legs and get coffee. Five minutes. Anybody
13 in opposition of that?

14
15 **MIGUEL ROLON:** You are the chairman.

16
17 **MARCOS HANKE:** Hearing none, let's come back in five minutes.

18
19 (Whereupon, a brief recess was taken.)

20
21 **MARCOS HANKE:** Thank you, everyone. We are back to the meeting at
22 10:42 a.m. We are going to restart the meeting. The next
23 presentation is Update on the Fishery Ecosystem Plan, and Michelle
24 Duval will be the presenter.

25
26 **UPDATE ON THE FISHERY ECOSYSTEM PLAN STAKEHOLDER ENGAGEMENT**
27 **WORKSHOPS**
28

29 **MICHELLE DUVAL:** Thank you, Mr. Chairman. Again, this next
30 presentation is just an update on the stakeholder engagement
31 workshops in support of the development of the council's fishery
32 ecosystem plan, and so, similar to the last presentation, I would
33 just like to give a little overview of what I plan to cover in the
34 presentation.

35
36 First, I'll just provide a little bit of information on the project
37 background and purpose. Then I will review the methods and
38 outreach, and then, after that, we'll walk through the conceptual
39 models and finish up with next steps for this process.

40
41 I thought that I would just start with a little bit of background
42 on fishery ecosystem plan best practices, and I know the council
43 is probably familiar with this, but the schematic that you see up
44 on the screen, on the right-hand side, is called the FEP loop, and
45 this represents the best practices that were developed by the
46 Lenfest Fishery Ecosystem Taskforce related to fishery ecosystem
47 plan development, and that very first step is where are we now and
48 assessing that.

1
2 In order to do that, this involves co-creation of a conceptual
3 model amongst stakeholders, managers, and scientists to identify
4 and inventory the components of a fishery ecosystem and how they
5 interact.

6
7 I think one of the best practices that is really highlighted, and
8 that I would like emphasize is this quote that you see on the
9 screen, which is that stakeholder input is central to fishery
10 system planning, and so broad stakeholder involvement is really
11 necessary in order to identify tradeoffs that may not necessarily
12 be apparent to decision-makers or to scientists.

13
14 Just a little bit more background on the current project, and so
15 this is part of a larger coordinated effort to reach as many
16 stakeholders as possible, in line with those best practices, and
17 so the current project is a result of communication between the
18 Pew Charitable Trusts, the Outreach and Education Advisory Panel
19 Chair, and the council Executive Director regarding identification
20 of a variety of stakeholder groups for FEP development, including
21 local government, coastal businesses, local environmental non-
22 governmental organizations, scientists, and others.

23
24 The Pew Charitable Trusts offered to provide support for a subset
25 of stakeholder engagement workshops, and so I was hired as a
26 contractor to do workshop facilitation and develop outreach
27 materials and write up the report, once the models were developed.
28 Pew staff provided logistical staff during the workshops, by
29 running the Mental Modeler software that's used to develop the
30 conceptual models, as well as backup for the workshop recordings.

31
32 Also part of this effort, as the council is well aware, is the
33 Lenfest Ocean Program awarded a grant to several members of the
34 council's ecosystem-based fishery management plan technical
35 advisory panel, and a couple of those folks are also members of
36 the council's SSC, and so this group of folks are leading an effort
37 in similar engagement workshops with the science community,
38 experts, managers, and others.

39
40 I worked with the Lenfest PIs to ensure that we were all using the
41 same type of methods with respect to these engagement workshops,
42 and then, of course, outreach to the fishing community has been
43 spearheaded by the council, through the district advisory panels,
44 although the Lenfest PIs are also reaching out to fishers who may
45 not have been involved through the DAP process.

46
47 The purpose of this project, overall, is, in keeping with those
48 best practices, really to ensure that a variety of stakeholder

1 viewpoints are incorporated into the development of the council's
2 overall conceptual model and to engage a subset of stakeholder
3 groups that are not frequently involved in the council's work.

4
5 These are coastal businesses, such as dive shops, surf shops,
6 hotels, guest houses, outdoor guides, as well as local
7 environmental non-governmental organizations, or eNGOs, based in
8 island district. The objective was to develop conceptual models
9 for each stakeholder group in each district, and so how is this
10 done?

11
12 The first thing I did was to develop a set of outreach materials,
13 and so this included two-page information briefs in both Spanish
14 and English, and one of these focused on fishery ecosystem plans,
15 and so what they were, a little bit of information on the council's
16 fishery ecosystem plan, and the second one was about conceptual
17 models and how these tools are used, and these were distributed to
18 all stakeholders who accepted the invitation to participate.

19
20 Then, with respect to stakeholder contact, there was an extensive
21 stakeholder list developed in coordination with the O&E AP chair,
22 with support from Sea Grant staff, and so this targeted a broad
23 range of coastal businesses and eNGOs, and separate workshops were
24 conducted for each of these stakeholder groups in each district,
25 and so you have two stakeholder groups, three districts, and so
26 this was a total of six workshops.

27
28 A small group approach was used for each workshop, and this was
29 done to really ensure that all attendees were able to participate,
30 as well as to allow for a thorough discussion of ideas, and so the
31 maximum target size was really eight to twelve participants for
32 each workshop, and invitation were sent out to over forth eNGOs
33 and over eighty coastal businesses, and these invitations were
34 sent by email, roughly four weeks in advance of the workshop, and
35 then follow-ups were made both by email as well as phone for non-
36 respondents, and then an agency with the connection information
37 and outreach materials were sent to confirmed stakeholders.

38
39 Just to make sure that we maximized our participation, I sent a
40 reminder email with the agenda and materials a couple of days prior
41 to the workshop, and then all participants received reminder phone
42 calls one day in advance, and so these workshops occurred in late
43 April and then throughout May as well.

44
45 The workshops were all virtual, just due to the pandemic, and so
46 these were two-hour facilitated workshops. All of the workshops
47 were recorded, and all participants were informed that they were
48 being recorded, and we did -- I did use evening workshops for the

1 businesses, and that was done to really maximize participation,
2 understanding that small business owners are pretty much busy all
3 during the day, and the only time they have to participate is
4 really in the evening, and so I do also want to note that, for the
5 Puerto Rico workshops, simultaneous translation was used, and all
6 workshop materials, including the presentation, were provided in
7 Spanish.

8
9 Each workshop started with a brief presentation, and so this was
10 a little bit of review of the background information that all
11 participants received regarding fishery ecosystem plans and
12 conceptual models, and then I used a series of trigger questions
13 and time for individual brainstorming to identify and develop the
14 biological, social, and economic components of the different
15 models, as well as to identify the relationships, or the linkages,
16 between the different components.

17
18 Then, after the workshop, I sent a thank-you email to every
19 participant, and everyone received a link to a Google document
20 that contained a schematic of the conceptual model, and so I
21 allowed two weeks for participants to provide any additional
22 feedback or relationships or linkages between components, and so
23 this was part of the effort to just validate the model.

24
25 I didn't receive a whole lot of comments on any of the models, but
26 the few comments that were received were incorporated into the
27 conceptual models, and then I also reviewed the workshop
28 recordings, just to ensure the accuracy of what was captured, to
29 make sure that all components were captured accurately and all
30 linkages among the components were captured accurately.

31
32 Now I will just quickly walk through the conceptual models, and I
33 am going to start with the St. Croix environmental non-governmental
34 community, and so I just want to spend -- All of these schematics
35 of these conceptual models look roughly the same, and so I just
36 want to spend a couple of minutes orienting everyone to those, and
37 so you see that there are a couple of components with green circles
38 around them and a couple of components with pink circles around
39 them.

40
41 The components that have the green circles around them are two of
42 the components that were most affected by other components, and so
43 lots of relationships, or linkages, coming into those components,
44 and so I am calling those receiver components. Then the two
45 components that you see the pink circles around were two of the
46 components that affected the most other components, and so lots of
47 linkages coming out of those components, and so I am referring to
48 those as drivers.

1
2 In full disclosure, this is different than how drivers and
3 receivers are referenced within the Mental Modeler software, but,
4 for illustration purposes here, this is how I am referring to
5 those.

6
7 The model developed by the St. Croix environmental non-
8 governmental community, two of the receiver components that were
9 identified were water quality and coral, and then two of the driver
10 components were anthropogenic influences and regulatory agencies.

11
12 Moving on to the St. Croix coastal business community, this model
13 is a little bit busier, but I know you all have seen these types
14 of models many times before, and so three of the receiver
15 components identified by the St. Croix coastal business community
16 were water quality, reef fish, and coral reefs. Then two of the
17 driver components were actually restoration of nursery habitats
18 for fishes and coral species protection.

19
20 Moving on St. Thomas/St. John, this was the model developed by the
21 environmental non-governmental community in St. Thomas and St.
22 John, and so two of those receiver components identified by this
23 group were water quality and coral, while two of the driver
24 components identified were land-based sources of pollution and
25 runoff.

26
27 Then the St. Thomas/St. John coastal business community -- Again,
28 this one is a little bit busier, but two of the receiver components
29 identified here were coral reefs and sea turtles, whereas two of
30 the driver components identified by this group were government
31 agencies and lack of environmental education.

32
33 Moving on to Puerto Rico, the environmental non-governmental
34 community, this is, again, a very complex, thorough model, and so
35 two of the receiver components identified by this group were reef
36 fish and water quality, whereas two of the driver components
37 identified were climate change and public education.

38
39 Then, finally, the Puerto Rico coastal business community
40 conceptual model, and so this -- Two of the receiver components
41 identified in this model were reef fish and coral reefs, and then
42 two of the driver components were lack of management and education.

43
44 I wanted to also just highlight, I think, some of the common themes
45 among these two different types of receiver and driver components,
46 and so, again, the receiver components were those that were
47 affected by the most other components, and so there were three
48 that were more common here, and these were water quality, coral or

1 coral reefs, and reef fish, and so water quality was identified by
2 both of the St. Croix stakeholder groups, by the St. Thomas/St.
3 John eNGO groups, as well as by the Puerto Rico environmental non-
4 governmental community, whereas coral and coral reefs also
5 identified as receiver components by both St. Croix stakeholder
6 groups, both St. Thomas/St. John stakeholder groups, and Puerto
7 Rico coastal businesses. Then reef fish was identified as a
8 receiver component by both of the Puerto Rico stakeholder groups.

9
10 A similar, I guess, assessment of common themes from the conceptual
11 models for the driver components, and so, again, these are
12 components that affected the most other components, and these are
13 primarily education, and then similar terms used -- Excuse me.
14 Certainly different terms used, but for similar concepts, are
15 government, regulatory agencies, and management, and so education
16 was identified as a driver by both Puerto Rico stakeholder groups
17 as well as the St. Thomas/St. John businesses, and then this
18 government/regulatory agencies/management component was
19 identified by the Puerto Rico businesses, St. Thomas/St. John
20 businesses, as well as the St. Croix NGOs.

21
22 Really, the next steps -- Again, this is just meant to be an
23 update. The models have been completed, and the stakeholder
24 workshops are done, and it's really presentation of these
25 conceptual models to the FEP technical advisory panel for
26 incorporation into the overall council model, as well as some
27 additional analysis and then completion of the project report.
28 Just a quick update for everybody, and so, Mr. Chairman, I am happy
29 to take any questions that folks might have.

30
31 **MARCOS HANKE:** Yes, and we're going to open for questions, and I
32 just want to make a comment before that. Great presentation,
33 again, and I like very much the explanation of the receiver and
34 the driver components, and that gives a visualization that we
35 didn't have before, and it's basically simplifying everything,
36 but, at the same time, having the detail, if it's needed. Thank
37 you very much, and I'm very impressed with the team of you, J.J.
38 Motta, Graciela, Stacey Williams, and, for me, that's assurance of
39 quality and participative channels for this kind of work. Thank
40 you very much, Michelle. Now it's open for questions. Does
41 anybody want to make a comment or a question?

42
43 **VANESSA RAMIREZ:** Yes, Marcos. Michelle, can you say more about
44 the distribution of the stakeholders that participate in these
45 workshops?

46
47 **MICHELLE DUVAL:** Thanks for the question, Vanessa. Do you mean
48 like with respect to the coastal businesses? The two stakeholder

1 groups that were identified were coastal businesses, and so that
2 included surf shops, and that included dive shops, and that
3 included restaurants, and that included small hotels, and it
4 included large hotels, and it included -- There was a very
5 extensive list that was developed, as I mentioned in coordination
6 with the O&E AP chair, as well as Sea Grant staff.

7
8 The invitations were sent out to an array of coastal businesses,
9 spanning all of those different categories, and, with respect to
10 the environmental non-governmental organizations, these were
11 organizations that had their place right there on each of those
12 island districts.

13
14 **VANESSA RAMIREZ:** Thank you, Michelle.

15
16 **MARCOS HANKE:** Thank you, Vanessa, for the question. Anybody else?
17 Any other questions? I guess that's it. Do you need anything
18 else from the council, Michelle, at this time, or we are okay?

19
20 **MICHELLE DUVAL:** No, Mr. Chairman. This was really just an update,
21 to let you know that this work is -- The conceptual models have
22 been done, and I will be passing those off to the EBFM Technical
23 Advisory Panel, and the work has been completed, and so thank you.

24
25 **MARCOS HANKE:** Thank you very much, again. We are ready for the
26 next item on the agenda. Thank you to all the council members for
27 their participation. Next is the SSC Report with Dr. Richard
28 Appeldoorn.

29
30 **SSC REPORT**

31
32 **RICHARD APPELDOORN:** Thank you, Marcos. This is the report from
33 the SSC. We met last week, on the 14th, and the issues we discussed
34 were the new Caribbean Branch, and we had an overview of that from
35 Kevin McCarthy, who is the Branch Chief, and I won't say any more
36 about that.

37
38 Also, we had an update on the National SSC Meeting, but the bulk
39 of it was on our review of the data-poor tech memo, which you'll
40 also be getting a presentation on, and so this is putting something
41 a little bit before that, and the red hind spawning dynamics and
42 closed season issues by Michelle Scharer, which you will also be
43 hearing later about. Finally, a presentation on the Puerto Rico
44 electronic reporting program and the potential extensions into
45 electronic monitoring.

46
47 Very briefly, the National SSC Meeting is actually called the
48 Scientific Coordination Sub-Committee, and this is the seventh

1 meeting of that. It was supposed to have occurred a year ago, and
2 it's now been okayed to be rescheduled as an in-person meeting
3 next year, 2022, in Alaska.

4
5 The overall theme of that is going to be ecosystem-based fisheries
6 management, with three focal areas: incorporating ecosystem
7 indicators into stock assessment, needs for managing interacting
8 species, and assessing species with shifting distributions,
9 primarily due to climate change.

10
11 I think our council, in particular, our SSC, will have a lot to
12 say about the ecosystem indicators, based on the work that the TAP
13 and Lenfest group are doing. All aspects of this meeting need to
14 renegotiated, even who are going to be the keynote speakers,
15 because schedules have all changed and everything, and we have a
16 conference call next month to start rescheduling and renegotiating
17 everything.

18
19 We do expect, however, that there will be travel support for three
20 SSC members from each council to attend the meeting, and so that's
21 the information that's available, at the moment, relative to that
22 meeting.

23
24 The bulk of our time was spent looking at two things, and one of
25 those was the tech memo on data-poor fisheries, and this is the
26 official title of it, but I have underlined "flexibilities" and
27 "data-limited stocks", because this is a tech memo that addresses
28 what to do with data-limited stocks, and it allows for new
29 flexibilities in developing things that were not available to the
30 councils or the SSCs before.

31
32 As I state here, it's all about flexibilities for setting OFLs and
33 ABCs and ACLs, and this is to be applied when catch data are
34 lacking or are insufficient.

35
36 That means to say that we can use other things besides catch data
37 to set reference points and target limits for individual stocks,
38 and some examples of alternative reference points might be based
39 on average length or maintaining a juvenile-adult ratio,
40 maintaining a level of catch per unit effort, maintaining an
41 average density. There's a lot of things that could be used here,
42 and so I don't want to lock us into thinking about any one thing,
43 and this is all new, and we'll have to approach it with a broad
44 mind.

45
46 One of the nice things about this is that we can use multiple
47 indicators at one time for any given stock, and so, given just the
48 list above, we might want to have that it has to be within a range

1 of catch per unit effort and have an average length of some
2 magnitude.

3
4 These indicators could also be used in conjunction with numbers or
5 weight-based reference points, as we currently have, and so we
6 could actually enhance what we have.

7
8 The tech memo gives guidance on what they're calling the (h)(2)
9 flexibilities, as to qualification of when can you use these, and
10 they give some examples, as I mentioned, of alternative approaches,
11 such as ACLs being expressed in terms of rates, and that would be
12 a catch per unit effort example, and what stocks would qualify for
13 the application of (h)(2) flexibility, but lack data for a rate-
14 based, and so there will still be things that you can do besides
15 rates.

16
17 You're going to get a presentation on this later, and so I won't
18 emphasize any of this, but we did look at these things and come up
19 with a number of, I guess, statements, if you will.

20
21 The SSC endorses the (h)(2) flexibilities for assessing the
22 overfishing status of data-limited stocks presented in the draft
23 tech memo, given that all stocks within the U.S. Caribbean would
24 benefit, a point that has been long recognized. Nevertheless,
25 while we see great promise with this enhanced flexibility, we
26 anticipate that there will be operational difficulties to overcome
27 in their application and expect a period of testing before such
28 methods can be routinely applied.

29
30 In other words, this is something we have, in the Caribbean in
31 particular, and the Western Pacific, have been advocating for well
32 over a decade, and so it's great to see that this is now coming to
33 fruition, but, as with any method, its application is going to be
34 something that has to be worked out and make sure that the science
35 is good and that it's justifiable, and so there's a lot of work to
36 be done, and it's just not something we're going to plug in and
37 all of a sudden we're fine. Potentially, once we do have something
38 developed, it can be updated very quickly from year to year, but
39 that is further down the road.

40
41 The SSC recognizes that there will be a substantial process
42 involved in prioritizing which species should be addressed using
43 this enhanced flexibility, due both because of the high number of
44 species within the U.S. Caribbean that would benefit and the
45 limitations within the Science Center, particularly the number of
46 assessment staff, and so we have lots of species and stocks across
47 the three islands that need to be addressed. We're going to have
48 to be strategic in how we do this, because, given the limitations

1 and the demands on particularly the Science Center staff, this is
2 a process that's going to go slowly.

3
4 An additional benefit is identified in that some standard fishery
5 management tools, such as size limits, closed areas and seasons,
6 et cetera, more directly relate to potential reference limits that
7 may result from these more flexible approaches, and so, if we were
8 using a length measure, for example, to set limits, then size
9 limits would, obviously, be a measure that would directly relate
10 to that, much more so than size limits relate to say a catch quota.

11
12 The SSC notes that the timing of this effort dovetails nicely with
13 other efforts within the region to improve monitoring and
14 assessment, including efforts to improve the quality, amount, and
15 statistical validity of landings data. For example, the recent
16 pilot study of the Puerto Rico commercial catch resulted in over
17 14,000 length estimates, which is a dataset that would be
18 available, should length-based measures be one method that we want
19 to pursue, other methods.

20
21 The formation of the Caribbean Branch within the Science Center
22 and their more targeted efforts to increase and improve available
23 data, the initiation of electronic monitoring of catches within
24 Puerto Rico, and the initiation of integrated stock assessments
25 through the SEDAR process, and we recognize that, while weight and
26 number-based OFLs are the ideal, improvements in data collection
27 and application of the (h)(2) flexibilities create a bridge,
28 ultimately to achieve that goal.

29
30 We still have a goal out there that we would like to have, in terms
31 of having the data to be able to apply the more rigorous models
32 that we would do through a SEDAR process, but that will still take
33 a long time to do that, despite all these really encouraging
34 activities that are underway, but using the flexibilities buys us
35 time, to where we can improve our assessment and management of
36 species while we move to achieve that more rigorous goal.

37
38 The next thing we talked about was the red hind spawning dynamics
39 and the relationship to closed seasons, and so the SSC heard and
40 discussed a presentation by Dr. Scharer, who is also an SSC member.
41 As a co-investigator myself, I recused myself as Chair when this
42 topic was discussed, and neither myself nor Dr. Scharer
43 participated in the voting on the recommendations that follow.

44
45 As a recommendation, it's to amend the Puerto Rico FMP to modify
46 the seasonal closure for fishing or possession of red hind in
47 federal waters west of the 67 degree, 10 minute West longitude and
48 for the Tourmaline and Abrir la Sierra Bank red hind spawning

1 aggregations to December 15 to March 15. Currently, they are the
2 beginning of December to the end of February.

3
4 The rationale for this was to reduce the impact on red hind
5 spawning stocks at the west coast spawning aggregations on the
6 last few days of their reproductive period, due to a shift in
7 timing of the aggregation. A fish spawning aggregation does not
8 form, and that is to say we have not recorded it to form, before
9 December 15, but aggregations can remain after the March 1 opening
10 that is currently in place, and so that's the rationale for
11 requesting a shift by fifteen days on either end.

12
13 Another recommendation is to support the implementation of
14 continued long-term fish spawning aggregation monitoring to
15 determine changes in the spawning stock/populations of red hind
16 off of western Puerto Rico.

17
18 The rationale for this was that we should be measuring the benefits
19 of management measures for red hind populations off the west coast
20 of Puerto Rico, and so this is very similar to, I think, comments
21 we've gotten from particularly the representatives in St. Thomas
22 about the need for monitoring what's going on and having that
23 relayed back to the council as to the status of these measures.
24 The committee was particularly concerned about what the population
25 size was of red hind off of Puerto Rico, and, again, Michelle will
26 be presenting material later that hopefully will show this.

27
28 The SSC requests the council to ask the Science Center to evaluate
29 the seasonal closure, currently February 1 to April 30, for red,
30 black, tiger, yellowfin, and yellowedge groupers in federal waters
31 in the U.S. Caribbean, as applicable, to ensure it coincides with
32 the timing of spawning aggregations for these species. Our
33 rationale for this request is that closed seasons should coincide
34 with the spawning seasons as much as possible.

35
36 Lastly, we heard a presentation by Alfredo Sfeir of ShellCatch on
37 electronic reporting and electronic monitoring. Electronic
38 reporting has been implemented in Puerto Rico's commercial
39 fishery, and that implementation is increasing as time has gone
40 on, but recall that there are more than 700 fishers who are
41 reporting now using the electronic reporting program, and this was
42 freeing up staff at the Commercial Fisheries Lab to utilize their
43 time to better monitor the quality of that data, and so it's
44 yielding, as a result, more and better data.

45
46 A lot of the data still has to be reviewed by someone reading it,
47 but it's eliminating the need for manual data entry, and so that's
48 where the savings really come in, and so we thought this was a

1 very -- It's a really very great activity that's happening, and,
2 as this expands, it hopefully can expand across islands and into
3 the recreational fishery and that this will greatly enhance the
4 amount of data and the quality of data that we're getting, and
5 this, of course, would be in conjunction with other activities
6 that are happening.

7
8 They have now, as was reported to us, been able to link the Puerto
9 Rico database that is resulting from this with the database
10 maintained by NOAA Fisheries, and so that data can be made
11 available to NOAA on a very, very timely basis, but note that this
12 is currently all done under a contract between ShellCatch and the
13 DNER of Puerto Rico.

14
15 We also were presented a preview of upcoming capabilities using
16 electronic monitoring, and this is mostly in the form of boat-
17 based video at the moment, which would be, eventually, in
18 conjunction with artificial intelligence. That is to say that,
19 using boat-based video, you could monitor -- I will make something
20 up for a trap fishery, but how many traps were being set and
21 hauled, what was being brought out of the traps, and you could
22 even get the lengths of the fish as they are being taken out of
23 the traps and whatnot, and so this is all possible, and he just
24 kind of gave us a view of kind of how this would work.

25
26 They have other contracts with other countries and organizations
27 where they are trying to develop that basis, and it seems
28 promising. However, at the moment, they are reading all the videos
29 manually, but they are working on developing artificial
30 intelligence capabilities that would be able to identify fish and
31 estimate the length, et cetera, all automatically.

32
33 This is an exciting capability that's coming down the pike, and
34 don't expect it next year, but it's being actively worked on, and
35 so these kinds of capabilities are going to be available to us,
36 and we need to think about should we apply them, how can we apply
37 them, and there's, obviously, going to be some issues with
38 confidentiality that will have to be addressed, but it's all very
39 exciting, in terms of the technology that's being developed.

40
41 Due to time constraints, and, at this point, it was already past
42 six o'clock in the evening, and the SSC did not consider any
43 recommendations relative to the electronic reporting and
44 monitoring issues. We were just kind of very interested in the
45 capabilities that are becoming available now, and we'll just leave
46 it at that, and I think that's the last slide. Thank you. Any
47 questions?

1 **MARCOS HANKE:** Thank you very much, Richard. Council members, do
2 you have questions? Carlos, go ahead.

3
4 **CARLOS FARCHETTE:** Richard, hi. Earlier in your presentation, I
5 saw something that I am not familiar with. It is rate-based ACL,
6 and I'm not sure what that is.

7
8 **RICHARD APPELDOORN:** Okay. Currently, all of our ACLs are based
9 on weight and derived from catch data somehow, and so that's a
10 weight-based ACL. A rate-based ACL would be something where our
11 target is not to maintain a certain level of catch, but to maintain
12 a certain level of say catch per unit effort, and so maybe we can't
13 -- We don't have a good handle on the total catch coming in for a
14 species, but we do have some standardized measures of catch per
15 unit effort for that species, and, therefore, you might want to
16 say, okay, we want to maintain catch per unit effort at or below
17 some level that we think will be sustainable, and so it's no longer
18 based on numbers of fish or weights of fish, but it's based on a
19 catch per unit effort, and so that's a rate-based reference point.

20
21 **MARCOS HANKE:** Any other questions?

22
23 **ANDY STRELCHECK:** Marcos, I wanted to thank Richard for the
24 presentation, and I really like the SSC's suggestion for doing
25 some pilot study work. One thing that is potentially on the
26 horizon for the Caribbean, and a good thing, is that there is, in
27 the President's budget, some additional funding for territorial
28 science, both in the U.S. Caribbean and the Western Pacific.

29
30 To me, it presents a huge opportunity for us to, I think, to
31 improve some of the data collection, and so the pilot studies, in
32 my view, and, Rich, I would be interested in your perspective,
33 but, in order to kind of move to these flexible management
34 measures, we really need to then ensure that we have sufficient
35 data collection to support that kind of underlying management.

36
37 If the average length is the target, then we need to make sure
38 that we're collecting a sufficient number of samples to determine
39 the average length for the fishery, and so I'm curious kind of
40 your perspective in terms of the pilot studies and kind of where
41 we're at with data collection and what you would see as some of
42 the improvements that would be needed to meet these flexibility
43 standards.

44
45 **RICHARD APPELDOORN:** I'm not sure I can answer that in any kind of
46 real detail, but I can give some examples. The SSC has not heard
47 yet the presentation by Todd Gedamke on the pilot program that he
48 has been overlooking in Puerto Rico, but there was a presentation

1 given at the council meeting, at the last meeting, and Todd is now
2 back on the SSC, and he gave us a little bit of inkling of what
3 has come from that, and also, again, what's coming down the pike,
4 in terms of automating things even more, and so that figure that
5 I gave of 14,000 length measurements is something that came out of
6 the pilot study.

7
8 If this was to be implemented fully, we would expect substantial
9 enhancement of the number of length measurements that we being
10 taken, and, if this can be automated, which is one of the goals
11 that I know that Todd has, and he has people who are set up to try
12 and develop artificial intelligence, and so something can just be
13 passed under a video camera and moved on, and no one has to sit
14 there and actually measure and then record the data, and it's all
15 being done through artificial intelligence.

16
17 This can both decrease the amount of time that a port sampler is
18 intervening with any fisherman and increase the amount of data
19 that is coming through that, because there would also be automatic
20 species recognition with that, and so the fish is just passed under
21 the camera, and it moves on.

22
23 If we reach that kind of level, we're going to have length
24 measurements galore for at least the species that are caught in
25 abundance to give us hundreds to thousands of length measurements
26 that we would really like to have, with really good data. One
27 could certainly work with less data, but then the uncertainties
28 start rising substantially, but I think that the kind of
29 information that we're going to be able to get, using the port
30 sampler approach, and we'll add in the e-reporting that Puerto
31 Rico is doing, and that will, I think, start feeding in a lot more
32 data that will be applicable to these more flexible alternative
33 reference point approaches.

34
35 It will really, at some point, come down to, okay, what are the
36 key species that we want to look at, are we getting sufficient
37 length information for them, or do we need to target some sampling
38 for them, but, other than that, I think this is really promising,
39 and then we'll get down to those species which really are not
40 amenable, and then we have to think about what are our data
41 sources, but we have other data sources, such as the visual census
42 surveys that NOAA Fisheries is doing in conjunction with the
43 National Ocean Service, I think, and those also provide a lot of
44 information on lengths and biomass that could be used for stock
45 assessment purposes as well, and so there's lots of different
46 sources of data that are coming in, and so I think we're going to
47 have --

1 Our data is probably going to increase faster than our ability to
2 deal with it, in terms of the staff time that's available, but,
3 once we have a system set up, you can see where you could automate
4 these data streams to have these reference points monitored on a
5 very timely basis, once they're set up.

6
7 **MARCOS HANKE:** Thank you for the answer. Next is Clay.

8
9 **CLAY PORCH:** Thank you, Chair, and thank you for that presentation,
10 Rich. One, I'm very excited to see that the SSC is embracing some
11 of these alternative techniques. I did want to mention, in terms
12 of the artificial intelligence, the automated image analysis,
13 we've actually, in several arenas, made great strides in that.

14
15 For instance, with our underwater video surveys, we have now gotten
16 to the point where we can process the videos on the ship, just
17 after they have been collected, and we're still working out some
18 of the details in regarding training the software to distinguish
19 all the species, but, for the majority of high-profile species,
20 the recognition percentage is really high, and, like I said, it's
21 really fast, because, right now, reading those images manually
22 takes an extremely long period of time.

23
24 For us, it generally takes about six months to read all the
25 underwater videos that we take, and then you've got to process all
26 of that information. Once we get this automated image analysis in
27 place, and, like I said, we've made great progress, I expect that
28 we will get that time down to a month or so, and that would be
29 really important, if we started using information like that to
30 manage fisheries on a CPUE-type basis.

31
32 I also wanted to turn to maybe ask Rich this question, if the SSC
33 had really talked about what management measures would look like,
34 and it's easy to say, for instance, that we would monitor catch
35 per unit effort, but you have to then say, okay, how do we monitor
36 catch per unit effort, and that would probably require electronic
37 monitoring and this automated image analysis, so that that
38 information can be processed quickly and without error, and then
39 you have to think about what do you do, and okay, so, if the catch
40 per unit effort drops below a certain threshold, then that would
41 demand stopping fishing.

42
43 I am just wondering if they had much conversation about exactly
44 what these measures would look like, and I recognize there is a
45 lot of kinks to be worked out. Thank you.

46
47 **RICHARD APPELDOORN:** I will say this. We recognized all the
48 difficulties that you just mentioned, or potential difficulties,

1 and that's why we have the statement that we recognize the
2 difficulties of implementation, because, while this is allowing us
3 a lot of flexibility, the implementation is not straightforward,
4 and it will need to be worked out, and perhaps on a species-by-
5 species basis, if we need to do that.

6
7 We did not have any discussion about where to go at this point,
8 and we were putting our discussion mostly in terms of what the
9 documentation was presenting, which was added flexibilities, and
10 we're embracing those added flexibilities. They're not going to
11 be a panacea, but we do think they're going to be very helpful.

12
13 You mentioned the one aspect about, okay, if catch per unit effort
14 falls below some level, or goes too high, for example, what do you
15 do, and that's the same problems we have faced with our weight-
16 based ACLs, and you're going to have other issues as well, in terms
17 of looking at length and how does recruitment affect your average
18 length, and so there's perhaps ways to look at that, in terms of
19 catch per unit effort, and that's why the ability to have multiple
20 indicators might be the best way to view the application of these,
21 because none is going to be perfect in their own right, but, if
22 you can use multiple ones, they might give you a better sense of
23 what's happening in the fishery.

24
25 We discussed these issues in very general terms, realizing that
26 the application of these is where the rubber meets the road, and
27 that's where we're going to have to spend a lot of time working it
28 out, and we're going to be counting on the Center to strongly help
29 us with that.

30
31 **MARCOS HANKE:** Thank you, Richard. I have a question to Clay,
32 Richard, or maybe Andy. How do you three visualize this transition
33 period, where we're going to have a potential new method or a new
34 way to do business, in terms of collecting science or collecting
35 data, with the SEDAR process?

36
37 I think, from my point of view, I think it's important to recognize
38 that there is capacity building already in the area of pursuing
39 those species that are on the schedule for SEDAR, and how is this
40 going to be addressed in the future and not to be empty handed in
41 the near future, just to follow-up with what we have on hand
42 already, and that's for any of you three. Thank you.

43
44 **RICHARD APPELDOORN:** I would just say, from the SSC's point of
45 view, we recognize that the SEDAR process and the types of models
46 that we can look at that, even the data-poor ones, are where we
47 want to work towards, and so these flexibilities that we're getting
48 now are kind of a bridge for what we can do in the meantime.

1
2 The potential amount of data that can come through these automated
3 processes that are coming online will allow a lot more data to be
4 collected in a most statistically-rigorous way, and it will help,
5 therefore, to reduce a lot of the variability, or at least be able
6 to measure directly the variability, and, as a consequence, more
7 species will be able to be bumped up into the Tier 1, 2, and 3
8 levels of the SEDAR process.

9
10 That is where we're going, and I think we're going to be seeing an
11 improvement, a big improvement, as these technologies and studies
12 come to their fruition, and so SEDAR, to me, is still going to be
13 the way to go, and, again, another burden on the staff, Clay, but
14 it's the gold standard, and, in the meantime, if we can get
15 something going with some of these flexibilities, so much the
16 better.

17
18 **MARCOS HANKE:** Thank you. Graciela, is there anybody requesting
19 a turn to speak? Tony, go ahead.

20
21 **TONY BLANCHARD:** I have a question for Rich. Good presentation,
22 and, now, I am a little concerned about the catch per unit effort
23 and how it's being looked at, because catch per unit effort goes
24 up and it goes down, but, at the end of the day, or, for the lack
25 of a better description, to the end of the year, everything
26 balances out. Now, that's one concern. The other concern is --

27
28 **MARCOS HANKE:** Tony, I cannot hear you. I lost you. I am going
29 to text him that we lost him, and I'm going to give him a turn to
30 speak again. Clay and Andy, did you want to make any comments
31 about the question that I made earlier?

32
33 **CLAY PORCH:** Thank you. I agree with Rich that SEDAR is the way
34 to go on this, and I would say that we've actually been looking at
35 these alternative techniques for quite some time. In fact, I would
36 say the Southeast Center was helping to lead the curve on this,
37 and so none of those techniques that are in the NS 1 Guidelines
38 are new to us.

39
40 We're well prepared to execute them, and the main problem was
41 having the data to do even most of those ideas, but, as Rich
42 pointed out, we're getting better and better at collecting
43 information, but I think the real problem and challenge for the
44 council is going to be, once you get this information, how are you
45 going to actually implement it, and Tony was getting to one of
46 them when you were talking about catch per unit effort, but, as
47 Rich pointed out, if you were monitoring mean size, and the mean
48 size falls below a certain level, what are you going to do?

1
2 It's always easier to explain that you have exceeded a catch limit
3 than it is to explain that you have exceeded an appropriate fishing
4 mortality rate, and so there will be some challenges along the
5 road, but, if you really don't know catch, or have the ability to
6 enforce catch, then it is appropriate to look at these other
7 approaches. It doesn't make them easy, but they may be the most
8 viable alternatives, until we get, as Rich said, to those Tier 2
9 and Tier 1 stock assessments.

10
11 **MARCOS HANKE:** Thank you for this participation, Clay. One thing
12 that I personally believe is the multiple factors, and not just a
13 single one, and also having a baseline to compare to those on those
14 catch per unit effort level, or anything that we're going to use
15 in the future, that we can compare to, right? This is a process
16 that is going to keep building, and we are excited to have an
17 opportunity to have a new tool in the toolbox to address our data-
18 poor area. Let's see if Tony Blanchard is back online to finish
19 his thought.

20
21 **TONY BLANCHARD:** Was any of the chairs of the DAPs at that meeting,
22 the SSC meeting?

23
24 **RICHARD APPELDOORN:** No, not to my knowledge.

25
26 **GRACIELA GARCIA-MOLINER:** Nelson Crespo was there during the SSC
27 meeting.

28
29 **TONY BLANCHARD:** Okay. Did they have any input to the meeting,
30 Nelson?

31
32 **MARCOS HANKE:** I was at the meeting, too. Off the top of my mind,
33 I don't remember input or anything that he participated, and maybe
34 I am wrong, but he was available to participate anytime and to
35 request his participation by the chairman of the SSC. He was
36 available there.

37
38 **TONY BLANCHARD:** Because my take is I believe that the chair of
39 St. Thomas especially, knowing Mr. Magras, would have some comments
40 on what was going on through the meeting, some input to bring to
41 the meeting, and so that was my concern, that the only DAP chair
42 that was there was Puerto Rico. Ed wasn't there either, to my
43 knowledge, and so that's the point that I am trying to bring.

44
45 **MARCOS HANKE:** Tony, thank you for your point. Actually, it's
46 appropriate for Mr. Julian Magras, if he wants to say anything
47 about the presentation on this matter, to keep advancing this
48 discussion forward.

1
2 **JULIAN MAGRAS:** The question that I had was -- Well, it was a
3 comment. Number one, I never received the information about the
4 SSC meeting, and so I was not there. I was contacted the day
5 after, to tell me that there was a meeting, and I found that very
6 strange, that I didn't know about the meeting. I called Ed, and
7 Ed told me that he never got the login information. I called
8 Nelson, and Nelson told me that he was on, and so that's the past
9 now, but I heard all of what was on the agenda, and I found it
10 very alarming that I wasn't able to make a lot of comments on what
11 was taking place.

12
13 I do have issues with the way that we are trying to move forward
14 with this new data way, and there's a lot of loops in there, and
15 it's creating a lot of issues. When Puerto Rico did their pilot
16 study, it showed where they were off by thousands and thousands of
17 pounds, and that can trigger accountability measures, and that can
18 also trigger where fisheries completely shut down, and I think,
19 before we move forward with any of these methods, that they need
20 to be looked at a lot more carefully.

21
22 We have been asking for more port sampling, and we still go back
23 to a project that the Virgin Islands did not want to participate
24 in that we are trying to move forward that project again. The
25 best port sampling, and the best data that you can receive, is
26 hands-on, and there are lot of people out there -- We need to go,
27 but the answers to a lot of the other stuff that took place at
28 that meeting -- I wasn't there, and so I have to wait until the
29 next meeting, and hopefully I will know about it, that I can make
30 my comments on the record.

31
32 It's just like the conceptual models, and here is that we are going
33 off the creation of conceptual models created by Lenfest, who is
34 guiding us, and, come to find out, Lenfest is funded by the Pew
35 Foundation, and we have a serious problem with that, and so you
36 have the whole Pew that is pretty much running the whole conceptual
37 model stuff, and so I am going to leave it at that.

38
39 I hope that, at the August meeting, that I will have a presentation
40 from the fishers of the St. Thomas/St. John District on our
41 disappointment in how a lot of things are going on, and we need to
42 get back on track, to where we are working together, instead of
43 trying to get back to where we were in the past of working against
44 each other. Thank you.

45
46 **MARCOS HANKE:** Thank you for your comments, Julian. Is there
47 anybody else would like to make a comment about the presentation?
48 Otherwise, I have a question for the group.

1
2 **RICHARD APPELDOORN:** Marcos, I would just like to remind everyone
3 that they are going to hear a presentation on the tech memo and on
4 the red hind, and so hearing our comments before they have heard
5 those presentations perhaps is somewhat putting the cart before
6 the horse, but there will be a chance to hear those presentations
7 and make comments.
8

9 **MARCOS HANKE:** Yes, Richard, and we have also on the webpage of
10 the council all those meetings announced, and this is how I
11 connected, and it's a public platform for everybody to access. I
12 want to remind all the council members to always be connected to
13 the best tool we have, which is our webpage. Are there any other
14 questions to Richard?
15

16 Hearing none, I would like to ask Richard about the recommendation
17 of the SSC, and I would like especially the representatives of
18 Puerto Rico to express about the recommendation about moving the
19 red hind closed season fifteen days towards March, but I think
20 it's appropriate, Richard, and this is my point on this, to do it
21 after -- To come back to this after the presentation of Michelle
22 Scharer a little later on in the agenda, and do you agree with
23 that position, with that statement?
24

25 **RICHARD APPELDOORN:** Absolutely. I think that the council should
26 hear the full arguments, and they would more fully understand the
27 basis for our recommendations.
28

29 **MARCOS HANKE:** Thank you. Let's do that then, and people,
30 especially from Puerto Rico, Nelson and Damaris, that this
31 addresses specifically our area, and it's another example of why
32 we did the island-based management approach, looking for that.
33 After, we're going to come back to this discussion, to see what
34 we're going to do with the recommendation of the SSC, after
35 Michelle Scharer's presentation. Hearing nobody else asking for
36 participation, we are finished with Richard's presentation, and we
37 are going to go now to Michelle Scharer's presentation.
38

39 **CLOSED SEASONS FOR CERTAIN SPECIES**

40

41 **MICHELLE SCHARER:** Thank you. Good morning. My name is Michelle
42 Scharer. I have been doing research in the west coast of Puerto
43 Rico for about twenty years now, thanks to Richard Appeldoorn and
44 other collaborators that I have named here, like Tim Rowell, Carlos
45 Zayas, Eric Appeldoorn, Ron Hill, Hector Ruiz, and Evan Tuohy.
46 We've been fortunate to work with all these organizations that I
47 have listed here in different aspects.
48

1 Basically, today, I am hoping that this information will help us
2 have a good discussion to inform MPA, or area-based, management in
3 a more ecosystem-based approach, and, specifically, to address the
4 potential for red hind fisheries to be improved by enhancing the
5 reproduction in a critical part of their life cycle.

6
7 I brought in a little bit of history. We had a SEDAR in 2014,
8 and, at that time, the red hind was the most abundant grouper
9 caught in Puerto Rico, and it was about 2 percent of total
10 landings, and I believe that's now Grouper Unit 3, and this graph
11 demonstrates the spatial distribution around Puerto Rico of where
12 those landings come from.

13
14 Historically, we had about 100,000 pounds total being caught, and
15 then, after 2005, we are around 40,000, or 50,000, but, in the
16 light blue, you can see a lot of that comes from the west coast of
17 Puerto Rico, and so, in the next slide, in the most recent time,
18 and these are data that the Department of Natural and Environmental
19 Resources put together for the most recent data available, we can
20 see that a high proportion of all pounds landed of red hind is
21 coming from the west coast, but there is a significant increase in
22 what's being landed from the east coast of Puerto Rico, but we
23 don't have any federal waters on the east coast, and so that's why
24 we're focusing today on the west coast for red hind. The mean,
25 like I said, of these past few years was around 47,000 pounds of
26 red hind for the whole island of Puerto Rico.

27
28 Before we had a closed season for red hind in the island of Puerto
29 Rico, and that was appropriately in 2004, when the DNER put out
30 fisheries regulations, and, before, a lot of the landings of red
31 hind were constrained to the month of January, February, and a
32 little bit in March, and so this is historical data of the landings
33 of this species, mainly during the time that they aggregate to
34 spawn, and this was work done by Ojeda et al. and working with
35 fishermen to get information specific about spawning aggregations.

36
37 Again, with the data that DNER provides, the most recent data are
38 the years 2012 to 2007, and I tried to reconstruct these monthly
39 landing patterns of the proportion of all the fish captured --
40 Sorry. Of all the red hind reported, and we can also see that
41 there is a decline now during December, January, and February,
42 compared to the previous graph, because that's a closed season,
43 and we're not supposed to be landing red hind, but there is another
44 significant peak in August and September, except of course in 2017,
45 when we were hit by the hurricane, Hurricane Maria.

46
47 This is a summary of many efforts that have been going on on the
48 west coast of Puerto Rico, and I just wanted to show this map of

1 why we're working off the west coast of Puerto Rico, specifically
2 in the federal jurisdiction area, because everything that you see
3 in green is basically Puerto Rico jurisdiction, and the
4 recommendations that come out of this research are specific for
5 that little chunk within that red circle.

6
7 Basically, these are areas where, again, fishermen reported that
8 there were spawning aggregations for multiple species, and not
9 only for red hind, but most of those areas are off that western
10 shelf coast, and they are in federal waters, and so the research
11 we've been doing includes different methods to try to assess the
12 populations of red hind, but, more specifically, what's going on
13 when they aggregate to spawn.

14
15 We've done diver surveys at some of these aggregation sites for
16 red hind, and there has also been work funded by the council to
17 look at Nassau grouper with acoustic tags at Bajo de Sico, which
18 is that little corner up in the left part of that map.

19
20 Thanks to an S-K-funded project, we were able to collect fish --
21 Sorry. Red hind between Puerto Rico, St. Thomas, and St. Croix
22 with the same methods, to look at size and age, their fecundity,
23 their sex ratios, and what we've been doing consistently at one of
24 these sites off the west coast, at Abrir la Sierra, is passive
25 acoustic monitoring.

26
27 It's also going on at other sites, but not as consistently as Abrir
28 la Sierra, and, basically, we're listening to the courtship-
29 associated sounds. We record the sounds that are produced by the
30 fish, and we convert that into sound pressure levels, which
31 basically gives us an indication of when the fish are present.

32
33 We collaborated with Laurent Cherubin from Harbor Branch, and we
34 deployed gliders that also listened for the red hind throughout
35 the west coast, and, more recently, we're piloting a grouper
36 sighting project with fishers off the west coast of Puerto Rico,
37 so that, if they're diving, and they see a Nassau grouper, they
38 can provide us with the size and the coordinates and the habitats
39 of these fish, and we can then monitor if that species is
40 recovering off the west coast.

41
42 These are some preliminary results from the collection of red hind.
43 It's important for everybody to understand that it's really
44 different when we're looking at red hind, because they are a
45 protogynous species, which just means that they change their sex
46 as they grow. When red hind are small, they're all females, and,
47 at a certain size, which is approximately eleven inches long, then
48 they transition to be males, and they have very complex social

1 structures, due to these types of aggregations.

2
3 We have been able to document that the males arrive first at the
4 aggregation sites, and some of them migrate quite a ways, and then
5 they have to set up and defend territories between males, and they
6 have like a harem structure when they're aggregated, and so one
7 male can have lots of females in his little area, but the females
8 move in and move out of the aggregation during different lunar
9 cycles at the aggregation site.

10
11 We know that the female fecundity increases with size, and so
12 bigger females will have more eggs, but they also need lots of
13 males to fertilize those eggs when they spawn.

14
15 We have also observed that the males and the larger-sized females
16 are remaining at the aggregation site longer, and then, after the
17 whole aggregation is over, that's when they go and migrate back to
18 their home range, and so, on this graph, I plotted preliminary
19 results of the number of females, which is the red bar, and males,
20 which is the blue bar, at three sites that we sampled during 2016,
21 and the sex ratios at the west fish spawning aggregation site was
22 seventeen females to one male, whereas, in the fishing grounds of
23 the same area off the west coast, when they're not spawning, the
24 sex ratio is four females to one male.

25
26 If we compare that to samples from the fishing grounds off the
27 east coast of Puerto Rico, we can see, also, a two-to-one sex
28 ratio, and it's important to compare the west coast fish spawning
29 aggregation ratio with results collected at the Red hind Bank and
30 at Lang Bank, because these were collected during the same time,
31 and we see the sex ratios are pretty different in the Red Hind
32 Bank. They're three-to-one, and, at the Lang Bank in St. Croix,
33 they're nine-to-one.

34
35 Why is this important? Because, as I said previously, we need
36 various males to be able to spawn with all these females and
37 effectively fertilize those eggs, so that we have a complete life
38 cycle and we have sufficient generations of red hind to repopulate
39 our stock.

40
41 This graph is a summary of all the diver surveys that we have made
42 at Abrir la Sierra over the years. Unfortunately, we don't have
43 the same effort every year to go there and do a lot of dives, to
44 be able to assess how many fish are there, but some years we've
45 had funding to do a more specific repeated sampling on one lunar
46 cycle, or at least two, but, in other years, we can only get there
47 once, and so we really haven't seen a change in the density of the
48 red hind of the aggregation site, but this may be an artifact of

1 not completely sampling every aggregation with the same factors,
2 but it is with the same method at least.

3
4 This is the basis of the technology that we're using for passive
5 acoustic monitoring of grouper sounds. Some of you may remember
6 the work by Carlos Sargus that was presented at the council
7 describing the different sounds that red hind produce. We also
8 have described the sounds of Nassau grouper, of yellowfin grouper,
9 of black grouper, and, basically, these sounds are different
10 between the different species, but they're also different
11 depending on the behavior that the fish are conducting when they
12 are aggregated.

13
14 We have these two main sounds that red hind produce when they're
15 aggregated, and some are during setting up their territorial
16 defense behaviors or courtship or, in the case of Nassau grouper,
17 we have also seen competition between males for a mate associated
18 with sound.

19
20 Peaks in sound production occur at sunset or at dawn, and so what
21 we've done is we're recording 24/7 during six months, but we
22 extracted the 6:00 p.m. hour to calculate sound pressure levels,
23 and this is all work that Eric Appeldoorn has been doing, and so
24 the sound pressure levels is basically how loud it is within that
25 frequency where we know the fish are producing sound, and, for the
26 examples that I am going to present you, the 150 to 300 hertz
27 frequency, it's filtered, and so we don't look at the other
28 frequency bands, because we know the grouper are not making sounds
29 in those other frequency bands, but, if you go to the next slide,
30 I can show you better the difference between counting the sounds
31 versus calculating the sound pressure levels.

32
33 This is one of the examples that I will be showing you, but, here,
34 we have two datasets. The gray bars are counting how many actual
35 sounds, individual sounds, were heard within that hour, and we
36 summed that for the hour, but, for the sound pressure levels, that
37 calculation of sound pressure level for each file is averaged over
38 the hour, and so, every day, you can see how the sound pressure
39 levels increase or decrease, and that coincides pretty well with
40 the number of sounds that we are hearing the red hind produce.

41
42 All of these graphs that I am going to show you, they all have a
43 red line, a red vertical line, and it's been placed on March 1,
44 because that's the day that the closed seasons end, and, after
45 that, it's legal to catch red hind, but, in some cases, you will
46 see that we can still detect the presence of the fish, because of
47 the sounds they produce.

1 I am going to go pretty quickly through a time series, and I tried
2 to show you, from the point of view of the red hind, what their
3 aggregations look like. Every year, we have calculated these sound
4 pressure levels for the -- I have just cut it down from December
5 to March because this is the area of interest, because we don't
6 really hear them before or after making these peaks to show that
7 they are aggregated, and the little circles on the top are the
8 full moon, and so, if you go to the next slide, I am going to shift
9 every time series, so that we you can see how they coincide on the
10 red hind schedule, which is associated to the moons and not
11 necessarily to the dates.

12
13 In 2011 and 2012, I think we were pretty okay that the closed
14 season came after the red hind were no longer present. In 2013,
15 we noticed that the fish were present after March 1 at this site,
16 and we were not quite sure why that was happening, but we kept on
17 looking at the same time series, to see if it happened again.

18
19 In 2014, we see presence of red hind after March 1 at the site.
20 In 2015, it was not apparent. The two main peaks of the red hind
21 sound production were previous to March 1, but there was a little
22 bit after that. Then, in 2016, we can see that there's a peak
23 there precisely on March 1, but, when these sound peaks are just
24 one day, we have to go back and check the record and make sure
25 what produced the sound, but it could be other interference, or it
26 could be whales, or it could be boats. Sometimes, when there is
27 a strong swell, or current, we'll see those one-day peaks.

28
29 In 2017, this is the time series of the sound production levels
30 for Abrir la Sierra, and it looks like we were okay in 2017. In
31 2018, we see presence of those high sound levels after March 1.
32 Then apparently it happened again in 2019. This is the record for
33 2020, and we see presence of red hind sounds after March 1. Then
34 we also see here that there was presence of red hind straddling
35 that date of March 1, and a little bit afterwards, according to
36 the sound levels.

37
38 This is what the red hind calendar for spawning looks like, and so
39 these two peaks, the strong two peaks, generally occur in January
40 and February, but sometimes, due to the timing of the moon and the
41 month, those peaks can also occur after March 1, and so the bars
42 that I have put in here, that are either gray or green, are
43 basically where March 1 is going to be on the red hind calendar
44 for the following ten years, and only two of those that are in
45 green, 2025 and 2028, can we predict that the red hind will be
46 done with the aggregation before March 1. For all the other years,
47 there is either going to be a coincidence with the end of the
48 second peak on March 1 or there may be a third peak when fish will

1 be present after March 1.

2
3 This is based on predictions that were put forth for the Virgin
4 Islands, and so a model that was worked out on the relationship
5 between the full moon and the winter solstice, but, in our case,
6 in the west of Puerto Rico, the red hind are a little bit more
7 delayed on the moon, and so this is why it's a little bit different
8 from the case in the Virgin Islands, and maybe the east coast of
9 Puerto Rico.

10
11 Here is a summary of the conclusions for what we've observed in
12 the past and what we expect for the future, if the same patterns
13 hold. For the few years in the past, we have four of all those
14 years where we did not have a problem with March 1, but, the other
15 63 percent, we had either a peak after March 1 or the second peak
16 occurred after March 1. That's why we're recommending just to
17 shift the dates, because, if the same pattern holds in the future,
18 80 percent of the time, we may fall short of protecting the end of
19 the spawning aggregation.

20
21 Why this shift is occurring is still a mystery to us. There are
22 many hypotheses that have been put forth by other researchers, and
23 some have to do with low abundance of the aggregations. When there
24 is not a lot of fish, the fish kind of wait and hang out, to see
25 if more arrive, and that takes longer after the time they were
26 supposed to spawn.

27
28 There is also a concept of hyperstability, where, at the
29 aggregation site, you see the same density, but that aggregation
30 is actually shrinking in space, and so, in total, you have less
31 fish.

32
33 Then another possibility is that we have changes in the sea water
34 temperature, or, actually, variations in the incidence and the
35 strength and the direction of the currents, which we know are cues
36 for spawning, when the fish are already aggregated, and we have
37 seen research where they have studied shifts in the space used by
38 fish when they are going to spawn, but we haven't had a lot of
39 research on shifts in the time that fish use to spawn, and so all
40 of these things are future lines that we could look at to decipher
41 what's going on, but, basically, we want to recommend, to improve
42 the grouper fishery in Puerto Rico, that these spawning
43 aggregations complete their life cycle and that all those eggs are
44 spawned into the water column, so that we have more red hind in
45 future years.

46
47 What we discussed at the council was to shift this ninety-day
48 closed season when the sacrifice of not fishing red hind may be

1 more useful, and so that would be starting 15 December to the 15th
2 of March. It's really important to monitor these aggregations,
3 because they are very variable, and they may be shifting, and these
4 things -- We have to be there to see them on time and not after
5 it's too late, and so, if we ensure the closed seasons provide
6 protection at the most vulnerable time, that would help forward
7 the management of those species, and we would also be able to
8 document how effective these seasonal closures are at the MPA sites
9 and also demonstrate the benefits of not fishing for those three
10 months.

11
12 We also have data that suggests that the black grouper and the
13 yellowfin grouper, perhaps the tiger grouper, and the Nassau
14 grouper are using different times as historically, and so this is
15 something that we also have some research on, but, in the case of
16 Nassau grouper, although it is a prohibited species, the
17 aggregation off the west coast of Puerto Rico is within a marine
18 protected area, and the seasonal protection there ends on March
19 31, but we have seen activity in April, for the same reasons that
20 I just discussed for red hind.

21
22 Even though they're not supposed to be caught, if they're
23 aggregated, they're vulnerable. If they're brought up, they could
24 suffer barotrauma, and we would like to avoid any of that, to
25 recover the species.

26
27 Something that's really important is that these closed seasons
28 need to be enforced, both at-sea and on the land, throughout the
29 supply chain, and, finally, a recommendation would be to educate
30 the critical importance of conserving fish spawning aggregations,
31 so that we have sustainable fisheries. That's it, and I am happy
32 to answer any questions.

33
34 **MARCOS HANKE:** Before the questions, I have -- Because of the
35 timing, I will ask Michelle and Richard, because this is related
36 to the SSC report too, if it's not more productive to have the
37 sequence of questions that I already have of Tony, Virginia
38 Shervette, and Eddie in the queue to do after lunch and not to be
39 rushing over this. What do the presenter and Richard think about
40 that?

41
42 **MIGUEL ROLON:** Marcos, that's your decision. We can wait until
43 after lunch and then start with this outline of people asking for
44 a question, and then you can add fifteen more minutes to the
45 discussion in the afternoon, but this is an important component of
46 the meeting today, and the council has to make a decision as to
47 the next steps.

1 **MARCOS HANKE:** Yes, I agree, and I was trying to be the most open
2 to the public, but we need to be quick on this and to make the
3 best of our time. Let's break for lunch and discuss this, and I
4 have Tony, Virginia, and Eddie in the queue, with a little more
5 time to think over the presentation and to discuss this better.
6 Let's break for lunch and come back at 1:00. See you guys at 1:00.

7
8 (Whereupon, the meeting recessed for lunch on July 21, 2021.)
9

10 - - -
11

12 JULY 21, 2021
13

14 WEDNESDAY AFTERNOON SESSION
15

16 - - -
17

18 The Caribbean Fishery Management Council reconvened via webinar on
19 Wednesday afternoon, July 21, 2021, and was called to order at
20 1:00 o'clock p.m. by Chairman Marcos Hanke.
21

22 **MARCOS HANKE:** Let's start. Let's reconvene. It's 1:03 p.m. We
23 have, in the queue, Tony Blanchard addressing the presentation of
24 Michelle Scharer, and maybe issues that were also touched on by
25 Richard Appeldoorn. Tony.
26

27 **TONY BLANCHARD:** I've just got to ask a couple of questions and to
28 --
29

30 **MARCOS HANKE:** Tony, we are having problems to hear you. Can you
31 try again?
32

33 **TONY BLANCHARD:** First, I want to know what the Puerto Rico
34 representation thinks about --
35

36 **MIGUEL ROLON:** I believe that what Tony wants to hear is Nelson's
37 --
38

39 **TONY BLANCHARD:** Can you hear me now?
40

41 **MIGUEL ROLON:** We can hear you now, Tony. Go ahead, Tony.
42

43 **MARCOS HANKE:** Tony, we cannot hear you very well. Go ahead,
44 again.
45

46 **TONY BLANCHARD:** Can you hear me?
47

48 **MARCOS HANKE:** Yes, go ahead.

1
2 **TONY BLANCHARD:** What I would like to know is, the downward spike
3 at the end of the season, of the closed season, do we have any
4 idea what the amount of fish that the spike represents, number
5 one, and are we even sure that they are still spawning at that
6 point in time, or are they just moving around the bank?

7
8 The other thing is, if we are talking about closing because we are
9 going on the idea of the full moon, the fish aggregates a certain
10 amount of time during that period, and then we should only close
11 on the full moon when it affects the seasonal closure as-is, and
12 that's my take.

13
14 **MARCOS HANKE:** Point well taken. Thank you very much. Next in
15 the queue is Virginia.

16
17 **VIRGINIA SHERVETTE:** Michelle, first, that was an excellent
18 presentation, and thank you so much for providing such a thorough
19 explanation, especially from you all's direct research. My point
20 was just that we actually have extensive life history data from
21 reproductive histology and age structure, both SEAMAP samples that
22 were collected, have been collected, during the spawning season on
23 the west coast and then some fishery-independent and dependent
24 sampling efforts that my lab has done.

25
26 That would provide additional information that shows some
27 different stuff than was in your presentation, and so, since I sat
28 in on that SSC meeting, I know that that kind of information wasn't
29 included in your consideration, and I just wanted to throw out
30 that those data do exist, and they might be utilized to better
31 inform this discussion.

32
33 **MARCOS HANKE:** Thank you, Virginia, for your input, and is there
34 any way that you can not discuss the information, but to say what
35 kind of information related to what?

36
37 **VIRGINIA SHERVETTE:** We have data from just reproductive histology,
38 gonad histology, that show, for Buoy 4, where that aggregation was
39 sampled that Michelle gave some ratio data, that, in 2018 at least,
40 when the aggregation was spawning, there was a sex ratio of one
41 male to seven females, not one to seventeen, for 2018, at least.
42 That's just one example. Then we also have -- Over the years, we
43 just have reproductive histology data showing the different
44 locations where fish have been collected, females have been
45 collected, that are spawning capable and then the extent of when
46 those spawning capable females occur.

47
48 **MARCOS HANKE:** Thank you very much for that clarification. It

1 still is a higher ratio than the rest of Puerto Rico, but it's
2 very important feedback for the group. Thank you, Virginia. Thank
3 you very much for your participation. If there is anything else,
4 please let us know. Eddie.

5
6 **EDWARD SCHUSTER:** Good afternoon. Edward Schuster, DAP Chair.
7 Excellent presentation, and I learned about the change from male
8 to female. My question would be, and my curiosity, is actually to
9 find out what triggers -- The males show up first, and so what
10 triggers them to change to finding out whether -- Like, for
11 example, if you've got a hundred males that show up first, what
12 percentage of the males change? Does 25 percent or 50 percent of
13 them change, because there's females there, or does the ratio have
14 to double to 300 females to a hundred males that show up?

15
16 The next thing is the fisher involvement, and maybe the fish has
17 changed, and there is another spawning aggregation, and, along
18 with any natural predators that show up, and I have seen this on
19 either Blue Planet or one of those National Geographics, where the
20 whale sharks come in. Have you seen those species around where
21 the aggregation, or while the aggregation, is taking place? Those
22 are the just the things on my question list here.

23
24 **MARCOS HANKE:** Michelle, very quick, do you want to answer to that?

25
26 **MICHELLE SCHARER:** Yes, I would be glad to. Thank you, Eddie.
27 The sex change part of the red hind is that, when they're all born,
28 when they're all small, they're all females, and, at a certain
29 time, after so many years, which varies, but it's around when
30 they're eleven inches long, then they become males, but they can't
31 change back, and so, the first part of their life, they are
32 females. There comes a time in their lives when they change to
33 males, and, the rest of their life, they are males.

34
35 When the males arrive first at the aggregation, they're not going
36 to change any more, because those are already males, and so, after
37 the females come in, some of those larger females are the ones
38 that could become males in next year's aggregation, and so it takes
39 some time for the physiology to work, to make them change their
40 ovaries to testes.

41
42 When I'm talking about sex ratio, it's basically the males that
43 were there that get inundated by a bunch of females. In one moon,
44 the females leave. In the next moon, females come back, and those
45 are the main spawning events that occur at night.

46
47 Regarding spawning aggregation sites changing, that is a
48 possibility, and that's why we try to make our surveys further

1 from the area we're sampling, and so these are like nuclei, where
2 there is a higher density of red hind during the spawning
3 aggregation, but they are spread in less density as well, and so
4 it is possible that they move around where they make these nuclei,
5 and that's why it's so important to have standardized monitoring
6 over time, but the space that we are listening to is the same space
7 year after year, and, with our surveys, we have seen that the fish
8 are there and that they're distended, that they're ready to spawn.

10 Regarding predators, we have seen a few hammerhead sharks during
11 the time we're doing the surveys, but not whale sharks, but there
12 are other little fish that could eat the eggs once they're released
13 into the water column, and so you also have to think of egg
14 predators, but those are great questions. Thank you.

16 **EDWARD SCHUSTER:** Just to add to this, Marcos, I know, in St.
17 Croix, we did this for the conch. We had a closed season of three
18 months, and then we expanded it two months, I think one month
19 before and one month after, and the reason being is that fishers
20 had come to our FAC and mentioned that they have seen the conch
21 spawning before the closed season and after, but I know this
22 affects Puerto Rico, and so I don't to be too influential on their
23 decision that they make, but that's just my input on it. Thanks
24 for the time.

26 **MARCOS HANKE:** Thank you for your participation. Richard.

28 **RICHARD APPELDOORN:** I want to follow up on Edward's questions.
29 Where you see things like whale sharks, the big filter feeders
30 coming in, are more the bigger groupers, and especially the
31 snappers, where they will spawn in the water column much more en
32 masse, therefore creating a high density of these particles for
33 those filter feeders to target, whereas red hind are spawning
34 pretty much just a little bit off the bottom, and, therefore,
35 they're not really launching stuff up into the water column as
36 much, and it's a more spread out process, because they are forming
37 these territorial harems, as opposed to all getting together and
38 trying to go up in several big, or one big, mass, like some of the
39 snappers do.

41 I wanted to mention a few other things about the state of the
42 aggregations in Puerto Rico, and it's really difficult to get large
43 sample sizes for this, and that's why Virginia has been going back
44 and getting more. The reason that we sampled at buoy four and not
45 where we've done most of our work at Abrir la Sierra is that we
46 felt that we would basically decimate Abrir la Sierra if we were
47 to take the fish out of the aggregation that we were closely
48 monitoring. That gives you sort of an idea of what we thought the

1 state of aggregation is.

2
3 One of the benefits for having that glider research done with
4 Laurent Cherubin was that the glider could go all the way up and
5 down the west coast, and even over to Bajo de Sico, listening for
6 these sounds, and therefore mapping the distribution of those
7 sounds, and pretty much what it showed was that the aggregations,
8 or the locations of sounds, which we associate with aggregations,
9 were only located in the areas basically that we were already
10 familiar with, as far as the outer west coast was concerned.

11
12 There are other aggregation sites in Puerto Rican waters, for
13 example, that were not looked at, because -- Such as over near the
14 mouth of Mayaguez Bay, and so I don't think we're seeing an
15 expansion of the range of the aggregations. However, what could
16 happen, if densities are increasing, is that the densities at these
17 outer portions of those aggregation areas would expand, and I think
18 that's probably what is happening over at the MCD.

19
20 The last point I wanted to make is that, in addition to the sex
21 ratios, we also have things like age distributions, and so a
22 comment on both of these, and these were samples that were also
23 processed by Virginia, and so maybe she can comment on that more,
24 but, in the initial samples that were done comparing the west coast
25 with the Hind Bank, and also Lang Bank, we found that the mean age
26 of fish in Puerto Rico aggregations was five, and the maximum age
27 was nine.

28
29 At the Hind Bank, the mean was eleven, and the maximum was twenty-
30 two years old, and so a much older age distribution in that more
31 protected area, and it's not surprising.

32
33 In terms of sex ratios and sex change, those are -- Sex change is
34 subject to a lot of things, and so it's subject not only to the
35 size, but it's the size relative to the rest of the population,
36 and so the time or size at which sex change will take place can
37 vary substantially, based on studies with other species, depending
38 on the size and age structure and health of the population.

39
40 That is also true with the size of the fish maturing, and therefore
41 being present at an aggregation site, and so, if you have an older,
42 larger, dominant population, smaller individuals that might
43 otherwise be at the aggregation don't go, because they haven't
44 matured yet, and so the age at maturation is also somewhat
45 flexible.

46
47 For example, in the same comparison, the peak size mode of red
48 hind at Buoy 4 off the west coast of Puerto Rico was only slightly

1 larger than the minimum size recorded at the Hind Bank, and so,
2 again, these are all signs that are saying that, at least at that
3 time, that population was being fairly stressed.

4
5 Now, Virginia's data that she just mentioned comes from some years,
6 I think, after the initial sample, and so maybe that indicates an
7 improvement in the population, or, conversely, the problem we've
8 found, and I think Michelle kind of touched on this, is that, if
9 you don't have a lot of samples, and I don't mean individuals of
10 fish, but I mean samples throughout the aggregation period, you're
11 unlikely to capture what the peak is, because the males are there
12 first, and the females will arrive, but, frequently, the females
13 are not really coming out until near sunset, and then they start
14 really showing up, where you can start counting them.

15
16 If you are taking your fish before that time, as compared to that
17 time, you might get different answers on what your sex ratio is,
18 even though the population is exactly the same, but it's just what
19 are the fish behaviors relative to your ability to catch them, and
20 so all of these problems make it difficult to monitor the health
21 of a particular aggregation, which is why we need long time series
22 and why it's important to get out there frequently during the
23 spawning period.

24
25 **MARCOS HANKE:** Thank you for all of those good points, Richard.
26 We have, as expected, a lot of interest. Nelson.

27
28 **NELSON CRESPO:** Thank you, Mr. Chair. Michelle, excellent
29 presentation. Based on your presentation and what I see in the
30 field, in my area, I think that it's pertinent, and it's not going
31 to cause major -- To move from December 1 to December 15 to March
32 15. On the check on the next ten years, most of the time, when
33 we're going to have the Holy Week, it's going to be by the end of
34 -- That's when the fish, especially the red hind, have a big
35 market.

36
37 Also, I know that species has to be protected, and I know that
38 Abrir la Sierra is one of the best spawning areas, and we need to
39 do something about it, because it's not to cause a major
40 socioeconomic impact, and I think we would consider to run the
41 closed season a little bit.

42
43 I don't know if that answers Tony's question, because I can't hear
44 him well, but I want to hear Vanessa's opinion, because I really
45 know more of the south side of the island, and that species has a
46 really high interest on the market, but only for the holy season.
47 When the holy season passes, the interest declines, and that
48 doesn't mean that the people stop catching it, but it means that

1 the interest to catch it and the sales lowers dramatically. That's
2 what I see every day, every year, in the field.
3
4 **MARCOS HANKE:** Thank you, Nelson. That's very important, Nelson,
5 on the west coast of Puerto Rico. I have, in the queue, Damaris,
6 Clay, and Vanessa. Damaris, go ahead.
7
8 **DAMARIS DELGADO:** I would like to propose a motion regarding this
9 potential change in the dates, if that's possible.
10
11 **MARCOS HANKE:** Yes. Thank you, Damaris. Let's listen to Clay and
12 Vanessa first.
13
14 **DAMARIS DELGADO:** Okay. Thanks.
15
16 **MARCOS HANKE:** Thank you. Clay.
17
18 **CLAY PORCH:** Thank you, Michelle, for this presentation, and I was
19 just wondering if we could use these passive acoustic monitoring
20 arrays in something close to real time, and the idea being that,
21 once the signal is gone, indicating that the fish are no longer
22 aggregated and spawning, then you could open up the fishery, and
23 so, that way, you would do it exactly when the fish have stopped
24 aggregating.
25
26 **MARCOS HANKE:** Richard, do you want to answer?
27
28 **RICHARD APPELDOORN:** I read his comment, and so I had two things
29 I could say, and then Michelle can chime in as well, and one is,
30 yes, you could monitor it. All you would need is to have a relay
31 up to the surface, and, using cell phones, you can listen to these
32 things real time, or you can have some automated system counting,
33 and we actually have algorithms that Laurent's group has developed
34 to try and do that.
35
36 The other way would be to have a glider cruising around, and what
37 his glider does is it listens in real time for these recorded
38 sounds, and so, technically, you could do it. You would have to
39 make sure that stuff doesn't get tampered with, but the other, and
40 perhaps more important, point is that the data show that we can
41 actually predict when they are going to aggregate very precisely,
42 and, therefore, I don't think you would need the real-time
43 monitoring.
44
45 You can say, okay, this year, we expect it to go on to the 4th, and
46 this year will be the 8th, or something like that, and be pretty
47 close, because I think the timing of this is, in fact, quite
48 rigorous relative to the moon.

1
2 What you would need would be a flexible mechanism that would allow
3 you to turn on and turn off the closed season each year without
4 having to go through some emergency measure type of process.
5 Michelle, did you want to add something to that?
6

7 **MICHELLE SCHARER:** I was just going to say we did do that with the
8 glider, and it worked pretty well, but these aggregations are a
9 little bit spread out, and they're like along the shelf, and you
10 have nuclei of fish that those are the ones we're counting, and so
11 there was a previous question by Mr. Blanchard about the number of
12 fish, and if there were sufficient fish during that last peak, and
13 the answer is we haven't measured that consistently over the years,
14 and so we can't really answer that, and, if they're done spawning
15 -- Well, one issue we have with this species is that nobody has
16 seen it spawning.
17

18 We have seen them still there with distended abdomens, which means
19 they still have their eggs in them, and they haven't been able to
20 spawn yet in that March peak, but we really need to be there and
21 monitor this more closely to be able to answer all these important
22 questions that you all are bringing up.
23

24 **MARCOS HANKE:** Thank you, Michelle. Basically, what you are saying
25 is that we need a little more time on the water and support for
26 that to happen. Next in the queue is Vanessa.
27

28 **VANESSA RAMIREZ:** Thank you, Mr. Chair. Practically, as we know,
29 and Nelson is always down here, and we already know that this
30 change is real. Since 2017, we have seen not only the red hind,
31 but also in another species that are in high demand, and, of
32 course, we're going to think that this is a good action.
33

34 We already know that there are going to be people that will not
35 agree with this, especially, as Nelson says, that March 15 is very
36 close to the holy week, and this species is very important for
37 that sales, but I think that we need to also be responsible and be
38 taking the action when we have to.
39

40 As Damaris says, I suggest that we accept this and make a motion
41 and move on on this, because we already know that, in the west, we
42 have a lot of commercial fishermen, practically more than the
43 licensed fishermen that are in here, and, for each one with a
44 license, we have one or two without a license. We have seen this
45 during the last years, and we have seen this during the last closed
46 season, that there are still fishermen, and there are still fish
47 markets that are buying this during the closure, and so, as a point
48 in here, and I want to be on the record, we need more enforcement

1 on land, also.

2
3 I will suggest that we take this action now, making the point also
4 that the first one should be an orientation period for the
5 fishermen, and we need to make a real effort to go down to the
6 fish markets and take the action of explaining to the fishermen
7 why is this season applied only in the west and why the importance,
8 when it's going to be applied, and where it's going to applied.
9 Thanks.

10
11 **MARCOS HANKE:** Thank you, Vanessa. That's very important. Thank
12 you very much. We have in the queue Miguel Rolon, and I would
13 also like to, in the future, after the motion, to have the support
14 of Jocelyn, to make sure that whatever is proposed on the motion
15 is the most efficient way of proceeding with whatever the motion
16 presents. Miguel.

17
18 **MIGUEL ROLON:** Okay. A couple of things. Number one, the motion
19 that you are considering is whether you accept or not the
20 recommendation of the SSC.

21
22 **MARCOS HANKE:** Correct.

23
24 **MIGUEL ROLON:** There are ways of doing that, and, right now, the
25 only way that you can do that is by amending the island-based FMPs
26 that have been approved in September of last year, and the same
27 way that you are working on an island-based FMPs amendment at this
28 time, and I discussed it with Jocelyn a little bit, and she
29 provided the clear path of what we need to do.

30
31 The council also can ask for more information, because, just today,
32 we found two sources of information that are a little bit
33 different, or will add more to what Dr. Scharer is presenting, and
34 that information comes from Virginia. In the queue here, in the
35 chat here, I have some information from the local scientists also
36 that have information that they can share with the council.

37
38 If you decide to move forward with this, then you need to consider
39 a couple of things. Number one, you have to instruct the staff to
40 work with the Regional Office to prepare an options paper, let's
41 say, to start discussing the -- To put everything together, the
42 biology and the socioeconomic information that you need.

43
44 Enforcement is an issue, because most of the -- Well, all of the
45 management measures, if you don't have enforcement, is like just
46 a paper regulation, and it doesn't work. If you are going to have
47 a change of the season, if you have a problem with enforcement
48 now, and you think about moving that season up and down every year,

1 because you are looking at the temperature or whatever in the
2 water, and so our recommendation is that, if you are going to move
3 it, lock it into a specific time and area that is being proposed.

4
5 The other issue that they're asking me is what happened to the
6 rest of the closed season, because it's announced from December 1
7 through the end of February, to include those years where February
8 has 29 or 28 days, and, at this time, you can even -- Don't even
9 talk about it, and just concentrate on the area 67, 10 west of
10 Puerto Rico to let's say adopt the recommendation of the SSC at
11 this time.

12
13 In summary, if you are going to adopt that recommendation, you
14 need to amend the island-based FMPs, and it cannot be made via
15 framework, because I asked, and a framework is when you give the
16 authorization to the Secretary to use these parameters if something
17 happens, for example, and he or she can modify the regulations in
18 place, and we don't have to amend the plan, because it's already
19 part of the management plan, and that's why they call it a
20 framework approach, but, in this case, we don't have that.

21
22 In summary, Mr. Chairman, if you are going to adopt the
23 recommendation of the SSC, which is moving the time that you close
24 in those three areas that have been mentioned, or the area west of
25 the coordinates that we mentioned, the longitude that we mentioned,
26 then it has to be done through an island-based FMP amendment, and
27 you need to start working on that recommendation, the appropriate
28 recommendation, that includes biological information from all the
29 sources that have been discussed today, the socioeconomic
30 information, and then you have to take it to public hearings, of
31 course, to the public. That's all I have to say at this time. If
32 you have any questions, Jocelyn is here. If you have any questions
33 regarding it, this is the time.

34
35 **MARCOS HANKE:** Yes, and I was -- I already expressed my interest
36 to hear the input from Jocelyn to follow the best steps and which
37 consideration we should have in this matter. Go ahead, Jocelyn.

38
39 **JOCELYN D'AMBROSIO:** Thank you. I agree with what Miguel just
40 said, that you can decide if you want to move forward and accept
41 the recommendation from the SSC to change the closure periods, and
42 you could then form an IPT and begin work on an amendment, or, if
43 there's additional information that you want considered, you could
44 direct staff to compile that additional information and come back
45 to an additional meeting and discuss this again and decide if you
46 want to move forward with an amendment.

47
48 I agree with Miguel that this would be an amendment to the island-

1 based FMPs and that we can't do it by framework. We can start
2 working on an amendment to the island-based FMPs right now, and
3 that's similar to what we're doing with spiny lobster, for example,
4 and we're working on an amendment to the island-based FMPs, because
5 those have been approved. We're still in the process of creating
6 the rules to implement them, but we're in an okay position to amend
7 those plans, if that's the choice right now.

8
9 **MARCOS HANKE:** Andy.

10
11 **ANDY STRELCHECK:** Thanks, Marcos, and I guess not commenting on
12 Jocelyn's statement, but more in terms of accepting the SSC
13 recommendations, and so the SSC is being fairly explicit with
14 regard to a December 15 through March 15 closure.

15
16 I think my preference would be along the lines of what Jocelyn was
17 saying, to kind of explore options for changing the closure dates
18 for red hind, and that could very well end up being December 15 to
19 March 15, but there could be other considerations.

20
21 For example, Clay had mentioned, obviously, the real-time
22 monitoring, but what immediately came to mind is, if we want to
23 provide some flexibility, given the dates in which the closure may
24 be needed, that we could look at different spawning closures on an
25 annual basis and set it based on the moon phases, or you could
26 provide NMFS, the Regional Administrator, some authority and
27 flexibility to open or close the fishery based on certain
28 conditions.

29
30 I think it would be best to kind of keep the recommendation, the
31 motion, for action more generic, rather than just simply adopting
32 the SSC recommendation, which is very specific.

33
34 **MARCOS HANKE:** Thank you. One comment is I have historical
35 knowledge about this discussion, this one and a similar discussion
36 in the past, and that is the fishermen tend to prefer a single
37 date, or something that we have some continuity over the time, and
38 it doesn't change too much, to avoid confusion. I am sorry about
39 my English there and the pronunciation, but I think the message is
40 there, and I would like to hear the motion that Damaris has,
41 because we don't have too much time, and we need to move this
42 along, to go through the next item on the agenda and discuss the
43 motion. Go ahead, Damaris.

44
45 **DAMARIS DELGADO:** The motion would be the council moves to request
46 staff to draft an amendment to the Puerto Rico FMP to modify the
47 dates of the seasonal closure for fishing for or possession of red
48 hind grouper in federal waters of Puerto Rico from the current

1 date and shift from December 15 to March 15, as requested by the
2 SSC.

3
4 MIGUEL ROLON: Okay. Damaris, for the screen, can we just copy
5 the recommendation of the SSC, and you can look at it and see if
6 it agrees with what you just said?

7
8 DAMARIS DELGADO: Yes.

9
10 MIGUEL ROLON: Liajay, can you copy-and-paste?

11
12 LIAJAY RIVERA: Can you send it through the email, because the
13 chat is not able to do copy-and-paste, and if you could please do
14 so through email.

15
16 MIGUEL ROLON: Liajay, wait. Just copy-and-paste the
17 recommendation of the SSC. As we are doing this, remember that
18 this will -- It's giving instruction to the staff to prepare the
19 document for further action, to see if this motion can be accepted
20 as-is. What Andy Strelcheck is saying is that there are other
21 options that have to be included also in the document.

22
23 Although the goal could be the 15th of December to March 15, there
24 might be -- After the information gathered by the staff, the
25 appropriate staff, there might be other options that could be
26 presented in the options paper, and that's why they call it that,
27 and the council can look at it and choose the best one for the
28 fishery and the socioeconomics of the area.

29
30 LIAJAY RIVERA: Miguel, I have just pasted the SSC recommendation.

31
32 MIGUEL ROLON: Thank you. Damaris, can you read it and see if you
33 agree with what you are trying to state?

34
35 DAMARIS DELGADO: Yes, that's fine.

36
37 MIGUEL ROLON: Okay, and so, if that's the motion, Mr. Chairman,
38 we need a second and discussion.

39
40 DAMARIS DELGADO: I sent it by email to you, Miguel, and Graciela
41 and Christina and Marcos, but that's fine.

42
43 MIGUEL ROLON: The point is the language that we have on the
44 screen, Damaris.

45
46 DAMARIS DELGADO: Yes.

47
48 MIGUEL ROLON: You agree with that one, and so we need a second.

1
2 **DAMARIS DELGADO:** Yes, I agree.
3
4 **MIGUEL ROLON:** Thank you, Damaris.
5
6 **VANESSA RAMIREZ:** Second.
7
8 **MIGUEL ROLON:** Now we need the discussion.
9
10 **MARCOS HANKE:** On the discussion, I would like to hear from the
11 rest of the group, especially Andy, if there is any language to be
12 added, recommendation language, to be added to address his point
13 earlier.
14
15 **ANDY STRELCHECK:** Marcos, thanks. My recommendation would be to
16 amend the motion, as written, to say something along the lines of
17 direct staff to develop an options paper to modify the seasonal
18 closure for fishing and possession of red hind during the red hind
19 spawning aggregation timeframe and then leave it at that, and don't
20 specify dates or anything like that. We'll have staff bring back
21 options for consideration by the council at our next meeting, or
22 the December meeting.
23
24 **MIGUEL ROLON:** Okay. A point of order. That's a substitute
25 motion, and so if -- That's a substitute motion, and so the --
26
27 **ANDY STRELCHECK:** Well, I --
28
29 **MIGUEL ROLON:** Wait. If the proponent of the motion and the
30 seconder agree, then we can withdraw this language and then allow
31 Andy to dictate to Liajay the new language, but they have to first
32 agree on the change of the motion.
33
34 **MARCOS HANKE:** Damaris and Vanessa, do you agree on the change of
35 the motion?
36
37 **DAMARIS DELGADO:** Yes, I agree.
38
39 **MIGUEL ROLON:** Vanessa, the seconder?
40
41 **VANESSA RAMIREZ:** Yes.
42
43 **MIGUEL ROLON:** Okay, and so, Liajay, please erase what we have
44 now. Get rid of the whole thing, and then wait for Andy to dictate
45 the new language. Can you do that, Andy, please, slowly?
46
47 **ANDY STRELCHECK:** Can you bring the previous language back up?
48

1 **LIAJAY RIVERA:** Sorry?
2
3 **ANDY STRELCHECK:** Can you go back and just bring the previous
4 language -- Because I can use the previous language, if you can go
5 back.
6
7 **LIAJAY RIVERA:** Okay.
8
9 **ANDY STRELCHECK:** My recommendation is direct staff to develop an
10 options paper to modify -- Then I guess just restore the struck-
11 out "areas: at the end, but delete the dates, and so remove the
12 dates, but leave "spawning aggregation areas".
13
14 **MIGUEL ROLON:** In this case, Mr. Chairman, Andy can then make the
15 motion as written, and then you need a second for the discussion.
16
17 **MARCOS HANKE:** That's the language, Andy. Are you comfortable
18 with the language to request for a second?
19
20 **MIGUEL ROLON:** Wait, wait, wait. Andy has to make the motion. Is
21 that your motion, Andy?
22
23 **ANDY STRELCHECK:** Yes, that's my motion. Thank you.
24
25 **MIGUEL ROLON:** Okay. Now we need a second.
26
27 **MARCOS HANKE:** Yes, that was my question, and is there a second?
28
29 **DAMARIS DELGADO:** Second. Thank you, Damaris. Any opposition?
30
31 **MIGUEL ROLON:** No. Discussion, Marcos.
32
33 **MARCOS HANKE:** We are going for discussion. I think we have -- I
34 was checking here in the chat, and we have Tony Blanchard.
35
36 **TONY BLANCHARD:** I think we're moving too far ahead. I don't think
37 we need a -- What Virginia said was -- Marcos.
38
39 **MARCOS HANKE:** Yes. Go ahead.
40
41 **TONY BLANCHARD:** I think we're moving --
42
43 **MIGUEL ROLON:** Tony, we cannot hear anything that you're saying.
44
45 **TONY BLANCHARD:** -- too fast. I think what she said was not taken
46 into consideration. Can you hear me?
47
48 **MIGUEL ROLON:** You are back, yes. Go ahead. Quick.

1
2 **TONY BLANCHARD:** I think that should -- We are moving too fast
3 forward, instead of taking into consideration the information from
4 Virginia that was not looked at at the SSC meeting.
5

6 **MIGUEL ROLON:** Okay. This motion is not to implement the measures
7 as recommended by the SSC. The motion is to prepare an options
8 paper, and the options paper includes all that information that
9 has been talked about today, and so Virginia's paper and the
10 information from the Puerto Rico Fishery Laboratory, and that also
11 will be included, as well as any other socioeconomic information
12 that we may have, because, right now, the only thing that we have
13 is the opinion of some fishers around the table that moving this
14 will not affect their fisheries, but there might be fishermen that
15 come to the table and say, no way, Jose, and that is when I fish,
16 and 10 percent or 20 percent, or whatever percent, that I fish for
17 comes from those two weeks.
18

19 What Mr. Strelcheck is suggesting here is, according to the
20 process, is to prepare that options paper, and the options paper
21 will have all of this. Remember that the options paper also has
22 possible other alternatives, because, for every action that you
23 have, you need at least three alternatives, or two more
24 alternatives, and so you have three alternatives for the council
25 to consider.
26

27 An alternative could be the floating season, like has been proposed
28 today, and it could be also a change of those dates, from December
29 16 to March 16, something like that, just as an example, and so
30 the council has to be aware of the process. If you approve this
31 today, you are not approving the measure itself.
32

33 What you are approving is to have that options paper, and the staff
34 will look at it, and you have an IPT that has to be named at the
35 Regional Office, and then it will be an options paper that
36 considers a modification or amendment to the island-based FMP,
37 applicable island-based FMP, and, in this case, it will be the
38 Puerto Rico island-based FMP to establish this new seasonal
39 closure.
40

41 Be mindful that Mr. Strelcheck deleted the period of December 15
42 to March 15, because that's deterministic, and so, if you approve
43 this, Mr. Chairman, and Tony and all the others, you are nothing
44 but preparing an options paper that will include all the
45 information that you need to take care of a final -- Not a final
46 decision, but make a decision that you will take to the public for
47 consideration.
48

1 **MARCOS HANKE:** Thank you, Miguel. Maria and then Vanessa.

2
3 **MARIA LOPEZ:** Good afternoon. This is Maria Lopez with NOAA
4 Fisheries, and I just wanted to speak from the side of the NMFS
5 staff. We will work with the council staff to put together an
6 options paper that, as Miguel said, that evaluates not only the
7 dates, but also the cumulative effects of -- Not the effects,
8 necessarily, but analyzing the other closures that are
9 overlapping, and the other areas as well, and we can also, if the
10 council is interested, form an IPT to take a look at this. We
11 will request also the researchers to send us the information that
12 they have, so that we can incorporate it and utilize that, so that
13 the council can make the best informed decisions. Thank you.

14
15 **MARCOS HANKE:** To that point, Maria, when you are saying the
16 analysis, it will be based on the SSC recommendations, and this
17 will be for Puerto Rico, correct?

18
19 **MARIA LOPEZ:** Yes, and so it will be based on this motion that the
20 council just put forward, and so the idea for this motion was to
21 keep it general, and so we can look at different options that we
22 could present to the council in December.

23
24 **MARCOS HANKE:** We have Vanessa.

25
26 **VANESSA RAMIREZ:** Thank you, Mr. Chair. Well, practically, my
27 comment is that, for the suggestion of the SSC, and the people
28 that can attend that meeting, I think that they already have the
29 information that they need, and, from us, the ones that are here,
30 that are from the west and fish every day in this area, they know
31 that this change is real, and I think that it's better if we take
32 an action, and it's better if we present everything at the same
33 time and not continue back and forth and changing things or waiting
34 until December, and we already know that this change is real, and
35 I think that those dates are the best ones, if you have to move
36 something. Thanks.

37
38 **MIGUEL ROLON:** Vanessa, a point of order, again. You cannot do
39 that, because you have to follow the process that we have, and,
40 although we would like to have immediate action whenever the
41 council says something, this is the only way that we can do it, by
42 amending the plan.

43
44 Fishermen, if they also believe this is good, they voluntarily can
45 do it, but, at this -- You also have to be mindful of the
46 regulations in place. If I am a fisherman, and I fish, in 2022,
47 between March 15, and there is no regulation in place, I am free,
48 and that's what I am going to do, and so the process calls for

1 this process that you have here, and this is the quickest way that
2 you can do it and the most appropriate.

3
4 Whatever we do here, remember that a management plan has to be
5 implemented, and so we are not talking about 2022. We are talking
6 about the season of 2023, if something goes smoothly and fast.
7 Any further discussion?

8
9 **MARCOS HANKE:** Yes. Thank you. Any further discussion from
10 anybody else that wants to add to this? **Hearing none, is there**
11 **any person against the motion? Any abstentions? Hearing none,**
12 **the motion carries.**

13
14 Thank you for a good participation, and I think the record is
15 clear, and thank you very much. The next item on the agenda is
16 the draft tech memo on managing with ACLs.

17
18 **MIGUEL ROLON:** Marcos, can you recognize Dr. Macpherson?

19
20 **MARCOS HANKE:** Yes, and I was waiting for Marian Macpherson to be
21 ready with the presentation. Welcome to the meeting. The
22 Caribbean Management Council floor is yours.

23
24 **DRAFT TECH MEMO ON MANAGING WITH ACLs FOR DATA-LIMITED STOCKS**

25
26 **MARIAN MACPHERSON:** Thank you. Thank you for having me. Hi,
27 everybody. I am Marian Macpherson, and I work in the NMFS Office
28 of Sustainable Fisheries, Headquarters Office, and I am here today
29 to talk with you about this draft technical memo that we have
30 produced, and I will note that you've got my name on the screen
31 there, but there are several technical experts that have helped
32 produce this document that are around to chime in and help answer
33 questions. Jason Cope is here, and Patrick Lynch is here, and
34 Skyler Sagarese is here, and I think also Kate Siegfried, and so
35 welcome to them, and I would invite them to join in as we go.

36
37 As an overview, why are we doing this, and what is this about,
38 obviously, ACLs have worked well in a lot of situations, yet we've
39 also faced challenges, and it's been twelve years since we first
40 implemented the MSRA requirements, and this is a good time to look
41 back and see what's working and what we could be doing better.

42
43 In 2016, NMFS revised the National Standard 1 Guidelines pertaining
44 to ACLs, and there is a particular paragraph that we'll be focusing
45 on. NMFS convened a technical working group consisting primarily
46 of folks from S&T and all of the science centers, with a few policy
47 people onboard, to provide guidance on these new guidelines, and
48 Sub-Group 3 of that technical group is focusing on this particular

1 topic, which is managing with ACLs in the data-poor fisheries.

2
3 We've had some progress in the last twelve years for what methods
4 we have available for doing data-limited assessments, and, also,
5 these regulatory changes, and so I have included the title of the
6 draft tech memo on this slide for you, because I want to emphasize
7 this guidance, draft guidance, is very limited. It's very narrow
8 in its focus, and it's looking at this one particular paragraph in
9 the National Standard 1 Guidelines that talks about flexibilities
10 for data-limited stocks.

11
12 The status of this paper is it's very much a draft. We're
13 anticipating additional changes after we hear feedback from
14 councils, and perhaps more internal reviews. We presented this
15 draft to the CCC at its May meeting, and NMFS has now requested
16 comments from you guys by October 1, and so we're doing these
17 discussions with councils and SSC, as you invite us, and I'm happy
18 to be here today to talk about what this memo is.

19
20 This is the general overview slide, and there are basically three
21 main topics that are in this draft tech memo. We talk about the
22 legal context, and we talk about the science and the assessment
23 methods, and then we talk about management and what that means,
24 what our interpretations mean.

25
26 Just briefly, what's in the Magnuson Act itself, what's in the
27 law, the statute, we must comply with. What's in NMFS' guidance
28 can be -- In some cases, we have more flexibility in our
29 interpretation, and so I will note, as a foundation for this
30 discussion, when it comes to ACLs, the Magnuson Act does not define
31 ACL. The Magnuson Act does not define catch.

32
33 Where we get this concept of an ACL being expressed as an amount
34 of fish, as a weight or a number of fish, comes from NMFS'
35 interpretation in our National Standard 1 guidance, and we still
36 believe that's the best way to do it, when you can, and that's
37 what we're shooting for. The guidelines call that the standard
38 approach. The standard approach means you're expressing your ACL
39 in terms of the weight, or number, of fish. We'll talk more about
40 that later, but that's the legal context.

41
42 Data-limited assessment methods, this paper, as I said, there's
43 been a lot of progress, in the last twelve years, of what we can
44 do. This paper talks about two categories of data-limited
45 assessment methods. There are some, depending on what data you
46 can put into the model, that will get you the information you need
47 to manage with an ACL that follows the standard approach, an ACL
48 that's a weight of fish, or an amount of fish.

1
2 There are other data-limited assessment methods that are giving us
3 good information that could provide a science-based approach to do
4 annual management and monitoring to a limit, or a level, that is
5 not expressed in terms of an amount of fish, and so that's what
6 we've explored, in terms of could we do an ACL that's expressed as
7 a rate, and so I will talk about that a little bit as we go through
8 this paper.

9
10 Then the management section of the paper is where we sort of pull
11 these concepts together, and, okay, when does this paragraph apply,
12 and when is (h)(2) -- When can we use it? When can we have the
13 flexibility to recommend an alternative ACL? The paper talks about
14 that, and then it explores what might it look like and what could
15 be an alternative ACL, and so we talk about what could it be if
16 you had rate data.

17
18 Then, finally, there is this category of stocks that maybe they
19 qualify for alternatives, but they don't even have rate data, and
20 what do we do with them, and so we've got considerations for that
21 category as well, and that is basically what I will be talking
22 through, is these three main concepts.

23
24 As I just mentioned, the requirements in the Magnuson Act are that
25 the FMP specifies the annual catch limit. The annual catch limit
26 has to prevent overfishing, and the FMP has to include
27 accountability measures, and that's Magnuson. NMFS'
28 interpretation in the guidelines, the standard approach to
29 complying with Magnuson is to express your ACL as an amount of
30 fish, and then we have this flexibility in Paragraph (h)(2) that
31 says a council may recommend an alternative that standard approach,
32 in certain situations, but the alternative still has to comply
33 with the Magnuson Act, and so we still have to have an ACL that
34 prevents overfishing and includes accountability measures, even if
35 it's not expressed as an amount of fish, and this alternative must
36 be included in the FMP.

37
38 To emphasize how this is going to be relevant for us, this is
39 straight out of that section of the CFR, and this is what (h)(2)
40 says for data-limited stocks, and there are limited circumstances
41 that don't fit a standard approach, and those circumstances
42 include, among other things, stocks for which the data are not
43 available, either to set the reference point or to manage to the
44 reference point. We can't set it reliably, or we can't monitor
45 and enforce it, and then a council may propose an alternative.
46 It's all going to get down to the data, what do you have, and
47 that's going to be the test, is what do you and what can you do
48 with your data?

1
2 We have made this progress in our assessment methods, as I have
3 said, over the last twelve years, advances in our stock assessment
4 methods, and we have new tools that let us do more with the data
5 that we have, identifying manageable metrics, and we have also
6 increased our understanding of the uncertainties.

7
8 Moving on to the next slide, I'm just going to touch on this, and
9 we have detailed questions, and I'm going to ask Jason to jump in
10 with this later, but this is the overview of the two categories of
11 assessment methods that I was talking about, and so the brown --
12 Starting at the top, the brown boxes are going to pertain to what
13 data are available, start with what you have, and then, basically,
14 if you have the biomass information to plug into your models, you
15 can travel down the left-hand side of your screen, and these brown
16 circles are just questions about what you can use.

17
18 Then it takes you down to what assessment methods are going to be
19 available in the little blue boxes, and, if you're using the ones
20 that are on the left, and I hope I didn't say right, and, if I
21 said right, I used the wrong word, and I'm sorry. It's the left-
22 hand side of the screen. If you have the biomass information, you
23 travel down the left-hand side of the screen, and that can produce
24 your ACL. It can support identification of an ACL that is
25 expressed the standard way as an amount of fish.

26
27 Some of these new methods that I have been discussing, those are
28 the ones on the right, and sorry for the confusion. If you don't
29 have the biomass information, but you can still measure other
30 things, and I have heard you guys talk about length and CPUE, you
31 can get science-based advice that you can use to manage and monitor
32 annually with limits and accountability, but just not expressed in
33 terms of amount of fish. If you're finding yourself going down
34 this right-hand side of the slide, this is when you might be
35 thinking about the flexibilities in (h)(2), what methods you're
36 going to use, and then how they're going to feed into your
37 management, in terms of the flexibility.

38
39 Before I leave this slide, I do want to highlight, going down the
40 left-hand side, when you get to the very bottom, that little box
41 at the bottom-middle, that says catch estimator approaches, and
42 we're going to talk more about those in a minute, but that's
43 basically, if you have limited data about removals, and that's all
44 you have, that may be your best scientific information available,
45 and you may need to use it, but huge caveats about uncertainties
46 with those approaches, and, now that we have all of these
47 alternative methods and flexibilities -- If you have any other
48 information to feed into a model, other than these catch estimator

1 methods, and we're going to have recommendations for that in our
2 draft technical memo.

3
4 I do want to point out, and I heard you guys talking about this
5 earlier, and I want to emphasize that this oversimplifies things
6 a little bit, just because, in data-poor situations, you think you
7 have information on lengths, but is it really usable to do what
8 you want to do with it, and I am hearing you talk about that, and
9 you know this already, but I want you to know that we realize that
10 this is an oversimplification, and you're going to have to ask
11 these hard questions and explore and vet these issues of what
12 really can you use, but this is the concept, and so just laying
13 that out there.

14
15 The draft tech memo, following the discussion of -- It discusses
16 the methods, the assessment methods, that will get you to
17 information for the standard ACL, and then it's got
18 recommendations. When you're using those methods, they're still
19 data-limited, and I'm not going to read these to you, and I think
20 you've got a copy of the draft tech memo that's been posted, and
21 you can also read this slide, but the concept here is, even when
22 you're using those methods, be aware of uncertainty, be clear about
23 your uncertainties, use precautionary buffers, and then I want to
24 highlight, here at the bottom, the discussion of using the catch
25 estimator methods.

26
27 We do recognize that this might be the best available that you
28 have, and, if it is, you've got to do the best you can with what
29 you have, but, if you're using that method, this memo encourages
30 you to look around and see if there's anything new that has come
31 down in the past twelve years that would be better and consider
32 those, consider flexibilities under (h)(2), and, if you're still
33 stuck using the catch estimator method, try to make a plan to
34 transition to a different approach.

35
36 We were just talking about the methods that will get you to your
37 standard ACL, and these are the other methods that I was mentioning
38 that you don't have the biomass data, but they can still provide
39 the science-based approach. Length-based and indicator methods,
40 and just to note about these that they are limited. They can't
41 define removal targets, in terms of the amount of fish, and so
42 they don't fit under our standard ACL guidance, but they do provide
43 these science-based metrics and reference points, and they can
44 support compliance with Magnuson, but just in a way alternative to
45 that standard approach, and, again, it's very fact-specific, but
46 this is the concept.

47
48 Here is the big question. When do you use (h)(2)? When can you

1 consider using (h)(2), the alternative method, and so the key is
2 the data. The key is you start with what you have. If you lack
3 the data to effectively specify or manage with an ACL expressed in
4 the standard format, that's when you want to consider using this
5 flexibility in (h)(2).

6
7 This little flow chart sort of encapsulates the whole premise of
8 the tech memo in one handy spot that we wanted to sort of lead you
9 here with some of the background information to get you here, but
10 it starts with what you can measure, and that's what we keep going
11 back to, and, similarly to the methods flow chart we looked at a
12 few minutes ago, if you have the biomass data, and those are the
13 two questions here, is it a complete time series of removals and
14 basic life history or these other options to get you what you need
15 on the biomass side, and then you can proceed down the left-hand
16 side of this chart and start heading in the direction of the
17 standard ACL.

18
19 There's a second question that has to be asked, and that is, number
20 one -- The first question we asked got us to the answer of can we
21 specify an ACL, in terms of an amount of fish, but remember the
22 language in (h)(2) says that you can't specify or manage to it,
23 and so the second question has to be, okay, you can specify it,
24 but are you able to monitor and enforce that standard ACL, and if,
25 again, the answer is yes, you proceed on down that left-hand side
26 of the page and you use the weights/numbers-based ACL.

27
28 If you get a no to either one of those first two questions, then
29 you get into the big box there in the middle of, okay, you're in
30 (h)(2) now, and you should start thinking about alternatives. Just
31 because you're in (h)(2), it doesn't automatically mean the rate-
32 based alternative is right for you. That's an alternative that
33 our team came up with, and we've discussed it and described it,
34 but, just because you're in (h)(2), it doesn't mean you have to
35 use rate, or that you're able to use rate.

36
37 There is a second question, before you get into proposing a rate-
38 based ACL, and that's do you have information on the fishing
39 mortality rate or a proxy for F at FMSY that you can use to get to
40 these reference points that you're going to need to manage with
41 the rate-based reference points. If you do have that information,
42 you're going to want to consider trying out this rate-based ACL,
43 and, again, there are lots of questions, lots of things to be
44 vetted and considered, but that's sort of the thought process.

45
46 There are going to be some stocks where your answer is no, where
47 we don't feel confident with our standard ACL, and we don't have
48 rate data, and so what do you do with these stocks, and that's a

1 tricky question, and we'll get into that. There's not much to say
2 about it, but you still must comply with the Magnuson Act, and you
3 must do something. It might be that catch scalars are all you
4 have, but, at this point, you're going to want to consider a
5 transition plan.

6
7 Is there some sort of cost-effective data collection project that
8 you could do that could start moving you in the direction of
9 managing and monitoring more effectively, and so that's just the
10 overview of everything, and then the paper sort of provides that
11 all written down in more complete sentences.

12
13 Now I'm going to talk a little bit about how would this work, how
14 would this concept of a rate-based ACL look, and so, using those
15 assessment methods that we talked about that went down the right-
16 hand side of our slide, whatever data you have to put into the
17 data, if it's fixed data or the CPUE data, but it's going to give
18 you your F, your fishing mortality rate, and your MFMT, maximum
19 fishing mortality threshold, which is one of the ways we have of
20 measuring overfishing, and so rate can give us the information we
21 need to make sure that we're not overfishing.

22
23 Following the format for the standard ACL in the NS 1 Guidelines,
24 you could take that F and MFMT and then apply buffers, as we
25 currently do, through the SSC for scientific uncertainty and then
26 through the council for management uncertainty, to derive an ABC
27 and then the ACL. It would just remain expressed in terms of your
28 fishing mortality rate instead of a weight or a number of fish,
29 and that's what you would start managing around.

30
31 I put in a slide -- After hearing your discussion this morning, I
32 think you all are way ahead of me on managing with indicators, but
33 our paper does mention that this is definitely within the realm of
34 the concept of rate-based management, would be using the
35 indicators, and so, if you have length data, then perhaps the SSC
36 can correlate specific lengths to specific rate targets or
37 thresholds, so that you could use that length data, and so here's
38 just sort of a hypothetical of what those lengths might look like.
39 Then you could either tie your management to that or continue
40 running the assessment method to compare your F to MFMT.

41
42 I heard you guys talking about management options, like what do
43 you do, and I want to point out that we -- A lot of the questions
44 for the council here, a lot of questions to be considered, and
45 we're aware of those, and those are going to be on the table, but
46 the types of tools that you could use for managing to a rate are
47 the same kind of tools you can use for managing to an amount. You
48 have size limits, you have time/area closures, you have gear

1 modifications.

2
3 I saw, from the SSC this morning, that, in way, these management
4 tools directly relate, or more directly relate, to these rate-type
5 methods than calculating back to an amount of fish, and so some of
6 these have logical linkages, but that question of CPUE is changing,
7 and how rapidly do we respond, how rapidly do we react, that's
8 going to depend on how you set it up and how the council designs
9 its accountability measures.

10
11 The FMP would need to describe how you're going to do your
12 monitoring, and a couple of things that we explored in the paper,
13 two options that you might want to -- One, run your model annually,
14 just continue collecting your data throughout the year and then
15 run the model once a year for your accountability measure
16 mechanism, or I heard you guys talking a lot about real-time
17 monitoring, and that's also an option, and that's certainly
18 something that the council would want to explore, but, whatever it
19 would be, you would tie an accountability measure of some sort to
20 your ACL.

21
22 Here is just the overview, again, of what we talked about of those
23 stocks that do qualify for alternatives, but they don't have the
24 rate data, and what do you do with those, and they must still
25 comply with Magnuson, doing the best they can with what they have,
26 the best scientific information available. For these stocks,
27 consider whether you could start collecting data that would support
28 a movement towards the rate-based ACL and, consistent with what I
29 heard this morning, continue to move us forward towards our
30 ultimate goal, which is to get all of these stocks towards the use
31 of the standard ACL approach of using the ACL expressed as an
32 amount of fish.

33
34 That is the quick overview of what is in that paper, and I am happy
35 to talk questions, and I am probably going to call on Jason to
36 jump in and help me, or anybody else, with technical stuff, but
37 that is the show.

38
39 **MARCOS HANKE:** Thank you for a great presentation, Marian. Council
40 members, do you have any questions?

41
42 **MIGUEL ROLON:** Marcos, not a question, but to clarify, because
43 some people are asking, okay, now this is it, and what now, and,
44 well, the thing is that what we have heard today is it provides
45 more flexibility, especially in data-poor areas like the one we
46 have here, and so the councils can work in the establishment of
47 ACLs, following these guidelines in a better, let's say, manner.
48 Also, if we do this, we comply with the Magnuson-Stevens Act, and,

1 of course, we have to always wait for the SSC recommendations.

2
3 We did something similar, or the SSC did similar, when we
4 identified the different species that we have here, the data
5 components that we have, and then we have -- Remember the tiers,
6 and so the presentation today not only validates what we have done,
7 and we can modify it a little bit, but we will be in compliance to
8 study those ACLs in a way that we follow the Magnuson-Stevens Act
9 and we follow the guidelines established by the National Marine
10 Fisheries Service, in this case NOAA Fisheries. That's where we
11 are.

12
13 Anyway, the question from the councils are open now. If you don't
14 have any questions, that's fine, and we'll move forward, but I
15 would like to hear from Dr. Richard Appeldoorn and other technical
16 people around the table whether they have any questions that can
17 be addressed today, of course from the council members.

18
19 **MARCOS HANKE:** Is there any other member of the technical group
20 that would like to jump in?

21
22 **ANDY STRELCHECK:** Marcos, I will jump in. Marian, it's good to
23 see you, and it's good to hear your voice. It's been a while.
24 You might have said this, and apologies if I missed it, and it's
25 very much a draft plan right now that is going through review.
26 What is the timing for finalizing the plan at this point, or the
27 policy?

28
29 **MARIAN MACPHERSON:** That's a good question. I think it kind of
30 depends on what kind of feedback we get, and someone just also
31 asked for a reiteration of that we have requested comments from
32 the councils by October 1, and then I think there will probably be
33 some more discussion at the next CCC meeting, and then, depending
34 on what the comments look like, what sorts of revisions need to be
35 made, will affect the timing of the next steps, but we're hoping
36 to keep moving it along, if it's something that's going to be
37 beneficial for people.

38
39 **ANDY STRELCHECK:** Then a follow-on, and I know that, at one point,
40 we were talking with you and others about a pilot-style project,
41 and I think you heard that conversation this morning, or suggestion
42 from the SSC, and I'm curious if there is any pilots ongoing at
43 this point in other regions or any kind of efforts along that
44 front, beyond some of the initial discussions we've had.

45
46 **MARIAN MACPHERSON:** Thanks, Andy, for bringing that up. Sam Rauch
47 encouraged us to kind of do an, I don't know, but micro-rollout of
48 this and reach out to the Southeast, and also the Western Pacific,

1 about whether there would be interest in doing a pilot project and
2 trying this out.

3
4 We have talked with the Western Pacific, and also with your region,
5 and we don't have a pilot project in the works yet, but I think
6 there are a couple of things that are of interest and might be
7 developing soon.

8
9 **MARCOS HANKE:** That is good news. Anybody else?

10
11 **RICHARD APPELDOORN:** Marcos, if I could just make a comment?

12
13 **MARCOS HANKE:** Richard, go ahead.

14
15 **RICHARD APPELDOORN:** I just wanted to make two points. One, the
16 presentation that the council just had is almost exactly the same
17 as what was presented to the SSC, although we had it presented by
18 Jason, who is a little bit more technically savvy in some of these
19 areas, and so I think that provides the context for which we were
20 making our endorsements for, and there's nothing really specific
21 there. It's a process, and we're endorsing the process. Secondly,
22 I would like Marian for explaining rate-based methods better than
23 I did.

24
25 **MARCOS HANKE:** Thank you, Richard. Clay.

26
27 **CLAY PORCH:** Thank you, Marian. I just wanted to comment that,
28 yes, we did have that conversation, and, in fact, the Southeast
29 has been applying a variety of data-limited tools for a while, but
30 most of them haven't been used in management yet, and so we're
31 definitely primed to come up with a pilot example.

32
33 In fact, we're going to look at some with this upcoming queen
34 triggerfish assessment, and, really, any of the assessments in the
35 Caribbean are data-limited, and so it's more a matter of, instead
36 of just trying to translate the approach that we find best
37 supported by the data into catch advice, we can use it more
38 directly in terms of managing fishing mortality rate or some
39 related indicator.

40
41 Like, if you used a length-based approach, there's an implied
42 fishing mortality rate, as Marian pointed out in one of the
43 figures, and so we would find the average size of the catch that
44 you would expect with the target level of fishing mortality, and
45 then you would just monitor the average size.

46
47 There is lots of things we can do like that, and they're not all
48 as directly intuitive as just monitoring catch, but, if you don't

1 have a good way to monitor catch, these are better than doing
2 nothing or pretending that you know what the catch is.

3
4 **MARCOS HANKE:** Thank you, Clay. I am looking here in the chat,
5 and I don't see anybody else. Thank you for a great presentation.
6 This is the last opportunity for the council members. Hearing
7 none, we will go for the next presentation.

8
9 **MARIAN MACPHERSON:** Thank you.

10
11 **ENFORCEMENT ISSUES WITH NASSAU GROUPER AND OTHER FISH SPECIES IN**
12 **ST. THOMAS/ST. JOHN, USVI**
13

14 **MIGUEL ROLON:** Marcos, the next thing in the agenda is the
15 enforcement issues with Nassau grouper and other fish species in
16 St. Thomas/St. John. I don't see a presentation, but, just to
17 give an introduction to the topic, we received a phone call at the
18 office, to me specifically, indicating that there were some issues
19 with the Nassau grouper in the area of St. Thomas/St. John.

20
21 I talked to a couple of people, and I talked to Julian, and he's
22 here, and he can explain, and the situation is this. The person
23 that called me claims that there are fishers going out, and they
24 fish Nassau grouper and fillet the fish at-sea and then they are
25 sold on land as other groupers or any other thing but Nassau
26 grouper.

27
28 This fisher is really upset, because he and his friends are
29 following the law to the dot, and they believe in the process that
30 we have to allow the Nassau grouper to recuperate, but, at the
31 same time, they are demoralized by these people coming in, and
32 nobody is intervening with them, and they are selling the fish.

33
34 We talked to Miguel Borges and others, and they told us that,
35 presently, they cannot intervene, because they only have authority
36 in the EEZ and not in the local area of jurisdiction of the U.S.
37 Virgin Islands, and so the issue is, okay, that's the situation,
38 and that is happening, and what can we do?

39
40 Do we need a memorandum of understanding for enforcement, so that
41 federal and local government authorities can join in efforts to
42 stop this from happening? What can we do? Of course, all the
43 process has to do with the present laws and regulations that we
44 have, and so, Julian, if you're around, can you explain a little
45 bit more, if you know, about this issue and what is happening in
46 St. Thomas/St. John? Marcos, Julian has his hand up.

47
48 **MARCOS HANKE:** Yes, and you already gave the opportunity to him.

1 Go ahead, Julian.

2
3 **JULIAN MAGRAS:** Well, when I received the email about what was
4 going on, right away, I jumped on, and I had some dialogue back
5 and forth, and one of our biggest concerns that I don't understand
6 is, if you have a compatible regulation, in both federal and local
7 waters, and an individual is caught by a federal officer, why can't
8 they deal with the issue, because it's a compatible regulation?

9
10 As it pertains to the Nassau grouper, that is closed all around,
11 forever, and so what is happening is fishers are complaining about
12 the illegal activity by other fishers, both commercial and
13 recreational, because we don't have any local enforcement that are
14 out there enforcing and checking the different markets and to see
15 what's going on at the dockside when the boats are coming in, and
16 nothing is being done.

17
18 Even to myself, I have warned several people that we are in the
19 closed season, and they need to follow the law, but I think
20 something needs to be done that, if a federal officer catches
21 someone on the shoreline with an offense that is both federal and
22 local, that they can address it, because then compatibility would
23 never work. We talk about doing stuff that is compatible, but the
24 federal officers can't comply, or they can't do their job unless
25 the individual is caught in federal waters, and that is a major
26 problem, and can we address that?

27
28 **MARCOS HANKE:** Thank you, Julian. I will just check, and I think
29 Miguel Borges is on the line, and the question, Miguel, is what
30 can be done or what can be done to fix -- If there is any loophole
31 or coordination with the state waters, and go ahead, Miguel.

32
33 **MIGUEL BORGES:** Well, thank you, Julian, also, for your comments.
34 When we received that, I contacted the council, and then I
35 contacted our enforcement officer who is over there in St. Thomas.
36 The main problem that we have is that, even if the regulations are
37 compatible, that doesn't mean that we have jurisdiction in state
38 waters. Those are two different topics.

39
40 The regulations might be the same, compatible, but that doesn't
41 mean that we can enforce those regulations in state waters, and so
42 that is an issue that always happens, and I have it here in Puerto
43 Rico as well, and in the Virgin Islands, and it's a challenge for
44 us to get jurisdiction sometimes.

45
46 We have, for example, jurisdiction in the tunas, from the shore
47 all the way to federal waters, but all the other species depend on
48 a case-by-case basis, and the specific anonymous call -- We, for

1 the most part, do not have jurisdiction on that issue. I wish we
2 had, and I spoke to General Counsel, to see if we could -- If we
3 had jurisdiction, but it's very limited in the specific issue that
4 was brought in that call. That's all, Marcos.

5
6 **MIGUEL ROLON:** So how can we fix it?

7
8 **MARCOS HANKE:** A specific question, from my side, is a letter of
9 understanding, or cooperation, between the state and with you guys
10 doesn't fix it, and is there a way to go?

11
12 **MIGUEL BORGES:** I believe that it has to be -- Our jurisdiction
13 has to come from -- Directly from a CFR or federal regulation and
14 not directly from the state. There is a process, in some cases,
15 where the state could be preempted, and they give some jurisdiction
16 to the federal agencies, but that is a process, a long process,
17 that has to be done, and it's not as easy as, okay, here you go,
18 and here's a letter of understanding between federal agencies and
19 the local government and we automatically have jurisdiction.

20
21 I wish we did, but we would have to ask General Counsel to see any
22 other alternatives that we have to acquire jurisdiction if the
23 state wants us to intervene more. As far as I know, it needs to
24 be a federal regulation for us to have jurisdiction, and so --

25
26 **MIGUEL ROLON:** Marcos, if I may.

27
28 **MARCOS HANKE:** Go ahead.

29
30 **MIGUEL ROLON:** I don't understand this. The Nassau grouper is
31 protected under the Endangered Species Act, and it's a federal
32 offense. You pursue the people because they are free to run
33 billfish all the way to the shoreline, and so why in the hell can
34 we not do the same thing with the Nassau grouper?

35
36 **MIGUEL BORGES:** Miguel, that's a good point, and I share your
37 frustration as well, but even -- That's a good point that you
38 brought, because I discussed the billfish issue, and it's the same
39 thing, and I do not have jurisdiction in state waters for the
40 majority of cases of billfish, if it's caught in state waters. I
41 need to prove that it was caught in federal waters.

42
43 **MIGUEL ROLON:** No, no, no, no. The fishery management plan for
44 billfish goes all the way to the shoreline. It's the only species
45 that goes all the way to the shoreline, and I -- Also, for the
46 record, Miguel Borges is doing an excellent job here, but what he
47 is telling us is that he needs some regulation that he can abide
48 to, in this case.

1
2 My suggestion, Mr. Chairman, is that we write a letter to the
3 appropriate authorities, in this case Andy Strelcheck, and they
4 can sort this out and come up with the possible solution, because
5 I agree with Miguel that a simple cooperative agreement won't do
6 anything unless we have a mandate, in this case a mandate to
7 enforce the law all the way to the shoreline.

8
9 My recommendation, in this case, is that we are not going to do
10 anything by continuing discussing this here, but allow the staff
11 to prepare a letter for the signature of the Chair, and we can
12 send it to the Regional Administrator of NOAA Fisheries, to see if
13 they can then tell us what actions can we take, or what action the
14 action agency can take, to finish this.

15
16 Also, in the case of Puerto Rico, the Rangers are deputized by the
17 federal government to engage with the federal regulations that are
18 -- The people that are in violation of federal regulations, and so
19 we need to look at that, and Miguel is right that we need to also
20 knock on the door of the legal advisors and make sure that we have
21 the elements and the tools to close this gap, to be able to then
22 enforce the law to protect the Nassau grouper.

23
24 Right now, internationally, we are telling other countries what to
25 do with the Nassau grouper, and then we are here in the Caribbean,
26 and we cannot do it, and, to me, it's more than frustrating. I
27 have other words, but we are on the record here, and so, if we all
28 agree, Mr. Chairman, we can do this, but I would like to hear from
29 council members and other any persons that have something to say
30 at this time, but I believe that, first, we will be presenting
31 communication, official communication, to the Regional Office
32 inquiring about what can we do in terms of alleviating this
33 problem, because it's really something that is affecting the
34 fishers in the St. Thomas/St. John area especially.

35
36 **MARCOS HANKE:** Thank you, Miguel. Jocelyn.

37
38 **JOCELYN D'AMBROSIO:** Thank you. I would want to speak with my
39 colleagues in the GC Enforcement Section, but I did want to just
40 speak briefly on this issue. Right now, as Miguel had said, there
41 is not jurisdiction in the state waters, and so the federal law
42 preventing any harvest or possession of the Nassau grouper would
43 be from federal waters, and so, if they encounter someone in state
44 waters, they don't know if it's breaking the federal law.

45
46 There is not jurisdiction to enforce the state law, as of right
47 now. In terms of whether that would be possible, I don't know if
48 it's possible to work with the states, at least to refer any

1 violations or to come up with any joint enforcement agreements,
2 and I'm not sure about that, and so I would have to check in with
3 others, but that's something that we could look into.

4
5 I did want to speak to the Endangered Species Act issue though.
6 Nassau grouper is listed as threatened under the Endangered Species
7 Act, and, basically, that means that the National Marine Fisheries
8 Service would have to put into place regulations that makes it
9 unlawful to take, which would include like possessing it, to take
10 the species, and so, right now, that is not necessarily a
11 violation, unless there is some other provision that is put into
12 place, and so that's why the Endangered Species Act doesn't, right
13 now, provide a hook for certain federal actions.

14
15 There is limits on the amount of species that can be taken, and
16 so, if it was taken in the federal fishery, we are monitoring that,
17 and there are take limits, but, again, that would be that we kind
18 of want to know what happened, as part of the federal fishing
19 activities, and, here, we're talking about something in state
20 waters. We can continue to think about if there is any potential
21 option for what could be done in those state waters, but, right
22 now, as Miguel Borges said, there is just a jurisdictional issue.

23
24 **MARCOS HANKE:** Thank you, Jocelyn. With the idea that Miguel just
25 mentioned before the council, does anybody from the council have
26 any opposition to make this letter, to follow-up on this request,
27 this issue, by the St. Thomas and St. John fishermen? Hearing
28 none --

29
30 **MIGUEL ROLON:** Marcos, also, we need to touch base with the
31 Commissioner of the U.S. Virgin Islands, to check on the applicable
32 regulations regarding this issue, because, if we, let's say, have
33 an issue with the jurisdiction, but, if it's adopted, and I don't
34 know if it has already been adopted, but, if it's adopted as a
35 state law violation, messing with the Nassau grouper, then you
36 have compatible regulations, actual compatible regulations, and so
37 the issue of jurisdiction is a little bit -- It's still there, but
38 at least there will be no excuse for enforcement agents to go into
39 local waters and enforce the law. The local government will
40 enforce the law in the three miles of the U.S. Virgin Islands,
41 and, of course, Miguel Borges will continue doing what he is doing
42 in the EEZ.

43
44 The letter will be -- I will draft the letter and send it to
45 Jocelyn for making sure that I am not stepping on the wrong toes
46 or saying the wrong words, and then, once we clear that, we will
47 send it to Marcos for review and approval, and we will send the
48 letter then to -- One to the Virgin Islands administration -- One

1 to Andy Strelcheck and other one to the Commissioner of the Virgin
2 Islands, the Department of Planning and Natural Resources. By
3 December, maybe we will have some information to discuss this
4 further.

5
6 **MARCOS HANKE:** Thank you, Miguel. I have Nicole Angeli. Thank
7 you for waiting.

8
9 **NICOLE ANGELI:** Thank you so much. Thank you for the discussion.
10 One of the things that the department would very much support would
11 be allowing federal NOAA officers to prosecute individuals if the
12 species were landed and they believe they were caught in
13 territorial or federal waters, and so we look forward to
14 information from NOAA legal about a way forward, so that we can
15 increase our capacity for law enforcement, especially in times of
16 disasters and pandemics, when most of our enforcement staff has
17 actually been called to our Virgin Islands Police Department to
18 execute activities relating to the pandemic, and so, in these
19 cases, any sort of cooperation or increased support from the
20 federal government would be very welcome.

21
22 **MARCOS HANKE:** Thank you for your points. I have Damaris wrote in
23 the chat about the same issue, that she has a similar situation in
24 Puerto Rico, and to please include a similar situation in Puerto
25 Rico, and she would like to be included in this letter, also.

26
27 **MIGUEL ROLON:** We will not say in Puerto Rico or the U.S. Virgin
28 Islands, but we will say U.S. Caribbean, so we can take care of
29 Damaris' concern. It will be a letter addressing the U.S.
30 Caribbean local waters.

31
32 **MARCOS HANKE:** Thank you. Anybody else from the group, so that we
33 can move along? Hearing none, thank you all for a great
34 discussion.

35
36 **MIGUEL BORGES:** Marcos, I just wanted to make sure that, for the
37 record, that -- Thank you, Jocelyn, for your comments, and Miguel
38 Rolon, and I also concur with your idea of a letter, of the idea
39 of requesting a letter, for NOAA to hear this issue, and it's in
40 everybody's benefit to sort out our jurisdiction in state and
41 federal waters, and so I agree with that letter, and, in my heart,
42 I do hope and wish that it was easier, the jurisdiction issue, so
43 that we would have jurisdiction in those ESA cases, even in state
44 waters, and so that's all. Thank you.

45
46 **MIGUEL ROLON:** From Miguel to Miguel, thank you very much.

47
48 **MARCOS HANKE:** Thank you, Miguel. The next item on the agenda is

1 the DAP Chairs Report. We're going to start with St. Thomas.

2
3 **DAP CHAIRS REPORT ON BUOY GEAR REGULATIONS**
4

5 **MIGUEL ROLON:** Marcos, before we start, I promised the three chairs
6 that I was going to do a little bit of an introduction. Remember
7 that, in the previous council meetings, we are addressing this
8 issue of the number of hooks for buoy sets that are used for
9 deepwater snappers.

10
11 Julian, Nelson, Eddie Schuster, and I had a talk, and I prepared,
12 based on communication with Maria Lopez, and, in this case, what
13 we did was to share a letter that was presented by her to look at
14 certain topics of interest in this discussion for council action,
15 and so we met, and we have some talking points, and then the idea
16 is for the three chairs to convey to the council what they have
17 found, in terms of the present status of the fishery in each area
18 using this type of gear, the buoys. The first one is Eddie
19 Schuster, followed by Julian Magras and then Nelson Crespo. Eddie,
20 are you available?

21
22 **EDWARD SCHUSTER:** Yes, Miguel. Do you want me to go ahead, first?

23
24 **MIGUEL ROLON:** Yes, please.
25

26 **EDWARD SCHUSTER:** Okay. Good afternoon, council members and
27 everybody present. We had this discussion, and I will just read
28 out what I have here. There were about twelve commercial fishers
29 and about one to two recreational fishers that both fish in local
30 and federal waters, but this gear is not used year-round. This
31 gear is used only when the weather permits, and it's also used
32 within the lunar cycle with fair conditions.

33
34 This gear is used in a depth range from 400 feet to 1,200 feet,
35 and the species that are targeted go anywhere from the blackfin
36 snapper, silk, black snapper, the queen, the quaker, which would
37 be the cardinal snapper, and some occasional catches of different
38 species of grouper, along with incidental catches of sharks. Also,
39 if the current -- While fishing in deep water for the queen
40 snapper, you may catch incidental like oilfish and other species
41 that I am not really too familiar with.

42
43 The number of hooks varies from eighteen hooks all the way to
44 twenty-five hooks, and along with a weight at the bottom, and there
45 is some other trade secrets that the fishers have asked not for me
46 to be too verbal on, too vocal, and one is also with a light that
47 attracts the fish to the bait.
48

1 The number of the buoys that are used, it varies. This is a fish
2 that travels at the bottom, with the current, and so what the
3 current is at the top is not necessarily what's at the bottom, and
4 so the fishers might start with one buoy, all the way up to four
5 buoys, but it's times that they go, and the fish are there, and
6 they are eating, and you only have time to drop one of the buoys.

7
8 The reason being is that, if the bite is hot, what happens is the
9 fish try to get away while they are hooked, and that thrashing
10 around causes the sharks to come, and then the fisher loses the
11 bait. The fishing days are usually anywhere from eight hours to
12 twelve hours, and it's not a fish that actually stays in the
13 freezer, and these fish actually are sold before they are caught,
14 and so, as a fisher catches a fish, if he's not too tired, most of
15 the fish goes that same day, or, by the next day, it's gone.

16
17 There is one other thing. That is what it is, and it's a self-
18 regulated fishery, and I don't -- It's very expensive to get into
19 it, one, and it's something that somebody has to have the
20 experience, or fishing with somebody that has that years of
21 experience, in order to go into it.

22
23 The reason being is that you could lose all your gear in one set,
24 depending on the current, and so you have to know where to set the
25 lines and have the experience to know if the current is going
26 inland, to the shallow, because there are deep shelf drop-offs on
27 St. Croix, and especially -- You would have to set really deep,
28 and you fish from the deep coming with that, and so you don't want
29 to set too much gear at the same time, and so you will have to
30 start off from there, and then there is times that the current
31 goes the opposite way, and you have to set it at 400 and then it
32 goes out to the deep, and so it varies. It's a fishery all due to
33 experience, and that really summarizes what I have written down.
34 Are there any questions?

35
36 **MARCOS HANKE:** Thank you, Eddie. The next presenter, and we will
37 make questions to all of you later, if the group desires, is
38 Julian.

39
40 **JULIAN MAGRAS:** Good afternoon, everyone. Julian Magras here, for
41 the record, DAP Chair, St. Thomas/St. John. This fishery is a
42 very, very small fishery here in St. Thomas/St. John. Right now,
43 presently, there are two to four guys that presently do this type
44 of fishing, and one of the main reasons for us having such a small
45 amount of guys doing this type of fishing is due to the fact that
46 the distance that they have to go to the drop, where they are
47 fishing, is pretty far, and so it's a weather-driven fishery, like
48 most of our fisheries, and so maybe ten miles to the south, but

1 twenty-something miles to the north, and so there are a couple of
2 young guys that presently are doing this type of fishing.

3
4 They are using electric reels, and they use up to ten hooks, and
5 then we have a couple of the older guys, and some of them use
6 traps, and that's the Ledee brothers, who was doing that for a
7 while, and some of the Berry guys, but they took a beating last
8 year, with the currents and everything, and so they have backed
9 away from that this year, and we have two other older guys that is
10 using the buoy gear.

11
12 They don't go out that often now, and so it's when the weather is
13 really calm that they would go out, and they would explore -- They
14 would do it for a couple of days, and then that's it, and so they
15 don't do it again, and so it's a fishery that is out there that
16 has great potential, and I wouldn't broadcast that there is a lot
17 of potential for it, because we wouldn't want outsiders to come in
18 and start to harvest tons of the fish, even though they don't have
19 to land it here, and they can land it elsewhere, because, if they
20 land it here, it's required for them to have a commercial fishing
21 license.

22
23 We also have the weekend warriors that also fish in this fishery,
24 and so, when the weather is calm, they will go out and catch some
25 of the fish, but they keep it for themselves. There is a great,
26 great market for it. If anyone catches that fish, it's gone. It
27 hits the ice while the guys are out, but, once they hit the
28 shoreline, it's gone. It's sold immediately.

29
30 I would like to see that maybe there could be a permitting system
31 for the federal waters, a license for federal waters for this
32 fishery, to try to control it for some younger fishers who are
33 coming up or anyone who might have interest in it, that we could
34 try to protect it, so that it's not overharvested, and it's a
35 virgin fishery right now.

36
37 **MARCOS HANKE:** Julian, I have a question, a clarifying question.
38 You were talking about the fishery, and not necessarily
39 specifically the buoy gear, and can you add anything about the
40 buoys?

41
42 **JULIAN MAGRAS:** The buoy gear, that's what I was saying. The buoy
43 gear is two to four fishermen that are presently doing it, just
44 a couple of days out of the year, and so I know of two here in St.
45 Thomas/St. John. We have a lot of fishers that come from St.
46 Croix, when the weather is good, and fish on the shelf of St.
47 Thomas, but I don't include them, because they don't land here.
48 They land in St. Croix, and so, presently, in St. Thomas, I know

1 of two guys that do the buoy gear, and, if they do it four or five
2 times for the year, they're doing it a lot.

3
4 **MARCOS HANKE:** Thank you for clarifying that.

5
6 **JULIAN MAGRAS:** It's very, very small, and so I think that's what
7 I would have to say about that.

8
9 **MARCOS HANKE:** Thank you very much. That's very helpful. Nelson.

10
11 **NELSON CRESPO:** Thank you, Mr. Chair. The comments I'm going to
12 make now are based on my experience as a commercial deepwater
13 snapper -- Fishing for deepwater snapper for more than forty years
14 and conversation with DAP members, Edwin Font and other fishermen
15 from the west of Puerto Rico.

16
17 I know there are some deepwater snapper fishermen here. If I miss
18 something, if you allow them to -- If I miss something, I request
19 them to remind me, because I know I have a lot of experience, but
20 there is always something that we miss.

21
22 This type of fishing is not easy at all, and, in a lot of the
23 cases, experience makes the difference between a good or a bad
24 trip. I am going to go over the talking points regarding the gear
25 in federal waters. All of us agree that the use of this gear has
26 to be in local and federal waters, as has always been used. This
27 is the most safe and effective gear so far to develop the fishing
28 for deepwater snapper 1 and 2 and deepwater groupers that we know
29 to this moment.

30
31 Regarding the duration of our trips, normally, we go between three
32 to four days per week in good conditions, depending on the moon
33 phase and the weather and current conditions. For example, you
34 can have a flat day, but, if the currents are hard, the possibility
35 of a bad fishing day increases. In reality, we only can be able
36 to fish around 100 to 120 days per year, or a little more in some
37 years. That's what we call the natural closure for this fishery.

38
39 The duration of the fishing trips is between ten to twelve hours
40 per day from when we leave onshore and come back, and I have to
41 clarify that the gear is used only around a maximum time of between
42 five to six hours per day, or less, and the rest of the time is
43 used to move from one point to another.

44
45 Let me explain this to you, a better understanding about this
46 fishery. Based on our experience, if we reach one area, and the
47 ocean currents are strong, or not suitable to develop the fishing
48 in the area, we have to move to another point that allows us to

1 fish. I must clarify that, until the currents are acceptable, and
2 if they are not the ones which the fish eats, it's very little or
3 nothing, what you are going to catch, and the same happens with
4 the moon phase. If you don't know where to go on each moon phase,
5 it's the possibility to make a good catch lowers down a lot.

6
7 Regarding the information of targeted species and incidental
8 species, the targeted species are, of course, Snapper Unit 1 and
9 2 and Deepwater Grouper, but, in my opinion, until we know the
10 groupers are there, the deepwater groupers, they are more a bycatch
11 than a target. Between the incidental species harvested, I would
12 classify them in two groups, that have some commercial value and
13 those that do not.

14
15 For example, the glasseye snapper, and I don't know the English
16 name, and the black cartucho, they are with the snappers. The
17 small sharks, the spiny and the other one, because they have a
18 limited value, most of them are returned alive to the sea, and let
19 me make a quick aside and tell you that they are really abundant,
20 and it would be good to take into consideration for marketing.
21 The meat is good quality, and I think it would be a good
22 alternative, in order to reduce the fishing pressure for other
23 fisheries. They are a species that currently have no commercial
24 value and are returned to the sea. They are rarely caught, and
25 perhaps that is why they are not traded.

26
27 Regarding the number of hooks, it varies, from each fisher, between
28 twenty to forty hooks. What we have found is that twenty-five
29 hooks is the perfect number to develop this fishery, due to some
30 reasons. Based on our experience, between twenty-five and thirty
31 hooks, the catch are more or less the same, and there is no reason
32 to use more than twenty-five hooks. With twenty-five hooks, you
33 can easily handle the gear in the boat, but I have to clarify also
34 that, with twenty-five hooks, you save bait, and you save money on
35 gear, when you're going to make it, but we have to clarify that
36 twenty-five hooks do not guarantee twenty-five fish. When the
37 fish bite and get hooked, they shake it, trying to escape, and,
38 generally, the bait on the upper and lower hook comes off.

39
40 From the other side, using less than twenty-five hooks, we find
41 out that the catch decrease. Because the bait increases, and more
42 hooks means more bait, and there is no guarantee that you are going
43 to catch more fish, and, because fishing equipment has risen
44 dramatically, and it does not make sense to use more gear than is
45 necessary, with the current -- With more hooks, the current moves
46 the gear faster and doesn't let the fish bite.

47
48 With the number of the set lines, that varies from the preference

1 of each fisherman. Generally, we use within one to four set lines,
2 and the number of hooks are the same, twenty-five. If the bite is
3 low, we use four set lines, in order to find the fish, and we are
4 just searching around the water.

5
6 When the fish start biting, immediately, we start reducing the
7 number of lines, depending on how hot is the bite. When the bite
8 is really hot, we don't use more than two, in order to pull the
9 line out faster and prevent the sharks from attacking the gear,
10 and the fish comes off from the hook. If you leave the set lines
11 in the water with fish for a long time, there is a risk to lose
12 the gear, due to the shark encounter increase.

13
14 If the currents are strong, we only use one or two set lines, to
15 start to slow down. Sometimes we only stay in the boat drifting,
16 just checking the GPS, and we wait for the current to slow down.

17
18 Information on how landings with this gear type are reported, we
19 pull this gear -- We report it to the DNER reporting or the regular
20 paper fishing trip ticket, and most of the fishermen have their
21 own logbooks for personal use.

22
23 Also, in my opinion, the DNER has been more than generous in
24 allowing sixty days to report any catch. I think that, with the
25 tools we have right now, more than thirty days is more than enough,
26 without excuses, to provide the data, in order to remain proactive
27 for the good of the fishers and the commercial fishermen. Again,
28 I emphasize that we have to open the door and give the opportunity
29 to the legal deepwater snapper fishermen to join us and start
30 reporting their catches.

31
32 I guarantee you, without a doubt, that there are more poachers for
33 deepwater snapper than the ones that have the permit, at this
34 moment, and we have to have a real idea for how healthy is our
35 resource, and so I request this council to pay attention to this
36 and explore a way to help to bring those guys to the table, and,
37 as I said, it's really important for me and for the health of the
38 fishery. That's all I've got, and, if you have some questions, I
39 will be more than happy to answer them.

40
41 **MARCOS HANKE:** Thank you, Nelson. Does anybody have questions for
42 the chairman of the DAPs? Maria.

43
44 **MARIA LOPEZ:** Good afternoon. This is Maria Lopez, for the record.
45 I want to say thank you to the DAP chairs for providing this really
46 good information that will benefit the description of the fisheries
47 that we are including in the amendment to the island-based FMP to
48 modify the definition of buoy gear.

1
2 I do have one question that Nelson mentioned at the end, and it's
3 about how the landings with this fishery are reported, and I didn't
4 hear that from the U.S. Virgin Island DAP Chairs, and I know that
5 they said that there are not many fishers that are using this gear,
6 but, if they have that information about how these landings with
7 this particular gear are entered into their catch report forms,
8 that would be very helpful. Thank you.
9

10 **MARCOS HANKE:** Is there anybody else that would like to make a
11 question or a comment? Hearing none, Maria, do you have all the
12 information or any other questions, before we close?
13

14 **MARIA LOPEZ:** I made the question about how the information is
15 entered in the logbooks, and, if the DAP chairs have that
16 information, they can send me an email, or communicate with me
17 later, and that would be great. Thanks.
18

19 **MARCOS HANKE:** Thank you very much. We are ready then to wrap up
20 this presentation and questions and go to the next item on the
21 agenda. Go ahead, Carlos.
22

23 **CARLOS FARCHETTE:** I heard that there are recreational users of
24 this gear. Is that going to be allowed in this FMP thing that
25 they're trying to do?
26

27 **MARCOS HANKE:** Maria.
28

29 **MARIA LOPEZ:** A buoy gear, in the Caribbean, is the gear that is
30 only an allowable gear for commercial, commercial fishing. In
31 federal waters, it's not an allowed gear, how it is defined in our
32 regulations, and so this action is only going to be modifying the
33 definition of the buoy gear as it applies to commercial fishers.
34

35 **CARLOS FARCHETTE:** Okay, and so I guess recreational fishers won't
36 be able to harvest that species, I guess.
37

38 **MARCOS HANKE:** Carlos, remember that we are talking about the buoy
39 gear itself, and that is different than fishing with an electric
40 reel on the side of the boat or a handline on the side of the boat
41 to catch the same species. Correct me if I'm wrong, Maria.
42

43 **CARLOS FARCHETTE:** Gotcha.
44

45 **MARIA LOPEZ:** That is correct.
46

47 **CARLOS FARCHETTE:** Okay. I've got you.
48

1 **MARCOS HANKE:** Thank you, Carlos.

2
3 **CARLOS FARCHETTE:** Also, to Maria's question as to what is
4 recorded on the CCR, I mean, Director Angeli should be able to
5 answer whether or not that gear is in that catch report, if they've
6 got to report it as such gear being used, and I'm not sure. I
7 have never seen it.

8
9 **MARCOS HANKE:** Nicole.

10
11 **NICOLE ANGELI:** That is not currently on, but we can revise our
12 CCRs, in collaboration with NOAA annually. The last time that was
13 done was 2019, and so it's probably time for us to take a look at
14 the CCRs.

15
16 **MARCOS HANKE:** Thank you.

17
18 **CARLOS FARCHETTE:** I didn't understand that. Did she say it is
19 there now?

20
21 **MARCOS HANKE:** She just said that it's not there, and it was a
22 little low, the volume, and it is not there, but that they are
23 willing to revise, and it was revised last time in 2019, and it's
24 a work in process.

25
26 **CARLOS FARCHETTE:** Got it.

27
28 **GRACIELA GARCIA-MOLINER:** Mr. Chair, if I may.

29
30 **MARCOS HANKE:** Go ahead, Graciela.

31
32 **GRACIELA GARCIA-MOLINER:** We've been talking about gears here and
33 there, but I think what is really needed is that we need to review
34 and redescribe all the fishing gears that are being used, not only
35 for the commercial, but also for the recreational sector, and,
36 really, the first review that was done for Puerto Rico was in 1988
37 and 1989, and there is really not a one-to-one correspondence of
38 the fishing gear that is being used to what is being reported, and
39 this happens for many of the other gears, the nets and the other
40 lines, et cetera.

41
42 It should be put in as a priority to complete a full description
43 of all the fishing gears being used to-date and to make that into
44 these catch reports, so that, when we go to analyze the data, we're
45 speaking the same language, because, otherwise, we'll keep running
46 into these problems, and so just be advised that we haven't done
47 a review since the 1980s, or the early 1990s, and that really needs
48 to be put in the list of priorities for the council and for the

1 local governments. Thank you.

2
3 **MARCOS HANKE:** Thank you, Graciela. On the same lines, I want to
4 add that, Maria, I don't know if it's possible, and there is no
5 limitation on this, but if there was a list of questions that could
6 be circulated to the fishermen on a voluntary basis for them to
7 provide information about the gear characterization, or
8 description, that they have, and that will be something that will
9 help to speed up this process and have better information. Just
10 let us know if there is any possibility to do that.

11
12 **MIGUEL ROLON:** If the local governments can do it, that's fine.
13 If we are going to make a survey, like the federal government,
14 that's something else. It takes about nine months just to start
15 a survey, and that's why we asked the chairs to talk to the people
16 there, but, as I told Graciela, the description of the other gear
17 is something else, and we can do it later, but we wanted to -- I
18 asked Graciela to introduce the topic for the record, but the most
19 important part now is to move forward with the buoy gear issue,
20 but Graciela and I were discussing this a little bit, and we are
21 a little bit worried, and what do you call a recreational fisher
22 carrying three buoys? That is interesting.

23 24 **OTHER BUSINESS**

25 **CAPTAIN SILVA'S LETTER ON DEEPWATER SNAPPER GROUPER FISHERY**

26
27 **MARCOS HANKE:** Thank you, Miguel. Let's pass to the Other
28 Business, and we don't want to run too late on this. Thank you
29 very much for all the participation. Other Business, we're going
30 to start with the letter sent by Captain Silva and his group about
31 the deepwater snapper grouper fishery.

32
33 **MIGUEL ROLON:** Mr. Chairman, the letter is in our briefing book,
34 in Spanish, and the English translation was done by Diana. I
35 believe that Mr. Silva was going to address this, and I don't know
36 whether he's here.

37
38 **MARCOS HANKE:** Roberto Silva, are you still with us?

39
40 **ROBERTO SILVA:** (Mr. Roberto Silva's presentation was in Spanish
41 and was not transcribed.)

42
43 **DAMARIS DELGADO:** I heard what Roberto Silva is saying, and I agree
44 totally with him and with the comments that have been presented in
45 the chat. We met with Roberto Silva weeks ago, as he said, and
46 with some other representatives, and we heard his worries about
47 this fishery, and we all agreed with him, with his arguments, and
48 we prepared a draft administrative order to address his concern,

1 the concern expressed to us, and that draft administrative order
2 has been submitted to the Legal Affairs Office, and I believe that
3 the fishing board, advisory board, is also evaluating the
4 administrative order.

5
6 We shared it with the board, and we are waiting for their comments
7 regarding the administrative order. We believe that order will
8 properly address the concerns of the fishers and will make justice
9 to many fishers, and I personally agree that there should be a way
10 to open it, to open the fishery, to many other people, and so
11 that's the status that I wanted to share with you at this point.

12
13 **MARCOS HANKE:** Go ahead, Miguel.

14
15 **MIGUEL ROLON:** Okay. A couple of things. Number one, there is
16 not a limited entry system in place in the federal government for
17 this fishery, and we do have an ACL. In the case of the local
18 government of Puerto Rico, they have a proxy of a limited entry,
19 with that executive order, and I believe that the two issues to
20 discuss here is, number one, if Puerto Rico is inclined to go with
21 Robert Silva and the other fishers' suggestion, which is to open
22 it for three to five years, full reporting by fishers,
23 electronically or otherwise, and then assess, with the fishers,
24 the status of the fishery, on a yearly basis, I believe, and then
25 probably, at that time, come with a better number for the ACLs and
26 whatever numbers we need to establish for the management of the
27 fishery.

28
29 So two questions. If the local government Puerto Rico, let's say,
30 has the fishery open to all, they can do it within the area of
31 jurisdiction, starting at nine nautical miles, but then the issue
32 of the ACL is what the federal government has to be mindful of.
33 In this case, if that fishery in the EEZ surpasses the ACL, then
34 you have the kick-in of the applicable measures.

35
36 If the fish is caught monthly within the area of jurisdiction of
37 Puerto Rico, meaning within the nine nautical miles, the question
38 is then how much of that will you account to the ACL, and so
39 Graciela and I have the answer to that, and so, for the record,
40 the first question is, if Puerto Rico opens this, what will be the
41 effect, and probably Jocelyn can address it, but what will be the
42 effect, if any, on the ACLs and the applicable regulations?

43
44 **MARCOS HANKE:** Jocelyn.

45
46 **JOCELYN D'AMBROSIO:** I was having a little bit of technical
47 difficulty there. Would you be able to repeat the question?

1 **MIGUEL ROLON:** In the case of Roberto Silva representing the
2 fishers in Puerto Rico, they're asking for opening the fishery
3 within the area of jurisdiction of Puerto Rico for three to five
4 years, and the fishery is not closed at this time, in the case of
5 the federal government, but they would like to open that, and they
6 collect the information using an electronic system, or any other
7 appropriate system, and then, at the end of that term, they will
8 be reviewing, with the scientists, the data collected every year
9 to assess the status of the stocks of those species.

10
11 The question is what impact will that have in the regulations
12 applicable in the EEZ? How can we monitor then the fishery caught
13 in the EEZ that will be tallied up against the ACL established for
14 those species?

15
16 **JOCELYN D'AMBROSIO:** Okay. So, in terms of ACL monitoring, we do
17 look at all landings of whatever species has an ACL, and then the
18 accountability measure process sets forth how those landings will
19 be done, and we use like a three-year average and compare it to
20 the ACL, and then, if that's been exceeded, then that's triggered,
21 and then there is action taken to try to prevent ACL exceedances,
22 but I'm wondering -- Is the question about how do we do the
23 monitoring, how do we get the information?

24
25 Right now, in terms of that, I think maybe there's others on the
26 call that are more familiar with that, but I know we have like
27 various logbook programs, and so I'm not 100 percent sure that I
28 am following, but, just in terms of federal management, it does
29 account for all landings of the managed stock, because we want to
30 make sure that we're managing the stock to prevent overfishing,
31 while allowing for that optimum yield.

32
33 **MIGUEL ROLON:** Marcos, if I may, the whole thing is this. The
34 numbers that the Southeast Fisheries Science Center collects are
35 provided by the local government of Puerto Rico fishery statistics
36 program. Those numbers include everything from the shoreline to
37 the edge of the EEZ, because, at this time, they are not
38 discriminated to one fishery area versus the other.

39
40 Therefore, if you open the fishery to everybody, and that number
41 surpasses the ACL established, then you have an accountability
42 measure that will kick in. Let's say that you have a hundred fish
43 for the ACL, a hundred pounds, for queen snapper, and now you only
44 catch eighty pounds, but, if you open it, and you catch 200, then
45 you have accountability measures, where you have a closure of the
46 season, et cetera, et cetera. That is the question that we have
47 here.

1 If the fishery is all done in the area of jurisdiction of Puerto
2 Rico, still the landings are counted against the ACL established
3 by law at this time, and so those are the issues that we have to
4 take into consideration with this. This isn't just a matter of
5 opening the fishery to everybody and his brother, but it's just
6 what are you going to do with the ACL.

7
8 In order to move from the number that you started for an ACL for
9 any particular species, you have to convince the SSC that the best
10 available information provided by the Center merits the revision
11 of that ACL one way or the other, status quo or up or down, of
12 that ACL. That is where we need to look at regarding this proposal.

13
14 **JOCELYN D'AMBROSIO:** Following up on that, that's very helpful,
15 Miguel, and I agree with what you're saying. If there is more
16 fishing pressure in the state waters, then that could affect the
17 amount of landings that are expected, and we would want to maybe
18 look at if we have the right reference points and what the stock
19 can sustain, but, based on what we have in the law now, those ACLs
20 and those overfishing limits, all landings would be monitored, and
21 you would have the accountability when those measures are exceeded,
22 and the length of the closure period, for example, if there is an
23 accountability measure, trying to prevent an ACL exceedance, we
24 would look at landings, if we have a sense that they're occurring
25 in state waters versus federal waters, and so the federal closure
26 might need to be longer, if there would still be landings in state
27 waters.

28
29 It's possible too, if there's a lot of landings in state waters,
30 that you wouldn't be able to prevent an ACL exceedance with any
31 length of federal closure, but I just don't have a sense of how
32 much fishing would occur in areas where there isn't now and how
33 that would play out, but those are considerations.

34
35 **MARCOS HANKE:** Jocelyn, I have a question about it. In the past,
36 we have talked also about the issue of data improvement and, once
37 you have a data improvement, quality or quantity, there was some
38 freedom that that can cause, in terms of starting to adjust to the
39 reality, and that can be also the case, depending on the way this
40 is implemented, and I have Andy in the queue after you, Jocelyn.
41 Go ahead.

42
43 **JOCELYN D'AMBROSIO:** Sure, and so our accountability measures,
44 right now, say things like -- We're sort of looking for the trigger
45 of has the ACL been exceeded, and then there is the response, and
46 what do we do to prevent an ACL exceedance, and so, on that trigger
47 question, we kind of ask, well, do we think the ACL has actually
48 been exceeded or is it just that monitoring has improved or

1 reporting has improved, and so we kind of base the measures on
2 baseline landings, with a certain understanding of reporting.

3
4 If that reporting has improved, but we don't think the underlying
5 landings have actually gone up, it might look like there is an ACL
6 exceedance, but we might decide that, actually, that's just a
7 reflection of better reporting, and so, in that way, the Regional
8 Administrator has the ability to say, well, we don't think that
9 this really has been triggered and that there's a need for a
10 corrective action, and so the Science Center is involved in kind
11 of helping make that determination.

12
13 This might be a different issue, where we're sort of -- There would
14 be different entrants, potentially, or additional fishing
15 pressure, and so we're getting reports of that fishing pressure
16 and just taking that into account in the normal process, but we
17 also just -- If there's additional landings and things like that,
18 we might want to see what the stock can sustain, and so you might
19 want to evaluate some of the reference points that you have and to
20 see that we have the proper management

21
22 **MARCOS HANKE:** Andy.

23
24 **ANDY STRELCHECK:** Thanks, Marcos. I won't repeat what Jocelyn
25 said, and I think she's captured it well, and well as Miguel, in
26 terms of implications of potentially allowing additional fishing
27 effort and harvest and what that would do, in terms of triggering
28 accountability measures and exceedance of the annual catch limit.

29
30 What I did want to comment on is, in reading the letter, it seems
31 like there is kind of two purposes. One is, obviously, to
32 reconcile some of the qualification criteria that were used
33 initially to allow entry into the fishery or prohibit entry into
34 the fishery, but then the other aspect of this is kind of the
35 improvements in data collection that would then potentially lead
36 to an adjustment to the catch limit, and I guess I would just want
37 a word of caution here, in that, just because landings are
38 increasing, it doesn't necessarily mean that that translates into
39 a higher catch limit.

40
41 We did base, obviously, the catch limits previously on average
42 landings history over some period of time, but we need to ensure
43 that, obviously, the landings that are being harvested are
44 sustainable, and there are a number of efforts with this fishery
45 ongoing, including an exempted fishing permit collaborating with
46 fishermen to collect additional data that the Science Center is
47 working on.

1 That all has to be factored into, obviously, any kind of future
2 decisions with changes to the catch limit beyond just potentially
3 increases in landings associated with greater participation.
4

5 **MARCOS HANKE:** On that same point, I would like to make this
6 question to Andy, because it's a follow-up on his comments. If
7 this is well designed, and there is biological parameters and
8 information, as was discussed for data poor in the past, on the
9 presentation made for the -- On the tech memo that we just had a
10 little while ago, and, if this is supported by the best technicians
11 and people with the knowledge, don't you see an opportunity here
12 to pursue this willingness of the industry to help and to get
13 information?
14

15 **ANDY STRELCHECK:** Yes, and, I mean, obviously, any time that
16 industry is willing to assist with data collection and enhancing
17 the information we have to manage a fishery, that is a win for
18 everyone, and, in terms of kind of the data-limited approaches, I
19 guess my comment would be that that's something that we certainly
20 can pursue.
21

22 Obviously, we haven't made any changes to management at this point,
23 and we've just heard a few presentations over the course of the
24 last few hours, and so, if that is a direction that the Caribbean
25 Council heads, then certainly work in this area, and in particular
26 this fishery, potentially through some sort of pilot study and
27 coordination with the Center and other entities, could benefit,
28 obviously, kind of future management and shift in management
29 potentially away from the biomass-based, or abundance-based, catch
30 limits to some other data-poor methods.
31

32 **MARCOS HANKE:** Thank you very much. Is there anybody else in the
33 queue?
34

35 **MIGUEL ROLON:** Roberto Silva wants to say something, Marcos.
36

37 **MARCOS HANKE:** Roberto, go ahead.
38

39 **ROBERTO SILVA:** (Roberto Silva's comments were in Spanish and we
40 not transcribed.)
41

42 **MARCOS HANKE:** Thank you, Robert. We have three other people in
43 the queue, and let's start to move the meeting along, and I think
44 this is a great discussion, and I want to add to the record that
45 I have been talking to some commercial fishermen about the
46 deepwater snapper, and they are aware of this process that has to
47 be taken, that there is some scars at the beginning of the process,
48 and they have to be patient about it, and this is just what Roberto

1 mentioned, and they are willing to participate and to make it
2 better. Basically, that's the synthesis of what I understand by
3 talking to them. Jose Chara, go ahead.

4
5 **JOSE CHARA:** My name is Jose Chara, and I live in Rincon, on the
6 west side of Puerto Rico, and we've got some concerns about what
7 Damaris was talking about, about the new OA that is coming out for
8 flexible -- The issues with permits given, or the process to
9 request that permit for the State Department, and what are we going
10 to do with the fishermen that -- For example, myself, I have
11 requested a permit last October, and I haven't heard nothing. They
12 just said that I don't got the experience.

13
14 What I am going to do, until this new OA gets signed, and what
15 other fishermen are going to do -- You're going to lose a lot of
16 data, or we're going to lose a lot of data, valuable data, and I
17 always go the right way and do the things the right way, and a I
18 know a lot of guys doing the same stuff, and I know a lot of guys
19 too doing it the wrong way and fishing without a license, and we
20 still are like losing that data each and every day that the weather
21 allows us to go out, and this is going to affect us as a social
22 member of the community, and in an economic way too, and I would
23 like to have some light on it, and I don't want to see dark in the
24 tunnel. I just want to see a little boat, because they always say
25 that you're going to get it, and you're going to get it. Maybe
26 now with the old OA, but with the new OA, and so when this new OA
27 is going to help.

28
29 **MARCOS HANKE:** Thank you for your participation. Nelson, and then
30 Sennai, and then we will wrap up.

31
32 **MIGUEL ROLON:** Marcos, you need to allow Damaris to answer Mr.
33 Chara. It was a question to her.

34
35 **MARCOS HANKE:** Go ahead, Damaris. Very brief, please.

36
37 **DAMARIS DELGADO:** I think that I have explained the status, and I
38 think that Mr. Chara understood. We are waiting, at least myself,
39 and I am waiting for the feedback, the official feedback, and we
40 are looking forward to finishing up this process and sign the
41 administrative order.

42
43 **MARCOS HANKE:** Thank you, Damaris. Nelson.

44
45 **NELSON CRESPO:** Thank you, Mr. Chair. First, I want to say thank
46 you, Roberto, to get into this and to taking care too, and that's
47 what I have been saying for a long time. When this special permit
48 was established, it was to resolve one problem that was in numbers,

1 and it's not in the fishery.

2
3 I think we have a great opportunity right now to step up to the
4 plate and work together with the fishermen and bring better data,
5 and I know that we have space to bring more guys, more fishermen,
6 to this fishery that I am pretty confident that is healthy, and
7 they can make a living from it, and we can -- Like I always say,
8 we cannot be losing this important data, because we never are going
9 to know how healthy this fishery is if we're still falling asleep
10 in this, and so please try to do something, and, Roberto, you've
11 got my support. Anytime you need me, you can find me, and you
12 know how to find me, and thank you, Mr. Chair.

13
14 **MARCOS HANKE:** Thank you, Nelson. Sennai, to wrap up?

15
16 **SENNAI HABTES:** Good afternoon. Thanks, Mr. Chair. If I could,
17 I will just request permission to share my screen, with a quick
18 PowerPoint, and I will try and move through it rather quickly and
19 just get to the points that need the council's attention. This is
20 a quick update on what we're working on for the EBFM. The purpose
21 of it was to give more time --

22
23 **MIGUEL ROLON:** Marcos, we haven't finished yet that presentation.
24 Sennai is on the FEP.

25
26 **MARCOS HANKE:** Yes, but I thought it was a question to the point
27 we were discussing about the presentation of Roberto Silva. Just
28 hold on for a second, please.

29
30 **SENNAI HABTES:** Okay.

31
32 **MIGUEL ROLON:** Mr. Chairman, to summarize, there are two things.
33 Puerto Rico can do whatever they want to do, because they can open
34 the fishery to everybody and his brother if they want, and they
35 can provide the information. If they follow, to the letter, the
36 request presented by Mr. Silva, what they are saying is to start
37 fishing for three to five years, and reporting every catch for the
38 deepwater snapper commercial fisheries, in an effort to provide
39 better data, in terms of the landings, and the objective is to
40 provide biological information, et cetera, et cetera, and so that's
41 one thing that they could do.

42
43 Then have new and better scientific data, in order to reevaluate
44 the ACLs for the species, and so, in this case, the council doesn't
45 have to do anything, and the local government can go ahead, and,
46 as Damaris explained, they are waiting for the fishery board,
47 advisory board of the Department of Natural Resources, to evaluate
48 this and to recommend to the council, to the Secretary of DNER,

1 what is the next steps.

2
3 In terms of the action that can be taken by the council at this
4 time, it's just to wait, because then, when you have the
5 information, you will be able to look at the ACL, and, as Roberto
6 said, you can then reassess the status of that fishery and see if
7 the ACL should be reviewed and evaluated somehow, using the process
8 that we have in the federal government.

9
10 That way, we are -- In this case, we are abreast of the issue, and
11 we can wait for the local government to decide what are they going
12 to do, and they can report back to us at the December meeting, to
13 Damaris or anybody else from the department, and then we can take
14 it from there, but one word of caution here is, when you go back
15 to the fishers, and you tell them that, if you provide this
16 information, then we are going to move the ACL, and that ACL
17 doesn't move an inch, they are going to kill Roberto or somebody.

18
19 We are going to be very careful what we are going to say upfront
20 and how we are going to present this to the fishers, and so we
21 cannot promise that the ACL is going to be moved in any way. What
22 we can do is what Roberto said in his letter, to have new and
23 better scientific data in order to reevaluate the ACLs, and that
24 is as far as we can go, in terms of what the council and NOAA
25 Fisheries can do.

26
27 **MARCOS HANKE:** Thank you very much, Roberto, for stepping up to
28 the plate and to bring this to the council. This is the end of
29 the conversation, and keep writing the right letters and touching
30 the right channels to move any of the ideas to promote sustainable
31 fishing in our area, and that would be welcome on this council, to
32 have a clear and transparent discussion. Thank you. The next
33 presentation, Sennai.

34
35 **EBFM TAP UPDATE**

36
37 **SENNAI HABTES:** Thank you, Mr. Chair. As I said, the purpose of
38 this is give an update on the EBFM TAP as well as to provide some
39 time for comments from the council, as, during the last meeting,
40 it was requested to have a little bit more time for discussion
41 regarding some of the issues that were brought up for the EBFM
42 TAP, in terms of the goals, as well as the timeline, moving
43 forward. I will move through some of the background quickly, to
44 get to the information on those things.

45
46 First off, a little bit of background as to the purpose of why the
47 EBFM TAP was developed, and I won't read these out. I have provided
48 this to the council, and so, if you want more information on that,

1 you can always feel free to look at the report, once it's posted,
2 and read more on it.

3
4 Basically, NOAA NMFS has supported implementation of an EBFM, or
5 ecosystem-based fisheries management, to inform and enable better
6 decisions, and that has led to using the EBFM Roadmap developed by
7 NOAA to create fishery ecosystem plans at the council level among
8 the different regions and territories in the U.S.

9
10 The EBFM TAP was developed on October 23, 2019, and it included
11 some of the pertinent information as to the purpose and
12 justification for the EBFM TAP, and it's to assist in the
13 development, collection, evaluation, and peer review of
14 statistical, biological, economic, social, and other scientific
15 information relevant to the council's development of the FEP and
16 amendments. It's composed of individuals engaged in ecosystem
17 research who are knowledgeable, and then --

18
19 **GRACIELA GARCIA-MOLINER:** Sennai, I hate to interrupt, but you are
20 showing a whiteboard instead of the presentation. Sorry about
21 that. Check to see in your view options and the share screen.

22
23 **SENNAI HABTES:** How about now?

24
25 **GRACIELA GARCIA-MOLINER:** Perfect. Thank you.

26
27 **SENNAI HABTES:** All right. Apologies. I'm not sure why that's
28 the case. The EBFM TAP provides expert scientific and technical
29 advice to the council on the development of and on the preparation
30 of fishery ecosystem plans and on the effectiveness of such a plan,
31 once in operation.

32
33 Again, the purpose of the TAP is to aid the council in this
34 information and identifying the scientific resources available,
35 and so that is the purpose of the TAP, and we are to support the
36 council with our information and making recommendations in the
37 development of the FEP.

38
39 We are here to provide ongoing scientific advice on EBFM management
40 for fishery management decisions, including recommendations for
41 habitat status, social and economic impacts of management
42 measures, and ecosystem-based impacts on the sustainability of
43 fishing practices. All of these were developed under the charter
44 for the TAP that was created by the council.

45
46 What we're doing is trying to draft a FEP, or a fishery ecosystem
47 plan, and I posted what we have under current guidelines for us to
48 follow to draft it out. The process that we are following is based

1 on the Lenfest FEP loop, which is also identified in the EBFM
2 roadmap by NOAA, and I won't go into too much detail on that,
3 because Michelle has talked about it, but, really, what we are
4 asking for the council to look at today is the draft goals and
5 objectives, so that we can move forward, as an EBFM TAP, with
6 drafting the FEP under the goals and objectives that we are
7 proposing to the council.

8
9 The overarching goal of the FEP is to promote ecosystem-based
10 approaches to ensure healthy, resilient, and productive marine
11 ecosystems and the fisheries resources dependent upon those
12 ecosystems within the context of the unique biological,
13 ecological, economic, social, and cultural characteristics of
14 those fishery resources and the communities that depend on them.

15
16 The corollary goal is to provide the framework that promotes the
17 following sub-goals or objectives, to increase human community
18 resilience within the context of changing ecosystems, promote
19 ecosystem resilience within the context -- I apologize. That's
20 double, and so define present ecosystem status and functionality,
21 understand dynamics of fisheries and ecosystem services, describe
22 key ecosystem linkages, identify research priorities, identify
23 additional ecosystem-essential species in need of conservation and
24 management, understand the risk to the fishery ecosystem and
25 tradeoffs from different management strategies, to improve the
26 data and information needed to support marine ecosystem
27 management, to prevent overfishing and/or ecosystem overfishing,
28 to achieve optimum yield, to incorporate ecosystem considerations
29 into stock assessments, to bring ecosystem considerations into the
30 decision-making process, and to promote adaptive management
31 policies, by reviewing MSA and National SSC and the CCC.

32
33 These were the ones developed under the EBFM TAP, and this is what
34 we're proposing to the council for review and to allow us to move
35 forward.

36
37 I just wanted to take about two minutes to discuss what's ongoing
38 with the FEP development process, and these are the conceptual
39 model stakeholder workshops that Michelle was discussing. The
40 purpose of these are for us to reach out to stakeholders to get
41 their input and understand their needs in drafting the FEP. I
42 completely understand what Julian and Tony were saying, and we
43 will listen to any recommendations that you have for better
44 creating outreach with the fishermen.

45
46 The way we had set this up, given the limited resources of the
47 TAP, was that the conceptual model workshops were split among the
48 different groups. The SSC and the DAPs were conducted by the CFMC,

1 and with help from NOAA staff, and the coastal businesses and
2 environmental NGOs were done by Melivora Consulting. Those have
3 all been completed. What's underway are conceptual model workshops
4 with the scientific community and with fishermen that are being
5 done with ISER Caribe.

6
7 I have provided the timeline of the next activity, and it is very
8 similar to what I presented at the last meeting. However, we have
9 changed the wording on some of the activities and the timeline
10 objectives, based on some of the comments that we had received
11 from the Chairman to reflect the need for the council's informed
12 decision on these processes.

13
14 With that, I will just kind of move to the main point of this,
15 which was to suggest that the council approves, or motions to
16 approve, the draft goals and objectives, as presented, and, with
17 that, I will leave it for discussion or questions or comments. If
18 you are not interested in sending this up for a motion, we would
19 appreciate comments on the goals and objectives, so that I can
20 present those comments to the rest of the EBFM TAP to discuss and
21 make recommendations to present for a motion for approval. Thank
22 you.

23
24 **MARCOS HANKE:** Thank you very much. I have a question to Jocelyn,
25 just to make sure. Because it was not -- It's in Other Business,
26 this discussion, and is it appropriate to make a motion and vote
27 on it, or do we have to wait for the next meeting, Jocelyn?

28
29 **JOCELYN D'AMBROSIO:** Thanks, Marcos. The Magnuson-Stevens Act
30 says that the actions that the council is going to take like for
31 final action, that those need to be specifically in the notice, so
32 that the public has an opportunity to attend the meeting and ask
33 questions, and so it would need to be in the agenda that was part
34 of the notice, but I think usually that's more referring to taking
35 final action on an amendment or the FMP.

36
37 That being said, it's sort of like maybe a little bit more of a
38 gray area. If you wanted to specifically notice that you were
39 speaking about this, so that the public has an opportunity to
40 weigh-in and see this more specifically, then you could defer it
41 to another meeting.

42
43 **SENNAI HABTES:** If I may, Jocelyn and Mr. Chair, we had proposed
44 this on the agenda at the last meeting, and this was a continuation
45 of that discussion, but it just didn't make it onto the agenda.

46
47 **MARCOS HANKE:** I understand, but I just want the process to run
48 very sharp and clear, and that's why the question, and we have

1 Tony Blanchard requesting a turn to speak.

2
3 **TONY BLANCHARD:** (Mr. Blanchard's comment is not audible on the
4 recording.)

5
6 **CARLOS FARCHETTE:** He needs to start over.

7
8 **MARCOS HANKE:** Tony, can you start over?

9
10 **TONY BLANCHARD:** I have a question for Jocelyn, whether it's a
11 conflict of interest that Mr. Habtes is the Chief of Fisheries for
12 DFW, which is a regulatory agency. When he became chair of the
13 TAP, he was working for UVI, which is another regulatory agency,
14 and it's just a legal question that I have.

15
16 **JOCELYN D'AMBROSIO:** Sure, and so you're asking if there's a
17 conflict for Sennai to serve as the role as the chair of the TAP,
18 or to be on the TAP?

19
20 **TONY BLANCHARD:** Yes, and as him being the Chief of Fisheries for
21 DFW.

22
23 **JOCELYN D'AMBROSIO:** Sure, and I had emailed a little bit with
24 Miguel about this, and I think that Sennai was appointed when he
25 serving in his personal capacity, and so I think what's important
26 is just to be clear about which role that he is now serving in,
27 and so, if he's serving still in that personal role, or if he is
28 intending to serve in this role as affiliated with his new position
29 within the government of the Virgin Islands.

30
31 I think that's just sort of a question that he needs to be clear
32 about, in which role he is participating, and, with that clarity,
33 I think we can move forward.

34
35 I also think the council could consider what individuals it wants
36 to have on this committee, and, obviously, Sennai brings various
37 expertise, and that's why he was appointed. He still has that
38 expertise, and so I think, like I suggested, having a charter
39 document that just makes clear who is on -- The number of person
40 that are on this board and what capacities they serve, and I think
41 we would just be more clear, but I don't necessarily see a conflict
42 of interest, but it's just a question of being clear, given his
43 change in position, how is he serving in this capacity, and then
44 the council has the ability to discuss who serves on these boards
45 and what the council is comfortable with, which experts it wants
46 to have on these panels, and so that's something that the council
47 could discuss as well.

1 **TONY BLANCHARD:** Okay.

2
3 **MARCOS HANKE:** Thank you, Jocelyn. Thank you, Tony. We have, in
4 the queue, Vanessa Ramirez. In the chat, she is requesting a copy
5 of this presentation to be sent to her and to all the council
6 members, and Graciela is saying that that will happen. Anybody
7 else who would like to comment or make a question?

8
9 **GRACIELA GARCIA-MOLINER:** Mr. Chair, if I may?

10
11 **MARCOS HANKE:** Go ahead, Graciela.

12
13 **GRACIELA GARCIA-MOLINER:** What you had on the screen for moving
14 forward with the FEP, the goals and objectives that you have talked
15 about for the last year or so, and I don't think that everything
16 is written in stone, and so this is a draft FEP that can be changed,
17 but the idea is to have already the information from the council
18 members on what direction they want us to take.

19
20 Then we would have to make priorities, in terms of everything that
21 is in the FEP, and so having your guidance, in terms of what the
22 goals and objectives are, it's really one step forward to getting
23 us in that direction. There are many efforts taking place at the
24 same time, and one thing that is clear is that, once we have
25 established goals and objectives, as I said, they are part of the
26 draft FEP, and so this is not the final time that you will see it.
27 It's providing that guidance that staff needs, and the TAP needs,
28 in order to move forward and make priorities along the way.

29
30 **MARCOS HANKE:** Thank you for the point of clarification. Is there
31 any other council member who would like to jump in and make a
32 comment? I don't see anybody else here, and I just want to comment
33 that, even though I read, and I feel that I am well informed about
34 what Sennai presented, I think it's pertinent to circulate the
35 email requested by Vanessa Ramirez, for every council member to
36 have enough time to read this and to have an opinion about it, and
37 for the next meeting, or any other process, if there is a quicker
38 process besides waiting for the next meeting, and, Miguel or
39 Jocelyn, if you can help us out, to find a quicker way, or do we
40 have to wait until August?

41
42 **MIGUEL ROLON:** What are you talking about?

43
44 **MARCOS HANKE:** To have the input, or the approval, of this draft.

45
46 **MIGUEL ROLON:** For the TAP?

47
48 **MARCOS HANKE:** From the council.

1
2 **MIGUEL ROLON:** Marcos, can you explain to me, because I am seeing
3 two things in the chat, and I don't know the specifics of what you
4 are referring to.
5

6 **GRACIELA GARCIA-MOLINER:** Sennai, can you put back the last slide,
7 the one with the motion, please? Thank you.
8

9 **MIGUEL ROLON:** You have to do that, but in August.
10

11 **GRACIELA GARCIA-MOLINER:** So we will amend the agenda for the
12 August meeting to include the EBFM TAP request for the approval of
13 the goals and objectives.
14

15 **MIGUEL ROLON:** In order to amend the agenda, you have to send a
16 note to Diana, so she can send it to Vicki. If we don't have time
17 for that, we can put it in Other Business, but with the
18 understanding to everybody that they have to come ready to make
19 this decision. If Jocelyn agrees, then that's what we need to do.
20

21 **JOCELYN D'AMBROSIO:** Sure, and so, as I said before, the Magnuson-
22 Stevens Act wants the agenda to be clear about matters that are
23 pertinent to all actions, and so, when Graciela was describing
24 this, that these are just draft goals, I think, if we were
25 approving the plan, we certainly would need that to be in the
26 agenda, but, if we're just trying to give them direction, then
27 this looks like reasonable goals to move forward, and the council
28 will have an opportunity to see this again, and it might be
29 appropriate to vote on this at this meeting, but, if you're more
30 comfortable more specifically noticing it in the next meeting
31 notice in the Federal Register, so that it's very clear to the
32 public the decisions the council is going to be making, then we
33 could do that as well.
34

35 **MIGUEL ROLON:** Marcos, if I may, from what Jocelyn is saying, there
36 is no legal issue with having the motion now, because it suggests
37 what you are doing, and you are not finalizing anything, but
38 remember that this still continues to be a draft until the process
39 is finished, and so what the council would be doing here is just
40 to modify those goals and objectives, as per the recommendation
41 from the TAP.
42

43 **MARCOS HANKE:** I have a turn to speak from Andy.
44

45 **ANDY STRELCHECK:** Thanks, Marcos. Maybe a question for Miguel,
46 and I think we might be saying something similar here, and so I'm
47 not sure that we even need to make a motion on this at this point,
48 given that it's a draft, and I hear there is at least maybe some

1 concerns, or people want some additional time to take a look at
2 this.

3
4 I am certainly perfectly comfortable with the EBFM TAP moving
5 forward to use these goals and objectives, with maybe some
6 recognition from the council that we might have some additional
7 input as this draft continues to be developed and finalized, but
8 I am not seeing anything in the goals, sub-goals, and objectives
9 that is of major concern to me, and maybe some refinements could
10 be made along the way, but, to me, I think the TAP is certainly
11 good to proceed, if that's the preference of the council as a
12 whole.

13
14 **MARCOS HANKE:** I share your opinion, Andy, but I just want the
15 council members, or you, to make a motion and to follow-up on the
16 recommendation of Jocelyn.

17
18 **MIGUEL ROLON:** Marcos, what he is saying is you don't need a
19 motion. Just recognize this language that you have here, and just
20 tell the TAP to continue working on the document with these, and
21 he's saying that you still have a chance to modify it somehow.

22
23 There is nothing here that is contrary to what you have been
24 discussing for the last five years, and it's just that they are
25 putting in context the real actions that you can take, the goals
26 and objectives, and so you can go ahead and just take note that
27 you've had this report and instruct the TAP to continue working,
28 using these goals and objectives, as Andy is suggesting.

29
30 **MARCOS HANKE:** As the Chairman, I am hearing everything that
31 everybody said, and, based on what I read about the document, this
32 is the path that I recommend the council to follow, and I didn't
33 hear any opposition, meaningful opposition, to the comment, to
34 what he said, and just keep the process going. That is my
35 recommendation to the group.

36
37 **MIGUEL ROLON:** As the Chairman, just -- It's not a recommendation,
38 but just instruct the staff to pursue this, and the TAP will
39 continue.

40
41 **MARCOS HANKE:** This is what I am trying to say, in English.

42
43 **MIGUEL ROLON:** Just let the TAP continue the work, using this
44 language.

45
46 **MARCOS HANKE:** Just keep doing the great job you are doing and
47 continue the work as it is, and we're going to participate a little
48 further in the process, if there is any need for any council

1 member. Thank you.

2
3 **MIGUEL ROLON:** Mr. Chairman, I have to go to the hospital to attend
4 an emergency of a friend of mine. Graciela will take care to
5 finish the meeting. Thank you very much.

6
7 **MARCOS HANKE:** Thank you, Miguel. I hope everything goes well.
8 The next item on the agenda is participation requested by -- I
9 think I have an ACL, Graciela, and can you clarify what it means
10 for the Other Business?

11
12 **GRACIELA GARCIA-MOLINER:** That is really in relation to what Mr.
13 Strelcheck was going to talk about in the spiny lobster.

14 **SPINY LOBSTER DISCUSSION**

15
16
17 **ANDY STRELCHECK:** Thanks, Graciela and Marcos. I just wanted to
18 let the council know that the accountability measure for spiny
19 lobster in Puerto Rico has been triggered, and so the catch limit
20 is monitored and compared to the average of 2017 through 2019
21 landings.

22
23 Based on that average time series, landings exceeded the catch
24 limit. Right now, we are evaluating that exceedance, in light of,
25 obviously, that timeframe, but also what occurred in 2020 and any
26 trends in 2021, but likely we will need to implement a closure of
27 spiny lobster in federal waters that would be announced in the
28 coming weeks, in terms of a timeframe. I don't have any specifics
29 on dates, other than to remind the council that the accountability
30 measure would result in a closure that would back up from September
31 30, and so the closure would be sometime between now and then end
32 on September 30, if it's sufficient to constrain harvest to the
33 catch limit.

34
35 More information will be coming, and we will certainly do Fishery
36 Bulletins, and we will certainly allow fishermen the opportunity
37 and time to remove gear from the water, but I just wanted to give
38 you a heads-up that the accountability measure had been triggered.

39
40 **MARCOS HANKE:** A question. Accountability measure, just to clarify
41 to everybody, applies to the whole U.S. EEZ?

42
43 **ANDY STRELCHECK:** That is correct.

44
45 **MARCOS HANKE:** Any comments or any questions?

46
47 **CARLOS FARCHETTE:** That's for Puerto Rico only, right?
48

1 **ANDY STRELCHECK:** Correct. It's just for Puerto Rico only. We
2 have yet to implement the island-based FMPs and make the changes.

3
4 **MARCOS HANKE:** I'm sorry, but now I am a little confused, and that
5 was why my question, because the island-based was not implemented
6 yet, and this applies to the U.S. Caribbean waters of St. Thomas
7 and St. John and Puerto Rico and everybody, or is it just around
8 Puerto Rico?

9
10 **ANDY STRELCHECK:** It's specific to Puerto Rico. The closure will
11 apply in federal waters off of Puerto Rico.

12
13 **MARCOS HANKE:** Thank you. That's what I really need to be very
14 clear on the record for everybody to understand. Thank you. Any
15 comments?

16
17 **GRACIELA GARCIA-MOLINER:** Mr. Chair, if I may?

18
19 **MARCOS HANKE:** Go ahead.

20
21 **GRACIELA GARCIA-MOLINER:** One of the requests that we have ongoing
22 with the Puerto Rico government is to actually acquire the data
23 from the e-reporting that has been available for 2020 and 2021,
24 for the monthly setup, and there are issues still with the
25 crossover from the e-reporting to the NOAA Science Center database,
26 but the request is to specifically look at the trends from that
27 amount of harvest that has not been accounted for from the dataset
28 that we already have on the commercial catch.

29
30 We are in ongoing conversations between the Science Center and the
31 DNER regarding the passing of the data from the e-reporting in
32 DNER to the actual database of NOAA, and so the request has been
33 made, and the non-disclosure things that we have to sign have been
34 signed, but the actual transfer of the data needs to be worked out
35 between the DNER and the Science Center, and that is already being
36 worked on.

37
38 Kevin McCarthy sent the information regarding confidentiality of
39 the data, and so that is working, but, in the process that it will
40 take to get that data passed over to the Science Center, the
41 request still stands to get aggregated data from the e-reporting
42 of the DNER, specifically for lobster, that could help -- I am not
43 saying that it will definitely help in the resulting accountability
44 measure that's been triggered, but that it could help in providing
45 us information on the trends, the monthly trends, of the 2020 and
46 2021.

47
48 On behalf of the acquiring the best available information that is

1 out there, the council would like to request that data, so that we
2 can use it in looking at these trends for 2020 and 2021. Thank
3 you.

4
5 **MARCOS HANKE:** A comment, a follow-up, on Graciela. This is a
6 request to the DNER, and Damaris is on the meeting, but this an
7 opportunity, a unique opportunity, to start to show what electronic
8 data reporting can do to the fishing community, and this data, and
9 this cooperation and coordination, to make this data available, is
10 beneficial for the resource and for the fishing community, and for
11 sure everybody will be very glad and thankful for you to follow-
12 up on this and for this data to be available, because, at the end
13 of the road, this will put us in a better position to make a
14 decision, and I please request Damaris to follow-up internally on
15 the DNER to expedite this process. Thank you.

16
17 **ANDY STRELCHECK:** Marcos, just one other thing to add, real quick,
18 and so I appreciate Graciela's comments, and I do want to thank
19 Puerto Rico. We, the Regional Office and the Science Center, have
20 been receiving some of this additional data for both 2020 and 2021,
21 for both electronic reporting as well as standard data collection,
22 and so that has been shared with us, and it has been, obviously,
23 part of the information that we're looking at in determining the
24 potential closure for spiny lobster, and so I just wanted to make
25 the council aware of that.

26
27 **MARCOS HANKE:** Yes, and I agree with you, and I am just waving the
28 flag of priority, because I see an opportunity here for an overall
29 benefit of coordinating the efforts, and this is my request at
30 this time. The next item on Other Business is Forage Species by
31 Nelson Crespo.

32 33 **DISCUSSION OF FORAGE SPECIES**

34
35 **NELSON CRESPO:** Thank you, Mr. Chair. I am going to be really
36 quick. Before Hurricane Irma and Maria, the decline was beginning
37 to be noticed in a small scale, but it has worsened it
38 significantly.

39
40 Coastal net and bait fishermen have approached me regarding this
41 issue, and they are really concerned about. With the decrease of
42 forage fish and the increase of predators, such as tarpon, they
43 have been noting to the point that they compare it to an epidemic
44 with individuals that easily can reach sixty pounds and over. The
45 abundance of sardines and other small species that attract fish to
46 shore has decreased considerably.

47
48 Other species, coastal species, like blue runners, jacks,

1 goldeneye, herring -- They avoid being with them for a long time,
2 and that's all the species that the local people eat. When we
3 tried to fish, they got trapped on the fishing gear, breaking them,
4 and all the other catch gets lost.

5
6 Around twenty years ago, before the catch of tarpon was prohibited,
7 this species was used on a smaller scale by small businesses, to
8 make local dishes, and, also, its scales were used to make
9 handicrafts. That at least created a balance between them and
10 other species, and they could interact together. However, I want
11 to clarify that I am not asking the local government to reopen the
12 catch for tarpon.

13
14 In my opinion, other factors, for example climate change, runoff,
15 coastal erosion, and pollution of our coast, among others, have
16 also contributed to the decline of forage fish, and the high amount
17 of tarpon along the coast are one of the consequences of this. As
18 part of the change, they also have to feed, and, with our healthy
19 stock of forage fish, their presence increased along the coast.

20
21 For these reasons, I ask this council to help to identify and
22 correct the causes of the decline in forage fishes, which are
23 important to the coastal fishing and the benefits of our habitats
24 and marine ecosystems, as fast as possible, before this situation
25 gets worse.

26
27 I cannot fail to mention the coastal fishes that are limited to
28 fish, due to the number of tarpon that you can sometimes see going
29 up and down between the waves and the sands, and so I really
30 appreciate the help that this council can give to this matter.
31 Thank you, Mr. Chair.

32
33 **MARCOS HANKE:** Thank you. Adding to the discussion, which I
34 already spoke to Nelson, we agree and we disagree on a few things,
35 but I want to mention too about forage species, and that is there
36 is some hotspot sargassum accumulation around the island, and I'm
37 addressing the east coast, many of them which create a permanent
38 anoxic and unhealthy waters, with low oxygen and low pH., that,
39 the way I see it, it's like a station during the spawning season,
40 and I think we are not measuring or considering these events.

41
42 Since the sargassum has started for our area, the forage species
43 that gather, the little tunny on the lighthouse of Fajardo, is not
44 there anymore, and the small anchovies and the small sardines that
45 create that activity doesn't get to the shore anymore, if they do,
46 they die immediately or get consumed by the fishes that are there
47 that can support the low oxygen.

1 We need to study, and we need to know more about the base of the
2 food chain. Otherwise, we are not doing ecosystem-based
3 management. The focus is to support a study on that, and this is
4 something that I really wanted to say to this group. Anybody else?
5 Go ahead, Carlos.

6
7 **CARLOS FARCHETTE:** For years, I have been talking about developing
8 a forage fish management plan, and maybe it's time to start
9 discussions, but I also do see Nelson's point, when it comes to
10 tarpon. I know we have Sandy Point on St. Croix, where, during
11 the nesting season for leatherbacks, there were about 2,000 nests
12 laid on that beach, and, when those hatchlings come out, the tarpon
13 were just having a field day, but that's something that -- They
14 are protected here, because it's for a charter business, a catch-
15 and-release business, but there are other issues, like Marcos said,
16 with the sargassum, and all of that needs to be looked at.

17
18 **MARCOS HANKE:** thank you very much. I really don't want to go in
19 the line of arguing in favor or against any idea, because we are
20 basing this discussion on speculation and appreciation, and what
21 I want this council to promote is to request attention and funds
22 to study and to get information to make the best decisions
23 possible, and, on this process, I am available to support any
24 initiative. Thank you. Thank you, Nelson, for your presentation.

25
26 **NELSON CRESPO:** Thank you, Mr. Chair.

27
28 **MARCOS HANKE:** There is no other public comment that we -- I mean
29 Other Business that we predicted to be here, and we are passing
30 now to public comment. Is there anybody from the public that would
31 like five minutes to present or to speak about any other issue or
32 comment on the presentations made before?

33
34 **GRACIELA GARCIA-MOLINER:** Mr. Chair, you have Joel from the Fishers
35 Association Aguadania.

36
37 **MARCOS HANKE:** Go ahead, Joel.

38
39 **PUBLIC COMMENT PERIOD**

40
41 **JOEL --:** (The comment was in Spanish and was not transcribed.)

42
43 **MARCOS HANKE:** Thank you. That's why we need to make a study and
44 support the study, to really know what is going on and which level
45 of pressure and dynamics is really happening out there, more than
46 just isolated important observations. Anybody else?

47
48 **VANESSA RAMIREZ:** Yes, Marcos.

1
2 **MARCOS HANKE:** Go ahead, Vanessa.

3
4 **VANESSA RAMIREZ:** A small comment. I agree with Marcos about the
5 situation that we need to make more recommendations to address
6 some studies about the tarpon. We have to remember that, for the
7 last year, practically all the restaurants and everything were
8 closed, and so the tarpon have to move on from the coast to more
9 deep, and I know that, in the west, we have a lot of them, and
10 that they can affect and impact the protected areas in the
11 Tourmaline and Abrir la Sierra. Thanks.

12
13 **MARCOS HANKE:** Thank you, Vanessa. We have Nicole Greaux.

14
15 **NICOLE GREAUX:** I appreciate all of that, and thank you so much.

16
17 **MARCOS HANKE:** No comments, Nicole?

18
19 **NICOLE GREAUX:** Are you referring to Nicole Greaux or Nicole
20 Angeli?

21
22 **MARCOS HANKE:** Greaux.

23
24 **NICOLE GREAUX:** Okay.

25
26 **GRACIELA GARCIA-MOLINER:** Nicole can type it up in the chat, and
27 we can read it for the record. Marcos, I don't see anyone else
28 with a raised hand or comments in the chat.

29
30 **MARCOS HANKE:** Graciela, let's announce the next council meeting.
31 In the meantime, Nicole can connect.

32
33 **NEXT COUNCIL MEETING**

34
35 **GRACIELA GARCIA-MOLINER:** Okay. We have the next council meeting
36 will be August 11, and it will still be a virtual meeting, and
37 it's a one-day meeting only. Then, for the December meeting, it
38 will be the 7th and 8th of December, and there is already a contract
39 with the Marriott Courtyard, but, most likely, it will be a hybrid
40 meeting, depending on what the protocol for the public is at that
41 time. Marcos, that's all I have in my notes.

42
43 **MARCOS HANKE:** Nicole was able to connect?

44
45 **NICOLE GREAUX:** Marcos, this was a question to Tony Blanchard and
46 Julian Magras in regard to the ISLA Caribe. As Tony mentioned,
47 they were here in St. Thomas, talking to the fishers that were in
48 Frenchtown, because that was the most prevalent names given to

1 them, and my question to them is when the program starts in the
2 study, if they would be willing to talk to whomever it is that is
3 going to be doing this, just to let them know what they are going
4 to be expecting or what the reasoning behind the reluctance is,
5 once they start off going to talk to the fishers.

6
7 **MARCOS HANKE:** Well, yes, for sure, they can answer to you, but I
8 think it will be way more effective if you guys call each other
9 and coordinate those questions, to create a channel of
10 communication. If Julian or Tony want to respond or to comment,
11 before we adjourn.

12
13 **STACY WILLIAMS:** Mr. Chairman, this Stacy Williams. May I make a
14 comment?

15
16 **MARCOS HANKE:** Yes.

17
18 **STACY WILLIAMS:** Hi. Yes, we are planning -- We are now in the
19 process of contacting all the fishers and fishers leaders in Puerto
20 Rico, and we will be recontacting the liaisons and fisher leaders
21 in the USVI, and so I can write my email in the chat, for any
22 comments or questions, and anyone can email me, and I can respond
23 to any of their questions, and so, yes, we are actually in the
24 process of writing up the letters and sending them out, hopefully
25 at the end of this week, for the conceptual models with the
26 fishers.

27
28 **MARCOS HANKE:** I understand, and I just promote those direct
29 channels of communication, so not to get lost on the way. Thank
30 you very much. Seeing nobody else in the queue for public
31 comments, we are ready to adjourn the meeting. It's 4:29 p.m.
32 Thank you for your patience and for a productive meeting, and we
33 will see you in August.

34
35 **GRACIELA GARCIA-MOLINER:** You need a motion to adjourn, Mr. Chair.

36
37 **MARCOS HANKE:** Yes. We need a motion to adjourn.

38
39 **ANDY STRELCHECK:** Motion to adjourn.

40
41 **CARLOS FARCHETTE:** Second.

42
43 **MARCOS HANKE:** Andy Strelcheck made a motion to adjourn, and it's
44 seconded by Carlos Farchette. Is there any opposition? Hearing
45 none, the meeting is adjourned. Thank you, guys. Thank you to
46 everybody. Thank you very much for the comments and for the
47 participation.

1 (Whereupon, the meeting adjourned on July 21, 2021.)
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3 - - -