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Table of Motions

[PAGE 73](#): Motion for staff to proceed with developing a framework amendment to the Puerto Rico Fisheries Management Plan to reclassify rainbow runner as a pelagic species. [The motion carried on page 73.](#)

[PAGE 73](#): Motion to request the SSC to revisit the rainbow runner ACLs under the Puerto Rico FMP. [The motion carried on page 76.](#)

[PAGE 88](#): Council moves to approve Amendment 2 to the Puerto Rico, Saint Croix and Saint Thomas/Saint John Fishery Management Plans: Trawl, Net Gear and Descending Devices with preferred alternative/sub-alternatives for each action as identified in the presentation and submit the amendment to the Secretary of Commerce for approval. [The motion carried on page 88.](#)

[PAGE 89](#): Council moves to allow staff to make editorial, non-substantive changes to the Amendment 2 to Puerto Rico, Saint Croix, Saint Thomas/Saint John Fishery Management Plans: Trawl, Net gear, and Descent Devices. Any changes will be reviewed by the Council Chair. [The motion carried on page 89.](#)

[PAGE 89](#): The Council moves to deem the regulations presented by staff as necessary and appropriate for implementing Amendment 2 to the Puerto Rico, Saint Croix, Saint Thomas/Saint John Fishery Management Plans: Trawl, Net Gear and Descending Devices, and to give the Council Chair the authority to deem any modifications made to the proposed rule as necessary and appropriate for implementing Amendment 2. [The motion carried on page 90.](#)

[PAGE 232](#): The Council moves to remove option 6 that would adjust boundaries; limit future options to ones that would address gears, methods, and species requirements for fishing in the Lang Bank seasonal closed areas and to send to the Saint Croix DAP and SSC along with the white paper for recommendation on preferred alternatives. [The motion carried on page 235.](#)

[PAGE 283](#): The Council moves to prepare and send a letter to the Department of Natural Resources of Puerto Rico, communicating the recommendations regarding Administrative Order 2023-07 that were provided during this meeting and request the DNER to correct the references to the annual catch limit for the Puerto Rico snapper unit 2 in this Administrative Order to reflect the current ACLs established in the Puerto Rico FMP implemented in 2022. The Council Chair is authorized to sign the letter on behalf of the Council. [The motion carried on page 285.](#)

1 **CARIBBEAN FISHERY MANAGEMENT COUNCIL**
2 **183RD REGULAR COUNCIL MEETING**
3 **HYBRID MEETING**
4 **WESTERN FRENCHMAN RESORT**
5 **SAINT THOMAS, U.S.V.I**

6
7 DECEMBER 5-6, 2023
8

9 The Caribbean Fishery Management Council convened on Tuesday
10 morning, December 5, 2023, and was called to order at 9:03 a.m. by
11 Chairman Carlos Farchette.

12
13 **Call to Order and Roll Call**
14

15 **CARLOS FARCHETTE:** So, good morning, everyone. Welcome to the
16 183rd, CFMC meeting being held in Western Frenchman Resort on Saint
17 Thomas, U.S. Virgin Islands. It's 9:03 a.m. on Tuesday.

18
19 Okay. I'm calling to order, so I'm going to do a roll call. I'm
20 going to start on my left with Cristina.

21
22 **CRISTINA OLÁN MARTÍNEZ:** Good morning. Buenos días. Cristina Olán,
23 Council staff.

24
25 **LIAJAY RIVERA GARCÍA:** Buenos días. Good morning. Liajay Rivera
26 García, Council staff.

27
28 **ROBERTO SABATER:** Buenos días. Roberto Sabater, Council member.

29
30 **JAMES R. KREGLO:** Good morning. James Kreglo, Council member.

31
32 **SENNAI HABTES:** Good morning. Sennai Habtes, Bureau Chief of
33 Fisheries, Virgin Islands, Department of Planning and Natural
34 Resources, Division of Fish and Wildlife, and EBFM TAP Chair.

35
36 **RICARDO LÓPEZ-ORTIZ:** Good morning. Ricardo López, Puerto Rico DNR
37 Director and Council member.

38
39 **VANESSA RAMÍREZ:** Good morning. Vanessa Ramírez, Vice Chair.

40
41 **CARLOS FARCHETTE:** Morning. Carlos Farchette, Council Chair.

42
43 **MIGUEL A. ROLÓN:** Morning. Miguel Rolón, Council staff.

44
45 **DIANA T. MARTINO:** Good morning, Diana Martino, Council staff.

46
47 **MARÍA LÓPEZ-MERCER:** Good morning, María López, acting Council
48 member for Andy Strelcheck.

1
2 **KATHERINE M. ZAMBONI:** Good morning. Kate Zamboni, NOAA's Office
3 of General Counsel.
4
5 **FRANCISCO E. WERNER:** Good morning. Buenos días. Cisco Werner,
6 NOAA Fisheries. Visiting from Silver Spring. Pleasure to be here.
7
8 **CLAY PORCH:** Good morning. Clay Porch, director of the Southeast
9 Fisheries Science Center.
10
11 **GRACIELA GARCÍA-MOLINER:** Buenos días. Graciela García-Moliner,
12 Council staff.
13
14 **KEVIN MCINTOSH:** Morning. Kevin McIntosh, Head of Permits.
15
16 **JESSICA STEPHEN:** Good morning. Jessica Stephen, Southeast
17 Regional office, Head of Data Management Branch.
18
19 **LAURA CIMO:** Good morning. Buenos días. My name is Laura Cimo from
20 the NOAA Fisheries Office of International Affairs, Trade, and
21 Commerce.
22
23 **MANNY ANTONARAS:** Good morning. Manny Antonaras, NOAA Office of
24 Law Enforcement.
25
26 **KEVIN MCCARTHY:** Good morning. Kevin McCarthy, Southeast Fisheries
27 Science Center.
28
29 **SARAH STEPHENSON:** Good morning. Sarah Stephenson, Southeast
30 Regional Office.
31
32 **ADYAN RÍOS:** Good morning. Adyan Ríos, Southeast Science Center.
33
34 **MARÍA DE LOS A. IRIZARRY:** Good morning. María Irizarry, Council
35 staff.
36
37 **NELSON CRESPO:** Good morning, everyone. Nelson Crespo, DAP Chair,
38 Puerto Rico
39
40 **JULIAN MAGRAS:** Good morning, everyone. Julian Magras, Saint
41 Thomas/Saint John, DAP Chair.
42
43 **VANCE VICENTE:** Yeah. Good morning, everybody. Vance Vicente, SSC
44 Chair.
45
46 **GERSON MARTÍNEZ:** Good morning, everybody. Gerson Martínez, DAP
47 Chair of Saint Croix.
48

1 **LINDSEY KRAATZ:** Good morning, everybody. Lindsey Kraatz, Senior
2 Advisor for Fisheries Science at NOAA Fisheries Headquarters.
3
4 **MAGGIE RÍOS-MOTIANI:** Good morning. Maggie Motiani, Division of
5 Fish and Wildlife, U.S.V.I.
6
7 **LIANDRY A. DE LA CRUZ:** Good morning. Buenos días, Liandry de la
8 Cruz, Port sampler and liaison, Saint Croix, DPNR Fish and
9 Wildlife.
10
11 **MARIANA C. LEÓN-PÉREZ:** Good morning, Mariana León-Pérez from ISER
12 Caribe.
13
14 **NICOLE GREAUX:** Good morning. Nicole Greaux, Division of Fish and
15 Wildlife, Caribbean Fishery Management Council Liaison, Outreach
16 and Education.
17
18 **WILSON SANTIAGO:** Good morning, everyone. Wilson Santiago, Puerto
19 Rico Fisheries Liaison.
20
21 **HELENA ANTOUN:** Good morning, everyone. Helen Antoun. NOAA
22 Fisheries.
23
24 **DIANA T. MARTINO:** That was it.
25
26 **CARLOS FARCHETTE:** Thank you, Diana. So, Miguel--
27
28 **DIANA T. MARTINO:** Oh, sorry. You were hiding.
29
30 **LEIGH FLETCHER:** Good morning. Leigh Fletcher, BioImpact.
31
32 **DIANA T. MARTINO:** Now we're good. We have some Zoom meeting
33 attendance. Cristina?
34
35 **CRISTINA OLÁN MARTÍNEZ:** Okay. In zoom we have, Jack McGovern,
36 Julie Neer, Jesus Rivera Hernandez, María Angeli León, Sarah
37 Stephenson, Martha Prada, Kiara Matías, Carly Dake, Andrew Mcgraw-
38 Herdeg, DWAME, Rachel Banton, and Jake Hemming.
39
40 **CARLOS FARCHETTE:** Thank you. Miguel?
41
42 **MIGUEL A. ROLÓN:** Thank you, Mr. Chairman. I just want to do a
43 couple of things. The first thing is that we would like to
44 recognize Cisco Werner. He looks kind of innocent there, but he's
45 the Director of the Scientific Program and Chief Science of
46 Advisory for NOAA Fisheries. He's the boss of the guy next to him,
47 because he oversees 6 Regional Fisheries Science Centers around
48 the states and 24 laboratories sampling stations. So, we are

1 honored that you accepted to come to this meeting.
2
3 He will give us two talks. The first one, today, will be about the
4 data collection efforts that they have. And also tomorrow, he
5 graciously accepted to participate in the panel to talk about
6 sargassum. So, we really want to welcome Cisco to our Caribbean
7 Fisheries Management Council.
8
9 At this time, Mr. Chairman, you know, at the end of the year, we
10 try to recognize people. We don't try. We do it. We recognize
11 people that we think do an outstanding work for the Council. The
12 first group, and this time we have a group.
13
14 The token of appreciation that we give to the people that we
15 recognize is what I call a reef in a bottle. The first group of
16 people we want to recognize are, Morgan Corey and Sean Lawler. I
17 hope that I pronounced it, Sean Lawler, pronounced it well.
18
19 These two, officials of National Marine Fisheries Service are the
20 ones in charge of coordination with the Council, with National
21 Marine Fisheries Service, of everything related to the Council.
22 The appointments, the contacts, the CCC committees, and they do an
23 excellent work.
24
25 Morgan is the quiet lady in the corner there, but she's always
26 abreast of everything that we do, with the eight Councils. And
27 believe me, that's not an easy task because each one of the
28 Council, we have our own requirements, our on individuality, so
29 she does that excellent with the help of Sean Lawler. They are in
30 the same office.
31
32 At this meeting, they put together the CCC in October, so we are
33 really, grateful for the work and recognize their excellent
34 performance.
35
36 The second group, we are all familiar with them. María López, Sarah
37 Stephenson and Jack McGovern. María and Sarah are here, and Jack
38 is on Zoom. Both of these ladies and this fellow scientist have
39 done an excellent job working with us. We have done a lot of things
40 that without them, believe me, we will not be able to be sitting
41 today with the updates that we have, with the information that we
42 have.
43
44 María, we would like to thank you. And Sarah is somewhere, so.
45 [Applause]
46
47 Because when we come to the meetings, you see the tip of the
48 iceberg. Then the Council say, "We are going to do this, we're

1 going to do that, and blah blah blah." But it's Graciela and the
2 team that put it together. And It's not an easy task. Aside from
3 that, I have to be sure that Katherine agrees with the things that
4 they write to make sure that we are on the right track.

5
6 Also, we would like to recognize, Kevin McCarthy and the group. As
7 you know, Kevin works for the Southeast Fisheries Science Center.
8 He is the Chief of the Caribbean Fisheries Branch. That's something
9 that Clay Porch instituted some time ago. And that branch has been
10 instrumental in helping us move forward with Fishery Management
11 Plan monitoring and the work that we have.

12
13 The last meeting, he brought almost all the members of the group,
14 so we were able to interact with them. So, we would like to
15 recognize, Kevin and the group, staff members that they have.

16
17 And we have, Adyan Ríos in the back here. We're very proud of
18 having these people here because these 2 ladies are from the
19 island, from Puerto Rico, and that's why it's sort of emotional
20 for us in a way.

21
22 But we'd like to recognize Kevin. Kevin has been excellent working
23 with us at all times. You have a question; you call Kevin and he's
24 there.

25
26 I believe that the three groups of people have helped us a lot
27 through the years, and we would like to keep working with them in
28 the future.

29
30 And last but not least, we don't have a reef in a bottle for her,
31 but I want to recognize Laura Cimo. Laura, when Carlos and I met
32 her, she was standing quietly in a restaurant, and I didn't know
33 how energetic this lady is.

34
35 She's in charge of coordinating with the WECAFC group throughout
36 the Caribbean. She works with the International Affairs, Trade and
37 Commerce, and she is our link with that office.

38
39 And, I cannot say more about it. She has been excellent working
40 with us, and we consider her a friend. At this meeting she's going
41 to give us a presentation on what WECAFC is doing so far. And also,
42 to announce the group that is going to meet in the summer, the
43 Flyingfish/Dolphin-Wahoo Working Group of WECAFC.

44
45 Thank you, Mr. chairman. By the way, I didn't bring these bottles
46 because we are going to send them to you, to your offices, because
47 you know-- And then, you can parade them like they do with the
48 Saints on Good Friday in Puerto Rico. So, each one of the offices

1 will be able to take a look at it.

2
3 Thank you for this work and I would like to have a round of applause
4 for this group of people again. [Applause]

5
6 And that's it. Thank you, Mr. Chairman. Ah, by the way, the Chair,
7 we sent a letter to the respective group, acknowledging what we
8 just said here. And the last thing is that Sennai Habtes, he's
9 representing the U.S. Virgin Islands, he's going to send me the
10 letter. The commission is not able to be here with us as he wanted
11 to be, but Dr. Sennai Habtes will be representing the Virgin
12 Islands with voice and vote at the meeting. We will have the
13 letter. He's going to send the letter to me, and I will send it to
14 Andy and you. Thank you, Mr. Chairman.

15 16 **Adoption of Agenda**

17
18 **CARLOS FARCHETTE:** Thank you, Miguel. So, the next thing is the
19 adoption of the agenda. Are there any corrections or additions to
20 the agenda? Hearing none, I'd like to have a motion to adopt the
21 agenda as submitted. Anyone?

22
23 **VANESSA RAMÍREZ:** Vanessa Ramírez for the record. Motion to adopt
24 agenda.

25
26 **SENNAI HABTES:** Sennai Habtes, second.

27
28 **CARLOS FARCHETTE:** So, the motion to adopt the agenda was made by
29 Vanessa Ramírez and seconded by Sennai Habtes.

30
31 **GRACIELA GARCÍA-MOLINER:** So, I think we're not going to have a
32 presentation by the protected resources. This is Graciela for the
33 record. So, that would give you about half an hour on the 2nd day.
34 So, the 2:45 to 3:15 presentations will not be given.

35
36 **SENNAI HABTES:** If I may, Mr. Chair.

37
38 **CARLOS FARCHETTE:** Yes, Sennai.

39
40 **SENNAI HABTES:** I find that, generally, by the second day we are
41 running a little behind, perhaps we should just leave that time
42 frame open if we need to move things up or back to make sure that
43 we have enough time to consider all business.

44 45 **Consideration of 182nd Verbatim Transcription**

46
47 **CARLOS FARCHETTE:** Sounds good. Okay. Thank you. Next on the agenda
48 is consideration of the 182nd Council meeting verbatim

1 transcriptions. Any corrections? Okay. I have corrections. Sorry
2 about that. I think I need therapy on this. Okay. Alrighty. So,
3 I'll just go ahead and send it to Diana. Yeah. Okay.

4
5 So, we're going to need a motion to accept the corrections to the
6 verbatim minutes. I only have five simple ones.

7
8 **JAMES R. KREGLO:** I make a motion that we accept the corrections
9 with the motion.

10
11 **VANESSA RAMÍREZ:** Second.

12
13 **CARLOS FARCHETTE:** Okay. Thank you.

14
15 Motion to accept, verbatim transcription by Kreglo. Seconded by
16 Vanessa Ramírez. All in favor, say aye.

17
18 **GROUP:** Aye.

19
20 **CARLOS FARCHETTE:** I'm trying to work this all a little different.
21 Okay. Next is the Executive Director's Report. Miguel?

22
23 **Executive Director's Report**

24
25 **MIGUEL A. ROLÓN:** Thank you, Mr. Chairman. I would like to take
26 these few seconds to allow Julian to give us some good news for
27 today. Julian?

28
29 **JULIAN MAGRAS:** Yeah. Good morning. Julian Magras for the record.
30 First off, I would like to say, good morning and welcome to
31 everyone. Welcome to Saint Thomas U.S. Virgin Islands. I know some
32 of you are visiting for the first time. It's been a long time since
33 December of 2016 that you guys have been here in Saint Thomas. So,
34 welcome to each and every one of you.

35
36 This evening, the Saint Thomas Fishermen's Association would like
37 to host everyone in this room. And if they have, friends or spouses
38 with them, they're more than welcome to join us. We'll be hosting
39 you guys at the Frenchtown Community Center in Frenchtown.

40
41 We have a full dinner. A seafood dinner planned for you guys by
42 the association. And we have some surprises also that would be
43 taking place at the event, and we'll keep those surprises until
44 everyone joins us.

45
46 Also, we will provide taxi service. They will have 2 taxi vans
47 that will be showing up outside of the entrance of the hotel at
48 5:45 PM sharp. So, hopefully, the after meeting will be over by

1 then, and that will provide shuttle to and from the event.
2
3 So, you guys, if you have your own personal vehicle and you want
4 to drive, it's fine. We do have, a yard where there is some parking
5 for some of the vehicles. I think it'll hold up to about 10. And
6 there's parking right around the same area also. And if not, you
7 just use a taxi service, and he would drop you guys off. And when
8 the event is over, he will bring you guys back to the hotel.
9
10 So please come out and enjoy the dinner that the fishermen have
11 put together. The dinner was put together by the fishermen and
12 also some of the chefs that work in the different restaurant that
13 we supply, and we will mention those people this evening.
14
15 So, we look forward to each one of you joining us. And come on
16 It'll be a lot of fun. Free food, free drinks. So, nothing to worry
17 about. And we'll have music also. Thank you.
18
19 **MIGUEL A. ROLÓN:** Julian, at what time you want us there.
20
21 **JULIAN MAGRAS:** Well, the event starts at 6:00-6:15. So, we're
22 ready. We'll be ready at 6:00, so if everybody arrives by the time
23 the taxi gets there, I say, 6:15. It's only from here to
24 Frenchtown. It's not far away, so we'll be ready. You know, we'll
25 do some socializing before we actually start the dinner. Thank
26 you.
27
28 **MIGUEL A. ROLÓN:** Thank you, Julian. By the way, the people that
29 we are paying the purchase order, with the [inaudible] order, they
30 can charge the taxi, for this special event, in your vouchers. I
31 got it from Angie.
32
33 **JULIAN MAGRAS:** Yeah. So, it's only \$15 round trip for the taxi.
34 So, we got him to cut it in half. So, that saves you guys \$15,
35 which I think is a great deal and we don't have to worry about
36 anything.
37
38 **MIGUEL A. ROLÓN:** Good. Thank you again. I'm still in my report,
39 sorry. I will say two things, and then I will allow Laura to give
40 you the presentation about the WECAFC.
41
42 As you have heard, the Inflation Reduction Act, they provided money
43 for the Councils, the eight Councils, and a lot of other people.
44 But the money for the Councils, provided that we prepare proposals
45 by the end of this year, by December 31st. Proposals for three,
46 \$75,000 which will be for the coordination of the other proposal,
47 has to be submitted, in full.
48

1 But then for other proposals that follow the five priorities that
2 IRA has, they will be able to submit a three to five pages treatment
3 of the proposal. This is the title. This is what we're going to do
4 in accordance with the five objectives of the IRA, and these are
5 the costs that will be involved.

6
7 Then in January 31st will be the last day to submit a full proposal.
8 The total money will be \$3,500,000 per Council. That doesn't mean
9 that we are going to receive that money. They are going to review
10 the proposals and approve them, as they always do with all kinds
11 of proposal. The difference is that each Council will filter the
12 proposal to the National Marine Fisheries Service, and we selected
13 already the groups that are going to be submitting the proposals.

14
15 I will send today to Sennai and to Ricardo. I guess I've sent you
16 already a template, but we'll send you the template again. They
17 changed it. So, the local governments, they want to submit
18 proposals that they can do it following the five topics that they
19 have.

20
21 This proposal has to address climate change, resiliency, the
22 effects on fisheries, commercial and recreational, social issues
23 like EEJ, social justice, etcetera. And so far, we have several
24 institutions and scientists who are working together with Martha
25 Prada. She is the coordinator, and she'll be collecting that
26 information. Graciela from the staff is helping, to organize it,
27 with Angie, the proposal that we have to submit.

28
29 So, in summary, hopefully we get out of the 3,500,000 maybe
30 3,000,000 but that's a lot of money. The catch is that you had to
31 do it in three years. You have to present the proposal within two
32 months. That's difficult to do, but all the Councils are doing it.

33
34 The proposal ceiling that we will submit this year will be the
35 total amount that we can get issued. As for \$3,000,000, that would
36 be your top. 3.5, that would be the top that they can give you.
37 That doesn't mean that they will give it to you, but it's a top
38 that the Caribbean Fishery Management Council can hope for, during
39 those three years.

40
41 The period starts on January 1, 2024, and will end on 2026,
42 December 31st. We don't know whether they would be able to add a
43 little bit more time in 2027, but they told us that we have to
44 inform all the Councils about this.

45
46 The agenda has the sargassum panel for tomorrow. That has been
47 coordinated by Helena Antoun and the National Marine Fisheries
48 Services. Her boss, graciously accepted to allow her to come and

1 do the work. She started, this idea some time ago. So, that panel
2 will be from 8 o'clock to 10 o'clock tomorrow. As I mentioned,
3 Cisco is going to provide us a talk about the science behind it,
4 and we have others that will participate.

5
6 The idea for this panel is that we are going to discuss the science,
7 the management and the industry of sargassum. We have been talking
8 about sargassum for a long time. Just to give you an idea, this
9 hotel paid thousands of dollars just to clean the beach downstairs
10 because of the sargassum. It affects the fishers. It it's a
11 nightmare.

12
13 So, we are going to address that tomorrow on the panel and some
14 other scientists are already working. Out of the panel we expect
15 to have some idea about proposal that can be submitted regarding
16 sargassum. Some of the scientists we talked to already are working
17 on it.

18
19 And that's it, Mr. Chairman. I would like now to talk about WECAFC.
20 WECAFC is the Western Central Atlantic Fishery Commission of the
21 Food and Agriculture Organization, the FAO, Food and Agriculture
22 Organization of the United Nations.

23
24 We have two people in the room here that are important to these
25 efforts with the Council. Laura Cimo, from the Washington office,
26 and the contact person at the regional office is María Del Mar
27 López. Between the two of them, they put together this
28 presentation. And Mr. Chairman, I would like them to do the
29 presentation. If you have any questions, please address them to
30 Laura and/or María.

31
32 **CARLOS FARCHETTE:** Thank you, Miguel. Laura, good morning.

33
34 **WECAFC Update**

35
36 **LAURA CIMO:** Thank you, Mr. Chair. Thank you, Miguel.

37
38 So, first of all, again, my name is Laura Cimo from the NOAA
39 Fisheries Office of International Affairs, Trade and Commerce. I
40 just wanted to give again just very brief updates on the Western
41 Central Atlantic Fishery Commission and specifically just some key
42 outcomes from the recent meeting of the commission this fall.

43
44 Cristina, would you go to the next slide, please? Thank you.

45
46 I know many of you are already familiar with WECAFC, but just for
47 those who aren't, just a very brief overview. WECAFC, of course,
48 is a Regional Fisheries Body, it has 34 members, which include the

1 United States. It acts in an advisory capacity for the conservation
2 management of living marine resources in the Wider Caribbean. You
3 can see the area of the competence in blue, basically, from the
4 north. It's off the coast of North Carolina down to the south, to
5 Brazil.

6
7 Next slide, please.

8
9 And WECAFC essentially works through eleven working groups.
10 They're focused on specific species or fisheries issues. The
11 membership includes fisheries managers, scientists, decision
12 makers from the WECAFC member countries, as well as regional
13 fisheries organizations and other invited experts. Basically,
14 their purpose is to provide management advice and recommendations
15 that the commission considers at their meetings, which are supposed
16 to happen approximately every two years.

17
18 I've just highlighted with stars the working groups where the
19 Caribbean Fishery Management Council has been particularly active
20 and engaged. I want to, of course, take this opportunity to thank
21 the Council for its extraordinary leadership and its support. Just
22 to highlight a few. There's the Queen Conch Working Group and the
23 Fish Spawning Aggregation Working Group, in particular, the
24 Council has been extremely active and helpful.

25
26 Next slide, please.

27
28 So, as I mentioned, I just wanted to share some outcomes from the
29 most recent meeting. The commission met in September in Bridgetown,
30 Barbados, and it was a hybrid meeting. So, we basically had over
31 100 participants online and in person. The U.S. delegation, of
32 course, was led by State Department, but we did have representation
33 from NOAA Fisheries, both from my office and the Southeast Regional
34 Office.

35
36 We also had participants from the Caribbean Council, the South
37 Atlantic Council, the state of Florida's Fish and Wildlife
38 Conservation Commission, and NOVA Southeastern University. As I've
39 said, there's many outcomes, but just to highlight some that are
40 most notable. The United States sort of helped pave the way at the
41 meeting for, some steps to transform WECAFC into a strengthened
42 fishery body or entity. We often refer to this process as strategic
43 reorientation of the organization.

44
45 And just as a little, background, I know this process has been
46 going on for a little while, but most recently a roadmap for a
47 member driven, inclusive process to strengthen WECAFC was
48 basically endorsed at the meeting in the summer of 2019. And that

1 was following a preparatory conference in March of that year where
2 we had some options and challenges that were discussed.

3
4 And the whole objective of this process is to provide binding
5 management authority for the commission to ensure that there are
6 sustainable fisheries in the designated area of competence, to
7 increase regional collaboration, and, of course, to improve data
8 collection.

9
10 So, at the most recent meeting, the specific steps we agreed upon,
11 I'll just highlight a few. There was revitalization of a drafting
12 group with broad membership of the commission. That group is going
13 to be tasked with refining some options that the commission will
14 consider. And the idea is to convene a second preparatory
15 discussion where the options will be evaluated and discussed, and
16 that's before WECAFC meets again. And the idea is to hopefully get
17 some funding to support this work.

18
19 Next set of just outcomes that might be of relevance is we had the
20 Anchored Fish Aggregation Device Working Group that considered a
21 set of documents that the U.S. provide input on and support. And
22 those included a Caribbean Regional Fishery Management Plan for
23 aFAD fisheries, as well as a guide for improving the monitoring of
24 aFAD catches.

25
26 And then finally, there were also some revisions to some existing
27 WECAFC recommendations that were endorsed at the last meeting.
28 Those include a revision to the Queen Conch recommendation. So,
29 the key change is to encourage WECAFC members to participate in a
30 queen conch genetic project that's aimed at determining spatial
31 distribution of queen conch, as well as status. And hopefully,
32 that will allow us to determine if the queen conch in trade has
33 been illegally harvested.

34
35 And finally, there were some changes to a recommendation on fish
36 spawning aggregations. Those actions or changes to the
37 recommendation are designed to improve data collection, also
38 improve assessment and outreach for the conservation of fish
39 spawning aggregations.

40
41 There was also a coordination committee that's going to be aimed
42 at facilitating the implementation of a Regional Fish Spawning
43 Aggregation Management Plan. That has already been endorsed by the
44 commission. And that particular management plan is focused on
45 Nassar Grouper and Mutton Snapper.

46
47 So, the 3rd change I've highlighted is just that the prioritization,
48 of those particular species will be included in WECAFC's data

1 collection program.

2

3 Next slide, please.

4

5 And then finally, there was a comprehensive program of work that
6 was adopted. I just want to highlight because the important
7 component of that plan is going to be the first meeting of the
8 Flyingfish-Dolphinfish Working Group in summer 2024. The Caribbean
9 Council has, very graciously, offered to host this meeting with
10 support from my office.

11

12 This meeting will be an opportunity to discuss sort of what areas
13 we'd like to focus on. There's going to be development of terms of
14 reference, also a work plan. NOAA Fisheries is inviting U.S.
15 Stakeholders to provide input on the issues that they'd like
16 discussed, priority areas. And, of course, we warmly welcome input
17 from the Council as well.

18

19 Also to highlight, there's new membership, but there's more
20 importantly new leadership. WECAFC now is going to be led by Mr.
21 Floyd Green of Jamaica, and we have two new vice chairs, one from
22 Venezuela and the other from the Dominican Republic. And we
23 tentatively have the next commission meeting scheduled for the
24 summer of 2025 in Jamaica.

25

26 And if you want, just the next slide. This is just a conclusion to
27 say thank you very much, as always, for your interest and
28 engagement. Thank you, Mr. Chair.

29

30 **CARLOS FARCHETTE:** Thank you. We have any questions for Laura?
31 Okay. Hearing none. Thank you again, Laura.

32

33 Next on the agenda is an update on NOAA Fisheries Science to
34 monitor, FMPs. Cisco Werner.

35

36 **Update on NOAA Fisheries Science to Monitor FMPs-Cisco Werner,**
37 **NOAA Fisheries**

38

39 **FRANCISCO E. WERNER:** Thank you, Carlos. Good morning and buenos
40 días to everybody again.

41

42 Again, I'm going to offer some remarks, but I wanted to thank,
43 again, Carlos, Mr. Chair, Madam Vice-Chair Vanessa, Mr. Executive
44 Director Miguel, and members of the Council for the opportunity to
45 join this meeting of the Caribbean Fishery Management Council, to
46 offer a few remarks today, and also at tomorrow's sargassum panel.

47

48 Since it's my first visit to the Council, I do want to just briefly

1 go over, you know, offer some introductions in terms of my
2 background and what I bring to the table and hope to work with
3 you. I will then speak a little bit about some of the fundamental
4 changes that we're seeing in the systems that we manage. I will
5 talk about the heightened importance of the relationship with the
6 Council, which Miguel already touched upon that. And also, some
7 discussion about the advances and ongoing steps and data
8 collection, which is really where it kind of all starts.

9
10 And so, I'll start by saying that the Caribbean is very near and
11 dear to me. Some of you knew I grew up in Maracaibo in Venezuela,
12 a short 700 miles from here. As the crow flies is about as close
13 as I've been in a long time to Maracaibo. And experiencing the
14 oceans of Venezuela during my formative years is really what drove
15 me to my career in oceanography.

16
17 I came to the United States in the mid to late '70s. I finished my
18 degree in Seattle, about as far as you can get from the Caribbean.
19 It was a great school. Then, I devoted about 40 plus years of my
20 career to the study of the oceans.

21
22 After about 25 years in academia, I joined NOAA in about 2010, at
23 the Southwest Fisheries Science Center as a director of the La
24 Jolla Lab. And then, in 2017, I moved to headquarters as the Chief
25 Scientist and Director of Scientific Programs, which is a
26 counterpart to, Sam Rauch, who is the Deputy Assistant
27 Administrator for Regulatory Programs. And so, between Sam and I,
28 we split the science and the regulatory side of the agency.

29
30 And so, in my position, as the Chief Scientist for Fisheries, you
31 know, I oversee all the Fisheries Science Centers like Miguel
32 noted. The Office of Science and Technology, which it is close to
33 1,500 really incredibly dedicated staff nationwide. I had the
34 privilege to lead efforts that provide the science needed to
35 support sustainable fisheries and ecosystems, rebuilding our fish
36 population, saving critical species, preserving habitats,
37 etcetera.

38
39 At this point in time, I would just like to say that the need for
40 the NOAA Fisheries Science Enterprise, to work closely with the
41 Fishery Councils is probably about as important as it has ever
42 been. And I'll talk about that and develop that a little bit.

43
44 So why do I say that this relationship with the Councils is so
45 important?

46
47 The reason is that while fishery management in the United States
48 over the past 40 years has been incredibly successful, I mean,

1 we're world leaders in terms of managing our fisheries. People
2 look to us in terms of how we do it. The Council process is one
3 that many countries try to emulate. Most recently, I remember there
4 was a close collaboration, even with Japan, saying, "How do you
5 guys do it?" To try to see how they would adapt their systems.

6
7 We're at a point where, because of climate change and other things,
8 we can't continue doing things exactly the same way we did before.
9 I mean, we need to change the way that we approach our science. We
10 need to change the way we approach, how we provide advice and
11 everything. And that is something that we will have to work closely
12 with the Councils. This is something that no one group can do
13 alone.

14
15 Very simply, if you want to get a little bit into the science part
16 of things, the way to describe it is that our systems are no longer
17 stationary, and we have entered a period, therefore, of non-
18 stationarity. And I'll just explain very briefly what I mean by
19 that. It is that we no longer can operate and assume average
20 conditions. Average conditions really don't exist anymore.

21
22 We are faced with trends. Things are changing. We're faced with
23 extreme events. We don't have prevailing conditions, which is one
24 of the core assumptions in terms of how we manage our systems. And
25 even these trends and extreme events are changing in terms of how
26 frequently they take place and the magnitude of how strong they
27 are.

28
29 Extreme events, we know, whether it's in atmospheric conditions.
30 You know, in terms of the severity of storms, well, we have
31 counterparts in the ocean with marine heat waves and such. And all
32 of these things are impacting our marine ecosystems, the systems
33 that we try to work with, understand dramatically.

34
35 I'd like to express it in the way of we're really dealing with a
36 new ocean, and this new ocean is one that, in my 40 years, as I
37 said, of studying the ocean, we've never seen before. If I go back
38 even, you know, when I was in graduate school, there was no mention
39 of marine heat waves, there was no mention of ocean acidification.
40 There was no mention of deoxygenation. There was no mention of a
41 whole host of things that now are front and center in terms of
42 what we do.

43
44 We didn't talk about the migration of species that we're looking
45 at now. We didn't talk about, you know, how the changes in food
46 web structure and energy flow and all of that. It's all basically,
47 you know, somewhat new in terms of what we need to look at.

48

1 And so, to add to the complexity of that, of understanding how the
2 new ocean works as driven by climate signals and others, we're
3 also faced with different changes or changes in the ocean use
4 sectors. You know, whether it's offshore wind farms, aquaculture,
5 minerals extraction, etcetera. These are all efforts that will be
6 out there and overlap, perhaps, sometimes compete with some of the
7 areas that we're used to working with or working on. And so, that
8 adds yet another complexity to this new ocean and what it is that
9 we're looking at.

10
11 So, when I ask people what keeps them up at night, you know, I get
12 different answers. Sometimes it's their cat, sometimes it's
13 something else. This is what keeps me awake at night. What keeps
14 me awake at night is the fact that we need to change the way we
15 sample, the way we collect data. We may not be able to go to places
16 we used to go before. We may need to go further, we may need to
17 sample more frequently, we may need to sample at greater depth.
18 So, we need to change that. We need to change the way we analyze
19 our data.

20
21 You know, we have new techniques coming on, whether it's artificial
22 intelligence, machine learning, other things, the high performance
23 computing that fortunately are there that allow us to do that, but
24 it is a new way of doing things. We will have to learn how to do
25 that, and we'll have to learn how to interpret that, again, not in
26 isolation but in collaboration with the Councils and others.

27
28 And perhaps the hardest one is how do we turn this new information,
29 these new analysis into information and actionable advice that the
30 Councils can work with. And so it's a dialogue that we have to
31 have about how we're approaching this new ocean, all of the things
32 I talked about, and how do we evolve it in terms of how we provide
33 advice.

34
35 Jumping really quick to the need for the close collaboration with
36 the Councils. And I wrote a note to myself here, "Data, data,
37 data." It really is all about the data, right? You've probably all
38 heard the expression, you know, "A person without data is just a
39 person with an opinion" or something like that. And because of all
40 the changes that are taking place right now, we're starting from
41 scratch in some ways. Maybe that might be a little bit extreme in
42 some cases, but we really have to understand things in a different
43 way.

44
45 In that regard, the Caribbean is in some ways a model in terms of
46 how we need to move forward. We need to-- You know, no region,
47 probably, can really be considered data rich anymore because we
48 need to find out how the new system works. We need to figure out

1 how to sample the new ocean, which means what do we need to sample
2 and how do we interpret it? And in some ways, you could think that
3 all regions, because of all these changes, are data limited. And
4 we need to learn from each other.

5
6 This is something that I firmly believe that in terms of how we
7 now approach jointly, not just NOAA Science Enterprise, and the
8 Caribbean Council, but the Councils in general, is something that
9 we'll have to engage in a dialogue.

10
11 And as Miguel noted, I think that dialogue has already started
12 here, between the Caribbean Council and the Southeast Fisheries
13 Science Center's new Caribbean Fisheries Branch. And that
14 relationship, I just want to say, that it really does reflect our
15 commitment. And by "our," I'm saying, the NOAA Fisheries side, to
16 really better serving our partners and constituents in the U.S.
17 Caribbean.

18
19 The work that Kevin and others have led. You know, the level of
20 communication and cooperation between the Southeast Fisheries
21 Science Center, the Caribbean Council staff, the Southeast
22 Regional Office Caribbean staff really is unprecedented. It's one
23 that is just advancing by leaps and bounds.

24
25 And I'll just talk about a couple of examples in terms of work
26 that has happened between the Southeast Fisheries Science Center,
27 the Caribbean Council, the Southeast region, and also with a whole
28 host of federal and territorial partners in terms of identifying
29 data gaps, that will allow us to prioritize research, understanding
30 how to use data limited methods to inform management and ecosystem-
31 based management. And really the all-important part about
32 improving communication with fishers and our constituents.

33
34 That to me in terms of we move forward in terms of understanding
35 the new ocean and the science is going to be essential. You know,
36 the working through cooperative research, collaborative research,
37 and the fisheries is going to be fundamental to every single
38 Council, every region that we work in.

39
40 The Southeast Fisheries staff have also expanded, for example, the
41 cooperative research with Puerto Rico fishers, in '23 and the U.S.
42 Virgin Islands, will be in '24. Looking at fishery independent
43 surveys for deep-water snapper and lobster. And there's also life
44 history sampling and collaboration with fishers in Puerto Rico and
45 elsewhere.

46
47 There's also work with Puerto Rico and the U.S. Virgin Islands On
48 improving port sampling of recreational and commercial fisheries,

1 which includes methods like I mentioned before, advanced methods
2 such as artificial intelligence and machine learning, that is
3 helping expedite and make some of these data collections quicker
4 as well as improved.

5
6 With regard to the other topics I mentioned, having to do with
7 offshore winds and aquaculture and the changing ocean environment
8 in terms of use sectors. There were also two workshops that were
9 hosted by the Southeast Fisheries Science Center with
10 participation by Council members and others on the development of
11 offshore wind and sea-based aquaculture. These were held in August
12 and September of this year and the purpose was, again, data, data,
13 data. Identify data sources in data gaps for marine spatial
14 planning and inform siting of these potential efforts, whether
15 it's offshore wind or aquaculture.

16
17 And then, these are just a few examples of ongoing collaboration
18 between us. But I also wanted to touch on the IRA, the Inflation
19 Reduction Act, which was also mentioned by Miguel. And just to
20 offer a couple of examples on how we are making investments through
21 the Southeast, in the Caribbean region.

22
23 As you know, the IRA is a historic investment in America's climate
24 resilience. NOAA Fisheries has received, an unprecedented
25 investment in strengthening the agency's core mission to provide
26 science based management and conservation in response to the
27 climate change challenges that we see.

28
29 I'll just mention 3 quick examples. The Southeast Fisheries Center,
30 again, using IRA funds, Inflation Reduction Act funds, will invest
31 in cooperative research with the U.S. Caribbean Commercial
32 Fishers, that will extend deep-water reef fish and lobster surveys
33 into the U.S. Virgin Islands. They'll provide support for a
34 University of Virgin Island student to develop methodologies for
35 remote sensing to estimate fishing effort, and also investment in
36 a research associate to integrate and coordinate fishery
37 independent sampling surveys in the U.S. Caribbean.

38
39 I just wanted to touch on these because I was hoping to leave some
40 time for questions and such, but I'll just close by saying, I'd
41 like to think of this as a beginning of a conversation. It's a
42 conversation that's already going, and maybe I should say it's an
43 ongoing conversation, and share that we are facing challenges that
44 are unprecedented and that we need to work on jointly in terms of
45 how we advance our knowledge, meet our challenges and, really,
46 help the folks that need our advice and information to strengthen
47 their ability to deal with some of the exposures to changes that
48 are coming and increase their resilience.

1
2 I'll be here for the two full days, so I hope and have a chance to
3 meet with everybody and learn a little bit from everyone. And more
4 importantly, if there's anything I can do from where I sit in order
5 to help, you know, working with Clay, working with Kevin, working
6 with others, this is something that I would like to make sure that
7 we have a chance to talk about, in the next couple of days.

8
9 So again, thank you for the for the kind invitation and the
10 opportunity to offer a few words. And if there's time, happy to
11 take any questions or comments, as needed. Thank you. Thank you,
12 Mr. Chair.

13 14 **Questions/Comments**

15
16 **CARLOS FARCHETTE:** Thank you, Cisco. So, any questions for Cisco?
17 Vance?

18
19 **VANCE VICENTE:** Just one comment. Thank you very much for your
20 presentation and the way you synthesize the kind of situations
21 that our ocean resources are going through and that will be going
22 through. That was excellent. Thank you.

23
24 **FRANCISCO E. WERNER:** Thank you.

25
26 **CARLOS FARCHETTE:** Sennai?

27
28 **SENNAI HABTES:** Thank you, Mr. Chair. Morning, Dr. Werner. One of
29 the things you touched on towards the end is more human
30 infrastructure and capital, and I think that's often been an issue
31 in the U.S. Caribbean and other insular areas. And I see both, the
32 Southeast Fisheries Science Center and NOAA Fisheries as a whole,
33 making great steps towards creating a pathway for developing the
34 infrastructure necessary to do more cooperative fisheries
35 management in the insular areas.

36
37 But we do face unprecedented threats and that does require a new
38 class of scientists trained and ready to do that work in these
39 regions. One of my larger concerns, you know, being from the Virgin
40 Islands and coming back to do this work, having been trained in a
41 way to do that is that I don't see the infrastructure or the
42 ability to develop the infrastructure for training people from
43 these regions to be back in the Caribbean and other insular areas
44 to manage these unprecedented problems that we face.

45
46 And, you know, it's food for thought. Perhaps, maybe you could
47 give some comments on your thoughts as to how we can better prepare
48 for those needs that we're going to have going forward, you know,

1 especially within fisheries management and the FMPs that we're
2 trying to better manage here in the Caribbean.

3

4 **FRANCISCO E. WERNER:** Yeah. Thank you. Thank you, Mr. Chair.

5

6 Great point, and, as you said, the human infrastructure is probably
7 more important than some of these other things that I talked about
8 and ensuring that we have that is something that we need to
9 establish a foundation for.

10

11 I'll mention A couple of things. You know, I'm not sure if the
12 Cooperative Science Centers, and these are consortia, if you will,
13 of universities that have been set up through the educational
14 partnership program within NOAA. They're associated with different
15 line offices, and the one associated with Fisheries is the LMRCSC,
16 the Living Marine Resources Cooperative Science Center. I know
17 that we've had a number of students from the islands, whether it's
18 Puerto Rico, the U.S. Virgin Islands and such be part of the CSC,
19 of the LMRCSC. I don't know if their next career path will take
20 them back here, back home, if you will, or through NOAA, back here,
21 but I think those are very tangible efforts that are being made.

22

23 And in some ways, they've been actually quite successful in terms
24 of how to recruit students into the program, but more importantly,
25 offer them a career path so that they can actually join NOAA or
26 other agencies more quickly to be able to then bring everything
27 they've learned during their student career back into the field,
28 if you will. So, it's something that we should probably talk a
29 little bit more about, but the LMRCSC is one example of probably
30 cases that we should do more of, but it's one example where there
31 is actually some tangible results that hopefully will address some
32 of the things that you brought up. So, thank you for that. Thank
33 you.

34

35 **CARLOS FARCHETTE:** Graciela.

36

37 **GRACIELA GARCÍA-MOLINER:** So, thank you for the presentation. This
38 is just a very specific example. We are very much interested, or
39 I am very much interested in including the knowledge that the
40 fishers have into all the science that we do. And I think that we
41 need to change the way we do things and actually have them very
42 much involved in all that is happening now. We could have a
43 commercial and recreational fishers fleets doing science for us.
44 I mean, they are out there 300 days a year, and they have been
45 searching for their target species as they have moved over the
46 past 30 years.

47

48 So, you know, how do we turn all that knowledge into the science

1 that we need to do. And it's going to take a while because
2 scientists tend to be very, very structured, and fishers are very
3 structured because they pay their bills. If they were not, they
4 wouldn't be paying their bills. So, you know, we need to do not
5 only the science per se in terms of the biology of the species and
6 the changes in the oceanography, etcetera, but also in the social
7 and economic aspect of these fisheries.

8
9 And as you mentioned, the Caribbean is a very special place because
10 we are a hotspot in terms of biodiversity, we do have fisheries
11 that cross the jurisdictions, and we work fairly well together.
12 So, how do we turn all that knowledge that they have into the
13 science and to show us how things have changed and where are the
14 species going? Because they probably already have a feeling of
15 where they're going. So just that, you know, the concern.

16
17 **FRANCISCO E. WERNER:** Yeah. Thank you very much for the question,
18 and thank you, Mr. Chair, for the opportunity to respond. Very
19 good point. Like you said, the Caribbean is so wide and diverse,
20 and the science is very hard to cover all of the areas that are
21 out there. So, it makes all the sense in the world to work closely
22 with the fishers, with the information, with the knowledge that
23 they have and bring that to the table.

24
25 I think that the recognition and the importance of local ecological
26 knowledge, traditional ecological knowledge and similar is, I
27 think, becoming more expected even, if you will, in terms of the
28 conversations and the participations in several regions. I believe
29 that the Alaska region, meaning the North Pacific Fishery
30 Management Council even has a new protocol for how to include this
31 conversation within the discussions.

32
33 It's a new step, but it's one that formalizes exactly what you
34 said and maybe it's something that other Councils have also been
35 looked at to see how do we invite that participation? How do we
36 include that information? Because there's no way that, again, as
37 I said before, any one group can do it alone, and so we actually
38 do need to work together to do that.

39
40 So, if anything, I will take this home in terms of how to ask a
41 question to see how we include this more formally in the various
42 conversations that we're having. Since we're all at the table
43 learning new things, and I think we all need to have that open
44 conversation and open mind about how we do that.

45
46 Thank you so much for that comment. Thank you.

47
48 **CARLOS FARCHETTE:** Thank you. I have, Kevin and then Julian.

1
2 **KEVIN MCCARTHY:** Thank you, Mr. Chair. I think Julian actually had
3 his hand up first, so I can follow-up Julian.
4
5 **CARLOS FARCHETTE:** Okay. Julian?
6
7 **JULIAN MAGRAS:** Julian Magras for the record. Thank you very much
8 for the excellent presentation. Graciela, thank you for those
9 words. You beat me to it.
10
11 I think that's the key component that we've been working on over
12 the last couple years to try to make some great improvement on how
13 we can include the fishers' knowledge in this process. We're the
14 ones that have actually seen the changes on a daily basis, being
15 out there doing the hands-on work. You know, the scientists have
16 their hands on in the books. Few get out in the ocean and actually
17 understand see what's going on.
18
19 We have been noticing the different changes and adapting to the
20 different changes on how we are fishing in order to make a living.
21 And like she said, that's how we pay our bills. We're not going to
22 go out there unless we can pay our bills.
23
24 You know, we are in full cooperation and ready to work with the
25 scientists, with the Science Center, and everyone, so the outcomes
26 of when we do stock assessments, and we look at all these different
27 species that we can close the gap a lot more than we have been
28 seeing. It has gotten better, and I think we can improve it a lot
29 more by us working more as a team and getting all the information
30 in one room and then look at how we can move forward, what needs
31 improvements, where we need to throw some extra money at. And at
32 that same time, we'll be saving money with all that information
33 being on the table. Thank you.
34
35 **CARLOS FARCHETTE:** Thank you, Julian. Kevin? Oh, I'm sorry. Cisco.
36 Sorry.
37
38 **FRANCISCO E. WERNER:** Yeah. No. Thank you, Julian. And thank you
39 for the opportunity to respond. Again, I couldn't agree with you
40 more.
41
42 As I mentioned, several years ago I was on the West Coast of the
43 United States in La Jolla, and that's when, you may have heard
44 there was this warm blob that occurred in the North Pacific, and
45 it caught us off guard, right? I mean, we were flat footed, didn't
46 expect it, never seen it before, and we thought we were describing
47 it. And we could not have described it had it not been for the
48 cooperation that we had for, like you said, the people who are out

1 there on the water all the time and were seeing things.

2
3 And I think that as challenging as that warm blob was, I'm going
4 to say, it actually brought together the need that this is much
5 harder than we thought it was and there was no way we could describe
6 the totality of what was going on without the close work with the
7 fishing industry, with the local communities that saw what
8 happened.

9
10 I think that, in some ways, I don't know if it broke the ice or
11 what it was, you know, but it made it that that conversation was
12 much more natural. And I think we see more and more examples of
13 this. Unfortunately, they happen when there's some kind of an
14 impact, that then we have to bring our minds together to see how
15 we work, how we describe it, how we understand it.

16
17 But I think there's also things that we can build on that in terms
18 of anticipating how we work jointly. We can't be in all the places
19 that we need to be, meaning we just simply, in terms of our
20 fisheries vessels, meaning the government vessels and so on, we
21 can't do that. We have to work with the fishing industry, with our
22 partners, and co-design how it is that we make sense out of this.

23
24 So, I think, and I read through the strategic plan of the Council,
25 which was very good, and I saw over and over again the importance
26 of the collaboration with the fishers and the partnership with the
27 fishers. And I think that, as I said, how we rethink what we do,
28 that intimate and close collaboration with the fishers is going to
29 be key in terms of how we go forward, in the years to come. So,
30 thank you for the comment and spot on. Thank you.

31
32 **CARLOS FARCHETTE:** Kevin.

33
34 **KEVIN MCCARTHY:** Thank you, Mr. Chair. So, Julian, great, great
35 point, and Graciela as well. So, I agree with you. Those kinds of
36 conversations and getting everyone involved needs to continue and
37 to expand.

38
39 Right now, there are three things that are currently ongoing that
40 speak directly to this, the local knowledge. One, is participation
41 in the SEDAR process. So, as many of you know there's a data
42 workshop coming up for SEDAR 84. A lot of this stuff I'm going to
43 talk about a little bit later in our Science Center presentation.
44 So, that's one thing. The fishers are certainly a critical part of
45 that process.

46
47 I jotted three things down, so I'm going to look at my notes while
48 you were talking, Julian. So, we also have fishery independent

1 surveys, as Cisco noted, and a little bit more on that a little
2 later when we present.

3
4 In developing those surveys, the input of the fishers, because
5 it's cooperative research, because it's being conducted on
6 commercial vessels, at least that's been the cooperation so far.
7 Maybe at some point it'll move on to for hire and recreational
8 vessels. But in any event, part of the design is in the
9 conversations we have with the fishers. So, to get that local
10 knowledge, to help design the best survey that we can.

11
12 And then the last thing I would say is coming out of our strategic
13 planning workshop that we held with many of the folks in the room,
14 we have this group that we're sort of calling the toolbox group.
15 And the toolbox is to come up with some innovative ways to provide
16 management advice. And that can certainly be local knowledge, local
17 expertise. There's definitely room for that. We can be innovative
18 and look for ways to include that local knowledge.

19
20 So those are just three things that are ongoing right now. But I
21 agree with you, Julian and Graciela, we can expand that. But those
22 are three things that are happening right now.

23
24 **CARLOS FARCHETTE:** Okay. Any more questions for Cisco? Graciela?

25
26 **MIGUEL A. ROLÓN:** We're running out of time, but I will encourage
27 anybody in the room that have a chance to talk to Cisco, Dr.
28 Werner. He's a very busy guy, but we have the opportunity to have
29 him here. I was going to mention, especially to Werner, that one
30 thing about being old is that you are able to compare things that
31 nobody knew about because they weren't born yet.

32
33 And for the last several years, I have seen the cooperation with
34 the Southeast Fisheries Science Center Regional Office like never
35 before. I started with Bonnie White. She was the Director of the
36 laboratory center at that time. And it continues with this branch
37 that is being put together by Clay and the group and, of course,
38 Kevin. It's something that we cannot overemphasize the importance
39 and the difference that it has made for the fishery migration plans
40 monitoring and development that we have here in the Caribbean. So,
41 thank you for all of that to everybody involved.

42
43 **CARLOS FARCHETTE:** Thank you, Cisco. I agree wholeheartedly with
44 what Julian and Graciela mentioned, local knowledge. I know for
45 Saint Croix we have a very big commercial fishing dive industry.
46 And those guys are below the surface 5 to 6 days a week and they
47 see a lot of differences out there, a lot of changes. So, I think,
48 you can really tap into a lot of that knowledge.

1
2 Gerson Martínez, sitting over there, is the DAP Chair. He's one of
3 those guys that has dove Saint Croix reefs for years. So, there's
4 a lot of knowledge you can take from him. And I have names of
5 others that are willing to assist.

6
7 I had to steal your phrase about, "A person without data is a
8 person with an opinion." I like that. I wrote that down. I'm going
9 to use that on Saint Croix. Thank you.

10
11 So, next on the agenda is the SSC report by Vance Vicente.

12
13 **SSC Report - Vance Vicente, Chair**

14
15 **VANCE VICENTE:** Yeah. Thank you, Mr. Chairman, and good morning,
16 everybody. So, I will begin the presentation.

17
18 It's essentially, the SSC report for the 183rd Caribbean Fishery
19 Management meeting where I summarize what the SSC has done during
20 the year up to now.

21
22 Before I start, I want to thank Adyan and the Council staff.
23 They've been extremely helpful in setting up, supposedly, my
24 preparation, but it's a hybrid contribution from everybody. So,
25 thank you first.

26
27 So, we had three SSC meetings during the year. One was during May
28 1 to May 5, 2023, which was a hybrid meeting between the EBFM TAP
29 and the SSC. This was discussed, and is present in the verbatim,
30 during the 182 CFMC meeting, which was held in Ponce.

31
32 So, we have two more meetings, September 27, 2023, and November
33 28, 2023. During September 27, '23, Adyan Ríos and Kyle Shertzer
34 gave a wonderful presentation on the SEDAR 80, U.S.V.I. Queen
35 Triggerfish, Saint Thomas/Saint John. Also, in September 27, we
36 summarized, as requested by from Miguel Rolón, the ten research
37 priorities that the SSC feels deemed to be required.

38
39 Continuing with the September 27, '23, meeting, the SSC members
40 discussed the SEDAR 80 data assessment review. The Southeast
41 Fisheries Science Center suggested the following actions to define
42 the RVC, which is the Reef Visual Census, selectivity. One, RVC
43 domed selectivity saturated at a fixed value of 0.9. Two, allow
44 the model to estimate the fishery selectivity. Third, run models
45 with an equilibrium catch, chosen by assessors, and a slope catch,
46 chosen by assessor, in order to confirm the behavior of the model,
47 if it's similar or not. Four, repeat the profile over the
48 equilibrium catch.

1
2 During the SSC meeting, there were then research priority updates
3 summarized, by Richard Appeldoorn and by the SSC team, but Richard
4 took the major action on this. These ten research priority topics
5 are: one, increase fisheries landing data based on port landings.
6 Second, put more effort on effort estimation. And three, prepare
7 for (h)(2) flexibilities, both simulations to test alternate
8 annual catch limits; and second, to collect life history
9 information. Five, collection of socio-economic data for
10 management in order to have a periodic systematic collection of
11 data to provide a baseline and comparative basis for social impact
12 assessments.

13
14 Six, this is from the EBFM, assessing regulatory impacts, which is
15 to evaluate the effectiveness and impacts of closed areas, and
16 this has also been emphasized by the fishers. Seven, expand the
17 fisher independent monitoring and surveys. Eight, develop species
18 and habitat climate vulnerability indices for the U.S. Caribbean.
19 We have done some of that, but there's still a long way to go.
20 Nine, EBFM reference points for using the fisheries management
21 decision support system in the U.S. Caribbean. And ten, continue
22 the participation in the re-initiation of the marine recreational
23 information program. And, by the way, these priorities were--

24
25 Oops. What happened to my presentation. It's gone. I don't know
26 what happened here.

27
28 During the SSC meeting of November 28, we had discussions on the
29 SEDAR 80 U.S.V.I. again. The second meeting, the SEDAR 80 U.S.V.I.
30 Saint Thomas/Saint John Queen Triggerfish, presented by Adyan Rios
31 and Kyle Shertzer. And second, the participation on various
32 reunions and activities which are due to be coming during 2024.

33
34 SEDAR 80, U.S.V.I. Saint Thomas/Saint John Queen Triggerfish.
35 Okay. This the summary of what we have so far regarding the SEDAR
36 80 U.S.V.I. Saint Thomas/Saint John Queen Triggerfish. It is the
37 following. One, catches are market driven. Two, the fishery-
38 independent index of abundance is increasing and indicates that
39 the stock is increasing.

40
41 Third, the Southeast Fisheries Science Center suggested that the
42 SSC member use Tier 3 to develop short-term catch advice. Four,
43 the SSC members will determine and establish the acceptable
44 biological catch. There are still topics to discuss about
45 characterizing the uncertainty regarding the level of connectivity
46 of new recruitments from the spawning population. Second, natural
47 mortality. And three, the level and effort of fishing before 2,000.
48 These uncertainties will be reviewed at the next SSC meeting with

1 the overfishing limit projections.
2
3 The SSC members decided to finalize and complete SEDAR 80, U.S.V.I.
4 Saint Thomas/Saint John, and also Saint Croix Queen Triggerfish at
5 the next SSC meeting, which will possibly be held in March 2024.
6
7 The summary of the modeling results of the SEDAR 80 U.S.V.I. Saint
8 Thomas/Saint John Queen Triggerfish are listed on the left. And on
9 the right, we have the data overview, estimated parameters, and
10 the fixed parameters.
11
12 So far, a reference model diagnostic is stable, but we are still
13 unable to estimate the maximum sustainable yield and the stock
14 status with confidence. And looking at the bottom, there are two
15 major findings. Number one, that abundance of the queen triggerfish
16 population in these areas is increasing. And second, that the
17 current catches are sustainable.
18
19 Here are the catch landings between approximately 2017 and '18. As
20 you can see, there has been a decreasing trend in the landings.
21
22 The management summary is as follows. Current catch limits for
23 Saint Thomas and Saint John queen triggerfish. The sustainable
24 yield levels. As you can see, the SYL, the ABC, and the ACL are
25 between 100,000 to 200,000 pounds. While the recent years of catch,
26 in 2019, 2020, and 2021, are all are all below 50,000 pounds. While
27 the results across the model run suggests that catch could increase
28 above the current levels, we're still unclear about how much.
29
30 This is an overview of the Saint Croix queen triggerfish, which
31 we'll be developing later on in March of 2024. But one thing that
32 comes to mind, before we go into the future participation of SSC,
33 you look at these declining rates. If the population is really
34 increasing and is becoming more sustainable, if we would have good
35 catch per unit effort correlated with a decrease in the landings,
36 discarding the number of trips because, obviously, the fishers are
37 not conducting as many trips because of the lower demand, if we
38 would have very specific catch per unit effort, like the catch per
39 trap, for example, at a more specific level, then we can
40 corroborate that the population-- I mean, if the catch per unit
41 effort remains constant or is increasing and still we have the
42 lower landings, then we have a better feel or confirm that the
43 population is increasing.
44
45 Again, we have measured acceptable biological catch, and we cannot
46 forget the basis of this, which were mandated by the Magnuson Act.
47 The SSC, for these species, we still need to develop, what is the
48 acceptable biological catch? Which we are not being able, and also

1 the overfishing limit. And then, of course, the Council establishes
2 the annual catch limit, while the DAP's give recommendation to
3 Council and discuss and contribute to making recommendation
4 regarding the range between the ABC and the ACL. So, that's
5 important to remember that we have to keep within this framework.

6
7 Well, other business things coming up. One already has come up,
8 which was the December 1, 2023, life history data overview-- I
9 cannot read it from here. --regarding the yellowtail snapper and
10 the stoplight parrotfish. So, before I complete this presentation,
11 I would like to have either Adyan Ríos or Kevin, which participated
12 in this meeting. I did not. I was not able to participate. I don't
13 know if we have a short summary of what was the result of the
14 December 1 virtual meeting.

15
16 Then, of course, there's the SEDAR 84 life history data webinar.
17 Well, okay. I'm sorry. That was the one on December 1st. But,
18 regarding the SEDAR 84 workshop, the data workshop is scheduled to
19 be conducted between January 23rd and 25th at the Verdanza Hotel in
20 San Juan, in Isla Verde, Puerto Rico as proposed by the SSC.

21
22 And we will be participating in the data workshop. It will be Juan
23 Cruz, Michelle and Jorge García. For the assessment workshop,
24 Walter Keithley, Richard Appeldoorn, and Juan Cruz. For the review
25 workshop, Vance Vicente, Jason Cope, and Erik Williams.

26
27 Next slide. No. That's it. Well, thank you. I would like to hear
28 from Adyan Ríos or Kevin to give us a short summary of what was
29 discussed regarding the life history of the yellowtail snapper and
30 the stoplight parrotfish. Please. Thank you, Mr. Chair.

31
32 **CARLOS FARCHETTE:** Thank you, Vance. Adyan?

33
34 **ADYAN RÍOS:** Adyan Ríos for the record. Thanks, Vance.

35
36 We had the life history webinar check-in, and it was really
37 productive to be able to bring together all the different folks
38 who are collecting the samples for the ages and for the lengths
39 and weights that we really need for the stock assessment. And so,
40 this was just a meeting in anticipation or in preparation for the
41 upcoming SEDAR data workshop where those data will be reviewed in-
42 depth. But it was very important to just, get in touch with
43 everyone, see where they're at and better prepare for the upcoming
44 data workshop.

45
46 The data deadlines are coming up, I think later on December 15th
47 for raw data. And then working papers ahead of the data workshop,
48 are do a couple weeks before the data workshop, which is January

1 23rd to 25th.

2
3 **VANCE VICENTE:** Thank you, Adyan. So, Mr. Chairman, that's the end
4 of my presentation.

5
6 **Questions/Comments**

7
8 **CARLOS FARCHETTE:** Thank you, Vance. Any questions for Vance?
9 Sennai?

10
11 **SENNAI HABTES:** Thank you, Mr. Chair. Sennai Habtes. Vance, did
12 you guys decide on members to attend the National meeting?

13
14 **VANCE VICENTE:** Yes. I forgot. I skipped that. If you could go
15 back to the slide of other meetings. Sorry. Other business. Yeah.

16
17 The 8th National SCS workshop, 2024, which is to be held between
18 August 26-28, in Boston. Yes. I think there is a list there which
19 is to be proposed to the Council so that they can decide on who's
20 going to be going. I believe that it was--

21
22 I think I have the names. My presentation is gone from my screen,
23 so I have to read from here, and my eyesight is not the same. So,
24 I think, to answer your question, if I remember, I was asked to go
25 because I'm the chairman. Second, Jason Cope, and the other person
26 would be, I think it is Todd Gedamke because they're more prepared
27 to answer. Because the purpose of this meeting is on how to develop
28 a new ABC, Acceptable Biological Catch, in view of all the
29 different changes that were discussed by Cisco. So, that is the
30 main--

31
32 Here it is. Just what I said. The topic of the National SCS applying
33 acceptable biological catch control rules in a changing
34 environment. The SSC will recommend to the CFMC the following SSC
35 members to attend the national meeting. One, Jason Cope, Vance
36 Vicente and Todd Gedamke. It was suggested to ask Tarsila Seara if
37 she wants to attend, but that, again, the Council is to decide.
38 Thank you.

39
40 **CARLOS FARCHETTE:** Follow-up?

41
42 **SENNAI HABTES:** Yeah. If I may, I would just suggest it might make
43 sense to have at least one Council member attend as these are
44 decisions we will be making, going forward, with a lot of IBFMPs?

45
46 **MIGUEL A. ROLÓN:** Well, no. The SCS is not for Council members,
47 and they prefer to have only the scientists.

48

1 **SENNAI HABTES:** Oh, they do?
2

3 **MIGUEL A. ROLÓN:** Yeah. And they report back to us. The lead
4 Council already decided that, so that's why they only invited
5 scientists. But they'll have a full report at each Council when
6 they finish.
7

8 In our case, we have the SSC, and we had a component of the
9 ecosystem, that you chair and probably Vance and the Council. But
10 we could have, if the Council allowed for that space, to have
11 Tarsila and Dr. Habtes attending, because they are the two
12 scientists that are lacking the expertise that you have in the
13 other three. But we need to confer with the lead Council, and if
14 it's available, we can do it. Yeah.
15

16 **VANCE VICENTE:** That will also, I mean, if the possibility of
17 participation is still open, I would like to suggest to have one
18 of our fishers. One of our Chairman fishers. No? Okay.
19

20 **MIGUEL A. ROLÓN:** These are scientists, Vance. Just scientists.
21

22 **VANCE VICENTE:** Okay. But we're presenting a lot of fisheries data,
23 but that's okay. Thank you.
24

25 **CARLOS FARCHETTE:** Okay. Thank you, Vance. When you were talking
26 about queen trigger, you know, I know in the Saint Thomas District
27 is a big heavy trap fishery. There's a lot of live discards of
28 queen trigger because it's like Julian was saying, it's a market
29 driven demand. So, I don't know if that life discard information
30 is being captured.
31

32 I know for Saint Croix, and Gerson is here to say if he wants to
33 validate it, they see a lot of queen trigger out there. They just
34 don't shoot them because the demand is not there. If they don't
35 have them sold, they just bypass him.
36

37 **VANCE VICENTE:** Yeah. Thank you. That issue has been brought up
38 several times, specifically by Julian Magras. Well, that
39 information has been integrated, I believe, in the discussions by
40 Adyan Ríos and Kevin and Kyle. So, yes, it has been considered.
41

42 **CARLOS FARCHETTE:** Thank you, Vance. I forgot one thing. When Cisco
43 was making a presentation and he mentioned University of Virgin
44 Islands. I'm really glad to hear that you all are tapping into the
45 students there in their marine biology courses and stuff. It is
46 good to see they can have a future under NOAA family.
47

48 **VANCE VICENTE:** Okay, thank you.

1
2 **CARLOS FARCHETTE:** Thank you, Vance. Any more questions for Vance?
3

4 **MIGUEL A. ROLÓN:** Not a question, but the Chair and myself will
5 look into this and see if we can send the people that were mentioned
6 today to the committee.
7

8 **VANCE VICENTE:** Okay. Thank you. Also, I want to remind you,
9 regarding the SEDAR 80 from Puerto Rico, there is a final SEDAR
10 report. Okay? And what is interesting is that it's similar, because
11 from what I remember from the SEDAR 80 Puerto Rico Queen
12 Triggerfish, again, there was a suggestion or indication, by the
13 models, that the population is not being overfished. That's what
14 we were inclined to think and conclude in March for the Saint
15 Thomas/Saint John. With Saint Croix, we still don't know. There's
16 still a lot of work to do.
17

18 Remember, this thing is taking time because the models that Adyan
19 and Kevin and Kyle are using, this is pioneering work. I mean,
20 this is not easy mathematical plus or minus stuff. I mean, it is
21 things that I don't digest still. I hope that someday I will. But
22 it takes a lot of work, a lot of data, a lot of inputs, and it's
23 amazing, the kind of work that they're doing. Thank you.
24

25 **CARLOS FARCHETTE:** Thank you, Vance. Okay. So next, it's Ecosystem-
26 Based Fisheries Management. Sennai Habtes.
27

28 **EBFM TAP Report - Sennai Habtes, Chair**
29

30 Thanks, Mr. Chair. Cristina and Liajay, did you get the-- All
31 right. Excellent. So, I appreciate the opportunity to talk to you
32 guys again today. I know we're running low on time, so I won't
33 occupy a lot of time with updates. I'll go through that pretty
34 quickly.
35

36 What I would rather have, is a discussion where I need some input
37 from the Council, particularly on our risk assessment development.
38 So, I would like to use the time more towards that, but I will
39 give you a quick update on where we are since the last update in
40 our August meeting.
41

42 So, just a reminder, so you guys have context as to what we are
43 talking about. This is the Technical Advisory Panel on Ecosystems-
44 Based Fisheries Management. The objectives defined by the Council
45 is to provide ongoing scientific advice on ecosystem-based fishery
46 management for fishery management decisions, including
47 recommendations for habitat status, social and economic impacts of
48 management measures, and ecosystem-based impacts or stressors on

1 sustainability of fishing practices. More specifically, during the
2 current year, what we are doing is trying to develop a draft
3 fisheries ecosystems plan, which is a framework by which the
4 Council will be able to maintain marine ecosystems and the
5 fisheries resources dependent upon those ecosystems.

6
7 So, where are we now? In red are the most Recent updates since the
8 last updates in August. The technical writer that was hired by
9 PEW, to provide us with a draft FEP, has sent me a draft. It
10 essentially has larger framework by which I need to condense it
11 down into a frame and work with the individual working groups that
12 I've provided you with, before, to get individual sub-components
13 that we could use to turn into a framework.

14
15 Essentially, it has a lot of the background materials and
16 information necessary for that process that we can use to refine
17 a lot of coal, through a lot of pressure, into diamonds. And that's
18 what we're working on doing in the next 8 months.

19
20 In addition to that, Tauna Rankin, and Council staff were able to
21 find internal funding to hire another contractor to develop a risk
22 assessment framework for use in the FEP. That contractor was
23 BioImpacts, which is a local LLC here in the U.S. Virgin Islands.
24 They have an environmental lawyer, who's worked with a lot of
25 policy in the past that will be working with us to develop the
26 risk assessment framework by which we can use.

27
28 And last but not least, the conceptual model frameworks work that
29 we've been doing with all the stakeholders in the U.S.V.I. in
30 Puerto Rico has been completed, and we have a final report from
31 the Lenfest group, mainly J.J. Tarsila will also lead some of our
32 other working groups that we're using to integrate into developing
33 the stressors and indicators for use in the ecosystems-based
34 fisheries management plan.

35
36 Yeah. You guys have seen this before. We'll skip that. Let's move
37 on to the questions because we don't have that much time. Two more
38 slides.

39
40 What do I need from you? We are trying to develop a risk assessment
41 tool. What that is, is a strategic process by which you can inform
42 decision support systems that the Council uses. What we would like
43 to do is define that framework in the fisheries ecosystem plan.

44
45 What I would like to get out of the time that we have left before
46 our break, which should be now, is a general conversation amongst
47 the Council members, as well as those in the room who would like
48 to inform what pathway we take on this. And the three questions I

1 want you to consider and provide me feedback on are, one, who is
2 the intended audience for this risk assessment tool? Because it
3 will be a tool. Although we are creating a framework, it is a tool
4 to make decisions. And for me to create something in our FEP and
5 a framework for the Council to follow, it helps me to have an idea
6 of where we want to go with it.

7
8 Next, how broad should this decision support system be using this
9 tool. Meaning, we can develop it to be as simple as individual
10 stock decisions management, or we can make it as broad to anything
11 within the ecosystem that impacts fisheries. But the more I put
12 in, the less utility and ease we will have in using this tool. So,
13 what I would say is, as you are making these decisions, think about
14 it as a tree with many branches. The more branches, the more
15 leaves, the less easy it is to see an individual spec on the
16 leaves. Right? What I want to know is how broad do you want to
17 make it versus how refined?

18
19 Last, how complex should the quantitative aspects of the risk
20 assessment tool be? Everyone in this room understands that we live
21 in a data limited environment in the fisheries that we are using
22 within the U.S. Caribbean. Often, there is not data to support the
23 risk assessment tools that we will be developing in this framework.
24 Should we be developing it out to the level where we assume that
25 we will have this data at some point and be able to give you
26 percentages associated with risk where there's data. Meaning, do
27 you want a 90% chance that this will happen? Or is it good enough
28 to say on a level between one to five, one being the best possible
29 outcome, five being the worst possible outcome, which one are you
30 going to get from this?

31
32 Because, you know, those are all decisions that we need to make.
33 I can write it up for there to be a framework using, you know,
34 quantitative assessments with percentages. However, if we don't
35 have that data, you're basically going to get a 0% chance of making
36 a decision on that for almost every decision that we're using.
37 Alright.

38
39 So, with that, I will stop talking, and I'd like to hear from
40 Council members and those in the room where you would like me to
41 go and how you want me to refine this process so that I can get
42 you a management document, hopefully, by the end of the year that
43 represents a fisheries ecosystem plan draft.

44

45 **Questions/Comments**

46

47 **CARLOS FARCHETTE:** Miguel?

48

1 **MIGUEL A. ROLÓN:** I just have a question. The Council already did
2 this, in a way, with the Southeast Fisheries Science Center, the
3 SSC, and a presentation was given to us some time ago by Bill
4 Arnold from the Regional Office, and it was the same idea.

5
6 But now that we are on the-- by the way, I like Cisco's new oceans.
7 We have new things that we never dreamed could happen before. We
8 also have new tools that we can work with. But under the Magnuson
9 Act, we have to concentrate on the things that we can do to manage
10 the fishery.

11
12 So, I guess your question is excellent. Shall we focus on the
13 things that we can do for species or species group, or work on the
14 broader scope of the whole thing? I believe that our efforts--
15 This is my personal opinion, but anyway. If you dilute too much
16 the effort, you end up doing nothing. Or it would be almost
17 impossible to put it in the context that we can manage under the
18 Magnuson Act. So, that's my take on that question.

19
20 The other thing is that the intended audience, when we put this
21 together in the past, we presented it to everybody. Actually, we
22 should publish it in our web page and have other links. But we
23 also have to keep in mind that not everybody can go through this
24 ecosystem and make sense of it.

25
26 So, Dr. Alida Ortiz told me that once we have this put together,
27 the role of the outreach and education will be to digest this
28 information to make it available to anybody. Announce to the world
29 that if you are a scientist, this is a tool that you can use. If
30 you are a fisher, this is a tool you can use.

31
32 The other thing is that the two local governments can take this
33 opportunity as well to have this toolbox to work with both, the
34 Puerto Rico and the Virgin Islands.

35
36 And how complex should the quantitative aspects be, I will leave
37 that to the SSC and the Southeast Fisheries Science Center to
38 answer that questions because that's where you have the expertise.
39 Thank you, Mr. Chairman.

40
41 **CARLOS FARCHETTE:** Clay?

42
43 **CLAY PORCH:** Yes. Thank you for this. I think it is a very important
44 step for the Council to take.

45
46 I do have some questions following up on Miguel's point. Could you
47 give us some examples of the kinds of actions you would expect the
48 Council to take based on the EBFM plan and the risk assessment in

1 particular, because I think that's where this process does often
2 fall down, and it ends up as all it is is the Council writes
3 letters to people. So, you know, to Miguel's point, what specific
4 actions would you expect the Council to take? Would this inform
5 optimum yield, which is the maximum sustainable yield as reduced
6 by relevant social and economic factors. Have you considered things
7 like setting ecosystem ACLs based on the overall productivity of
8 the-- those sorts of things?

9
10 **SENNAI HABTES:** Sure. That's a great question, Clay, and we've
11 discussed a lot of this within the EBFM TAP. I think the simplest
12 solution is doing setting OFL based on a risk assessment for a
13 single species stock. Right? And where we are now, I think it's
14 possible to integrate ecosystem indicators into individual species
15 management within the Council level. And from a simple standpoint,
16 I think that is the basic that we could do from the EBFM TAP.

17
18 Broader, you can have larger decisions made either between CFMC or
19 local governments or in conjunction to assess impacts of changes
20 to the ecosystem, based on those ecosystem indicators. And the
21 risk assessment tool, in my opinion, could be used across all of
22 those. Right? It could be looking at how dredging in a seagrass
23 area would impact local recruits, if we have that much data on it,
24 for instance.

25
26 But from a standpoint right now, I think the basic indicators that
27 we could include beyond socioeconomics are based mostly on
28 satellite data and a lot of water quality data that's getting
29 taken, and I think that was a lot of the concerns from our
30 conceptual models that were expressed both from fishers as well as
31 other stakeholders in the scientific and public community. And so
32 that's what we've tried to indicate.

33
34 I think what we are mostly concerned with is integrating that kind
35 of data into the decision-making framework associated with the
36 managed species at the Council level. I don't think we're at a yet
37 where we could make more specific management decisions. But the
38 risk assessment tool could be developed to understand what the
39 risk is by not integrating other data. And I think that's where
40 we're trying to go.

41
42 Should I be making it broad enough for us to build a foundation in
43 the future when we may have the kind of data that can do it, or
44 should we be focused on creating a utilizable tool that the Council
45 can use in the moment for making fisheries management decisions
46 and how that will impact future yields. Getting, you know, at OFL
47 or MSY, if that's even feasible for the species that we're
48 managing.

1
2 I think more along the lines of looking at the species complex
3 that we've decided for the IBFMPs and how the other indicator and
4 stressors data need to be incorporated to better understand how
5 that affects yields. Does that help?
6
7 **CLAY PORCH:** Yes. But I think is part of a longer conversation, so
8 I'll have to catch you after on a break or something.
9
10 **CARLOS FARCHETTE:** Thank you. Vance?
11
12 **VANCE VICENTE:** Yeah. Thank you. Good presentation. My question
13 is-- Not my question, my thought is that we have enough significant
14 scientifically collected data, right now, for your model to be
15 tested or give an example.
16
17 I like what we just talked about, the queen triggerfish. There, we
18 see a time period where there is a decrease in the landings which
19 corresponds to severe environmental changes. That was hurricane
20 María, hurricane Irma, in Puerto Rico the earthquakes, the COVID,
21 and whatever. This market demand explanation for the lower
22 landings, again, I mean, I really have to thank Julian. He has
23 been insisting on this for a long time.
24
25 Can we break down which component of the market demand is
26 responsible for-- Like, what percent can be explained by hurricane?
27 What percent could be explained by COVID? What percent could be
28 explained by earthquakes? Break down the components, the
29 socioeconomic components that affect our fisheries landing
30 information. Because there's a lot of information there, but we
31 need to get an example. Maybe the queen triggerfish is a good
32 example. I don't know. That just came up of the top of my head.
33 Thank you.
34
35 **SENNAI HABTES:** Thanks, Vance. Yeah. I mean, that's a great point.
36 I think a larger aspect of what the Lenfest team that's been
37 working on this project have been trying to do, is to get us the
38 socioeconomic data frame by which we can collect that data that
39 can be used towards this type of management approach. I would say,
40 we're still kind of at the beginning stages of that.
41
42 We have a good understanding of what can be collected, and we have
43 a good understanding of the needs, but we haven't really created
44 a systematic framework by which we're going to be collecting that
45 data, regularly, going forward. And so that often limits what we
46 can do in something like a risk assessment.
47
48 We have had the SSC go through the process of doing a risk

1 assessment using a framework approach that we thought would be
2 useful for the U.S. Caribbean. To put it mildly, that did not go
3 well. Right? And so, what I am trying to do is use information
4 from you guys to hone in on a better framework that would allow us
5 to present it in a useful tool.

6
7 If you ask me, I would say, the one that we presented to the SSC
8 was the best model that we should use going forward. Clearly, as
9 a scientist, that's probably not the only information I should be
10 getting and using, you know, the framework for the model.

11
12 So, you know, a lot of your comments are helping me to refine that.
13 The one I really just want to get back to is, how broad should the
14 decision support system be for this tool? Am I focusing it solely
15 for fisheries management and the impacts of ecosystem indicators
16 on fisheries management, or should I be developing it for a broader
17 suite of management approaches within the region?

18
19 **CARLOS FARCHETTE:** Okay. I have Vanessa, Graciela and Julian.

20
21 **VANESSA RAMÍREZ:** Yes. Thank you. Sennai, thanks for this
22 presentation.

23
24 I just have, in the same line of Miguel comments, I will suggest
25 understanding our limitations to use this tool, concentrate in the
26 things that we can manage, maintain it in a simple way with
27 friendly language, and yes, I like the one to five option. It's
28 going to be a better understanding for us as a Council to use it.

29
30 **VANESSA RAMÍREZ:** Extremely helpful. Thank you, Vanessa.

31
32 **CARLOS FARCHETTE:** Graciela.

33
34 **GRACIELA GARCÍA-MOLINER:** So, going back to the conceptual models
35 that we have worked so hard to accomplish, I mean, one of the main
36 issues that we came up with was water quality. Water quality is
37 not under the purview of the Council. However, it impacts the
38 larvae life stages, the juvenile life stages, and it impacts the
39 fisheries directly because if you don't have good water quality,
40 you will be searching for your target species somewhere else, or
41 there might not be any recruitment over a period of time.

42
43 So these are things that, you know, it might not be letter writing
44 itself, it's just that we need to integrate those other agencies
45 that have regulations in place for water quality, which is where
46 we might have the missing link to have those people on board so
47 that we can get the data that they have, which has been very
48 difficult to get. But, you know, we do have America the Beautiful

1 that it's supposed to have everyone playing on the same field, and
2 that might be something that the Council can pursue at that other
3 regulation level.

4
5 So, these are the things that, you know, the conceptual models
6 show a lot of things that are really not under the purview of the
7 Council, but that the stakeholders who are out there and using the
8 resource are telling you that are the most significant ones that
9 are impacting their fisheries. So, you know, how do we put that
10 into the risk assessment?

11
12 I'm sure that it will again show up when we look at this because
13 it's the reality of the situation. I mean, we do have a very
14 limited area. Things flow within the islands, and we all get
15 impacted by that.

16
17 **CARLOS FARCHETTE:** Thank you. Julian?

18
19 **JULIAN MAGRAS:** So, very interesting to see where we at today with
20 the Eco-Based Fishery Management Plan.

21
22 You know, Saint Thomas/Saint John DAP were the first ones to take
23 the bite at the conceptual models. Both, of what's going on land
24 based and what's actually going on in the fishery. Correct me if
25 I'm wrong, Sennai.

26
27 But what I see continue coming out of this plan is, how are we
28 going to protect the fishery more? Where, I think, actually, how
29 can we get the human activities that are causing the issues to the
30 fishery corrected. Coastal runoff, oil being dumped down the
31 drains. You know, all of these different things that are messing
32 with our juvenile habitats.

33
34 We're looking at certain new ACLs, new parameters, and I have a
35 problem with that because we're still not fixing the problem that
36 that is actually affecting the juvenile habitats, which I see as
37 your major issues. And that's within, what we would call, the
38 U.S.V.I. the territorial waters three miles to the shoreline.
39 Puerto Rico is 9 miles to the shoreline.

40
41 But I'm going to speak for the Saint Thomas/Saint John District
42 because there are a lot of impacts that are taking place within
43 closed areas territorially, and we are still not correcting them,
44 and that's what's affecting the eco-based. It's not the fishers.
45 The fishers are the ones that have been reporting the issues at as
46 they see them. They have sent pictures. They have done everything,
47 and nothing is really being done to stop or try to mitigate what's
48 actually taking place.

1
2 When this plan comes forward, what we are seeing is more decrease
3 in our ACLs, etcetera. I don't think the fishers should be the
4 ones to be impacted in an issue where they have not created, and
5 the governments have not corrected.

6
7 At the very beginning of the process, letters have been written
8 twice by this Council to the different agencies to participate in
9 a meeting, and that meeting has never taken place. I think in order
10 for us to move forward, something needs to happen with these
11 agencies and how we can correct what's causing the issues in the
12 fishery. And then after that, we can say, well, let's look at the
13 fishery as a whole, and do we really need to cause more hardships
14 and the fishers?

15
16 Because every time there's an issue not created by the fishers,
17 the fishers are the ones who walk away with the hardship of
18 decreased catches, etcetera, etcetera. Thank you.

19
20 **CARLOS FARCHETTE:** Vance?

21
22 **VANCE VICENTE:** Just one more quick comment. I think I made the
23 point last time. What really concerns me is that we have monitored,
24 I don't know, pH, sea surface temperature, sea level rise,
25 frequency and intensity of hurricanes, rainfall, water quality
26 monitoring. And all these at a global scale and at a local scale.

27
28 There are several ecosystem studies that have been monitored now
29 for decades, in Puerto Rico, which have been taking the ecosystem
30 approach and, specifically, NOAA's Estuary Research Program in
31 Aguirre and from the EPA the San Juan Bay Estuary Program. And we
32 have all this historical information.

33
34 My complaint is, and I'm also responsible for it because I'm not
35 doing much with them. This information is here. We may don't have
36 long records of fisheries planning or biological data, that's where
37 the gap is, learning more about the life history adaptations.
38 Whether these fisheries stocks are eurytopic or stenotopic, and
39 how would they react to these historical changes that they have
40 been exposed to.

41
42 So, my recommendation to the EBFM is to really, again, I made that
43 point before, to synthesize what we have, what we know, and the
44 sensitivity and reliability of the fish stocks. And try to
45 correlate and try to explain, what percent of the variance in these
46 changes in population can be attributed to these physical, I
47 haven't even mentioned, biological components?

48

1 Here in the Caribbean, actually from Florida throughout the whole
2 West Indies Region, there has been a massive mortality of
3 Scleractinia corals, okay, which is a framework of the of the coral
4 reef community. And like, Dr. Reni García from the SSC and like I
5 myself have reported, we're talking about-- and in Florida, they
6 have monitored transects in the Florida Keys. I mean, we're talking
7 about 60, 80% of Scleractinia coral population just wiped out.

8
9 And this is not the bleaching. Okay. Bleaching, blah. The
10 zooxanthellae can come back. They can recruit. There's some
11 mortality, but nothing like the Scleractinia Coral Tissue Loss
12 Disease. I mean, here, the live tissue is gone. Rarely, does it
13 come back. It may come back if there's enough live tissue left to
14 recover the lost space. But this implies, again, just to give a
15 biological example, an extreme change in the habitat composition
16 as well as of the fisheries. The reef fish populations, which
17 depend on the coral reef, not only the coral reef, but the hard
18 bottom habitats and the coral communities and the like.

19
20 So that's my concern and my final comment because I can keep on
21 talking and talking. Thank you.

22
23 **CARLOS FARCHETTE:** Thank you, Vance. María?

24
25 **MARÍA LÓPEZ-MERCER:** Yeah, thank you. I just have a question for
26 Sennai. In terms of time, right? We know that the Council has been
27 working in this process of development of the fisheries ecosystem
28 plan for a while, and there are decisions that need to be made
29 such as the one that you were asking today.

30
31 How do you see the difference between going a simpler way, like
32 you presented, versus going on broader spectrum in terms of time?
33 You know, because one of the things that we want to get from this
34 is being able to make management decisions in a timely manner. You
35 know, we don't want this to take ten years and then, by then, we
36 have other changes that have occurred, and this becomes obsolete,
37 right?

38
39 The other question is, do we have what we need right now to take
40 a broad look and take it into making management decisions for the
41 whole thing? Right? So right now, for the species we have stock
42 assessment for individual species. This is how we are dealing right
43 now, and ideally, we will be looking at other things, but if the
44 way that we are managing right now is in a way of individual
45 species, how can we make that better?

46
47 **SENNAI HABTES:** Yeah, thanks, María.

48

1 I think those are valid and great questions. One, the more complex
2 we go, I would say you can add on, easily, another 4 months to 6
3 months for each step-in complexity that we add into whatever risk
4 assessment design that we do. One, the only people that are working
5 on it, specifically and continuously, without having no other jobs,
6 are the contractors that we hire. And so, you know, we can only do
7 this in between all of the other things that we're doing.

8
9 I think at present, where we are now is we have everything to draft
10 an FEP with the exception of a specific risk assessment framework
11 that we want to put in, as well as all the background necessary
12 for people to understand it. But to do a slimmed down management
13 document that explains the framework by which we want to do this,
14 my hope, is to have at least a draft by summer of this year if I
15 can make all of those decisions.

16
17 But that, really will be on the backs of myself and the other
18 chairs of the working groups to get that writing done. So, you
19 know, I think who knows? It's just dependent on how much else gets
20 dropped in all of our collective plates.

21
22 The other thing I would say is what do we need to do that, I think,
23 is more resources. And then I wanted to just address the two points
24 that Julian and Vance made briefly.

25
26 One, Julian, I agree with you. Part of what we're doing with the
27 conceptual models is to get all of that information into the
28 framework, so we can look at how not making or not being able to
29 make decisions on that, in the Council's aspect, will impact our
30 fisheries. Because we have to remember, this is the Caribbean
31 Fisheries Management Council. There are specific aspects to
32 management that are delegated by law to this agency and this group.
33 Right? We cannot do things outside of that. It's just not possible.

34
35 What this is, is a tool not to make new laws or new regulations,
36 but to help us understand the risks of not being able to do things
37 or being able to do things within that framework. Right? So that's
38 the standpoint of that.

39
40 Vance, to your point, I agree. There are selected places in which
41 we have a whole lot of information that can be put in. The larger
42 issue is that there are not clear methodologies over long periods
43 of time that have been done in the U.S. Caribbean that allow us to
44 make and answer these questions. Like, that is what I do. I'm a
45 fisheries ecologist. Did my PhD on it in an area where we did have
46 a long time series of that data. We do not have that here, and we
47 have to stop saying that we do. There is not the infrastructure.
48 There are not the tools. They're not the methodologies to answer

1 these larger questions.
2
3 To get to that, to make answers and understand what is happening
4 in our ecosystems, we need to build that infrastructure, and we
5 need to build it now. Because if we don't, another 15 years will
6 go by, and we will still be looking at massive declines in our
7 ecosystems and have no way of saying why that is happening.
8
9 Sorry. I got a little animated there, but I'm done.
10
11 **CARLOS FARCHETTE:** Carlos, may I say something before we break? We
12 are behind, but exactly what you said is what we need to do. That's
13 something that should be a top priority for the Council. Otherwise,
14 we keep, as Clay says, sending letters to people.
15
16 So, Mr. Chairman, probably what we should do, between this meeting
17 and the next one, we should have a conversation with Sennai, with
18 Vance, and let's see how we can put some wheels into this. And by
19 that, I mean, that we can then have a document that the Council
20 can examine and look at it. The document should include everything
21 that we have said. Also, it's kind of mundane thing, but we have
22 to put money into whatever we say, otherwise we don't go anywhere.
23
24 **CARLOS FARCHETTE:** Okay. I have somebody on online.
25
26 **CRISTINA OLÁN MARTÍNEZ:** Marcos Hanke.
27
28 **CARLOS FARCHETTE:** Go ahead, Marcos.
29
30 **MARCOS HANKE:** Yes. Can you hear me?
31
32 **CARLOS FARCHETTE:** Yeah.
33
34 **MARCOS HANKE:** Okay. Thank you for the opportunity. In respect to
35 the comment made by Julian and the follow-up comment made by
36 Sennai, we are all aware of the implications of a better, strong,
37 and complex analysis created by the ecosystem-based management,
38 but since the beginning, the request and the origin of this was to
39 inform, and I cannot list the amount of times that was said to the
40 fisherman, when I was Council member, that this is just to inform.
41 It's not to create another layer of management. It's not to create
42 another uncertainty. It's not to transform into numbers. It's just
43 to inform.
44
45 Because this was the concern of the fishermen, and we all agreed.
46 Right now, we were discussing, earlier in the morning, looking for
47 more collaboration and participation and I'm not seeing very much
48 transparency. I am seeing a shift on what is being said. I

1 recognize the importance of ecosystem-based management, but we
2 have to be super careful the way we do it.

3
4 I'm interested to see if there is any discussion on things that
5 could benefit the access to the fishery that we don't see the
6 ecologist doing. And, we have to be very balanced and true to the
7 science and to the participation and to the record that we have on
8 the past. Thank you.

9
10 **CARLOS FARCHETTE:** Thank you, Marcos. Okay. We're running kind of
11 behind. I'm going to be cutting back on your break. So next on the
12 agenda, I have the Southeast Fisheries Science Center update, Kevin
13 McCarthy.

14
15 **SEFSC Updates - Kevin McCarthy, NOAA Fisheries**

16
17 **KEVIN MCCARTHY:** Thanks, Mr. Chair. I think we're just going to
18 take a second to get the presentation up there, and then we'll
19 charge ahead.

20
21 So, this is the Science Center update that we normally give at
22 these meetings. Here's what we're going to talk about. We've got
23 a new member working with our branch, so I'll introduce Carly. I'm
24 going to hand the mic over to Rachel, and she's going to give you
25 an update on the strategic planning project that's ongoing. Then
26 back to me to talk about Inflation Reduction Act funding. This is
27 IRA money that went to the Science Center. That's different than
28 what Miguel was talking about earlier. And then we'll hand off to
29 Jennifer to talk about Marine Spatial Planning.

30
31 So, Carly Daiek is a new CIMAS Research Associate. That's the
32 Cooperative Institute through the University of Miami, and we have
33 a lot of research associates that work at the Science Center.
34 Rachel, for example, who most all of you know, is a research
35 associate through CIMAS. So, Carly got both her master's and
36 bachelor's from Michigan State University in Biosystems
37 Engineering. And what she's going to be working on is the process-
38 - we're understanding the process and the cost associated with the
39 U.S. data provision reporting requirements to WECAFC. We've talked
40 a little bit about WECAFC earlier today. Laura is actually the one
41 who came up with the money to pay for Carly's work. So, we have
42 headquarters to thank for allowing us to bring Carly on board.

43
44 So, this is just sort of a general statement I wanted to make. A
45 lot of people have touched on these ideas, and I had put this slide
46 together already, so I'm glad I'm hearing it from all of you. I
47 didn't just take notes and put together a slide as I heard it
48 today. I built this a couple days ago, well, in truth, it was

1 probably yesterday. But anyway, collaboration. I'm hearing a lot
2 about that, and it's critical to everything we do here. Whether
3 it's-- Well, it's collaboration among all of us.

4
5 The other thing we're doing is all new, right? Everything we do
6 sets a precedent. Everything we do establishes a new way of doing
7 business. So that can be a painful, slow process at times. But we
8 want to make sure we get it right, and we want to make sure that
9 everybody's involved so it's informed with the best information
10 that can get.

11
12 Every time we do a stock assessment, every time we try and come up
13 with a new analysis for a species, we find new challenges. Vance
14 got into some of those with the queen triggerfish work in the
15 Virgin Islands. That presented some new challenges, even different
16 from the challenges we had with Queen Triggerfish in Puerto Rico.
17 But I have to say that the level of cooperation amongst all of
18 these initials here, the Council staff, the Council, the SSC, the
19 DAPs, other stakeholders, SERO, the Science Center. It's just been
20 exceptional. I've seen just a change in the years that I've been
21 working down here. Even from 4 or 5 years ago. Just The change in
22 the level of cooperation and collaboration has just been
23 outstanding.

24
25 So, I can't thank you all enough for making my life a little bit
26 easier when we're all working towards the same goal and not working
27 across purposes. So, thank you all.

28
29 And I think this is where I'm going to hand it off to Rachel. I
30 think she's on the line. Rachel, are you ready to take the mic?

31
32 **LIAJAY RIVERA GARCÍA:** Hi, Rachel. Your mic is open, but we cannot
33 hear you.

34
35 **KEVIN MCCARTHY:** Yeah. We can't hear you, Rachel. What if we--

36
37 **RACHEL BANTON:** Hear me now? I put in headphone. Is it working?

38
39 **KEVIN MCCARTHY:** Oh, there we go. We can hear you now. Thanks.

40
41 **RACHEL BANTON:** Okay. Alright. Thanks. I was talking away. Sorry,
42 guys. So, usually, my computer doesn't let me talk with microphones
43 and so I'm surprised it's working right now, but okay.

44
45 So, one of those outstanding collaborative exercises or
46 collaborative efforts that everyone's been touching on today is
47 the strategic planning initiative. So, this is a multiyear
48 collaborative exercise designed to identify optimal data

1 collection programs that would facilitate the development of stock
2 assessment and EBFM strategy.

3
4 So, this collaboration is among ten federal, territorial, and
5 commonwealth agencies. And those include the logos listed here, as
6 well as, the Science Center, SERO, and NOAA headquarters. From
7 this work, we've got 8 ongoing working groups, each with an annual
8 objective and after these initial projects are completed, those
9 same groups will take on new tasks to accomplish the larger 5-year
10 goals and objectives that were identified during the workshop this
11 past May.

12
13 So, these ongoing projects that I mentioned, here are the first
14 five of them. We're calling them the data groups. So, these groups
15 are developing inventories of current and historical data streams,
16 for those five sub-bullets listed there. For fishery independent
17 data, fishery dependent, life history, socio-economic, and habitat
18 data. So, these groups are then going to use these inventories to
19 identify spatial and temporal gaps and then provide some
20 recommendations for prioritized research that would fill those
21 gaps and help to inform management.

22
23 And then the other three, ongoing projects. The first one is what
24 we're calling the toolbox group that Kevin mentioned, a little bit
25 earlier today. The objective of this group is to understand various
26 methods to inform management given the available data. And these
27 methods could include single species stock assessment, data
28 limited approaches, as well as ecosystem approaches. And Kevin
29 made a comment earlier this morning, that this group is also going
30 to look into quantifying and including local ecological knowledge
31 into some of these processes.

32
33 This effort has, gotten interest from NOAA headquarters, and they
34 actually, have volunteered to fund a LANTERN detail to assist in
35 these efforts. So, the LANTERN program is internal to NOAA, in
36 which staff can temporarily take on a new detail and offer some
37 expertise in maybe a different region or, in a different aspect of
38 their career or a different career path altogether within NOAA.
39 So, we're really excited about that opportunity to have someone
40 else on board to sort of help us identify these available methods
41 in the toolbox. This group is also exploring the idea of
42 incorporating students into this process, and having a student or
43 a few students, maybe, help to contribute to the efforts that the
44 LANTERN detail and the larger working group will be doing.

45
46 So, the next project we're calling the toolbox project. Their
47 objective is to improve communication of knowledge to better engage
48 stakeholders in fisheries management processes. This group is

1 identifying organizations involved in communication efforts in the
2 region, and then from that, they're going to create a process
3 diagram that explains how education and outreach works in the
4 region, including identifying the points of contact for specific
5 topics and various locations in the region, with the goal of
6 fostering communication among stakeholders and fishers.

7
8 And the last working group that's ongoing is the Funding Governance
9 Group. Their objective is to define the needs and mechanisms to
10 streamline the process for establishing a funding governance
11 structure in the region. So essentially, this group is, when money
12 becomes available in the region, this group is working to
13 understand how we can more effectively and efficiently move it to
14 our partners for various data collection efforts and data
15 processing.

16
17 So, these groups are all progressing really nicely, and we hope to
18 wrap up these initial annual objectives in the coming summer, and
19 then they'll begin the next phase of the project. And we have the
20 Spanish and English versions of a fact sheet that explains the
21 workshop process and strategic plan a little bit in more detail,
22 and we've provided those to the Council. So, reach out to anyone
23 there or us if you would like to see that fact sheet with more
24 information.

25
26 So, thanks guys, that's all I have. Go to the next slide, please,
27 and I'll give it back to Kevin.

28
29 **KEVIN MCCARTHY:** Thanks, Rachel. So, I've got a couple slides here
30 to sort of outline our plans for some Inflation Reduction Act
31 Funding that came to the Science Center. So, again, this is
32 separate and apart from what Miguel was talking about earlier.

33
34 So, we've got a couple of different fishery independent surveys
35 that we're going to expand. Right now, they're ongoing in Puerto
36 Rico, but we want to move them over to also include sampling in
37 the U.S. Virgin Islands. All of this is conducted as cooperative
38 research with Caribbean fishers, so we want to move an existing
39 Puerto Rico deep-water survey into the U.S. Virgin Islands.

40
41 In addition, we want to extend that deep-water survey into
42 shallower water, so it will overlap with the existing diver survey
43 that is limited to 30 meters. A couple of times they've been able
44 to do some work in down to 50 meters, but for the most part it's
45 limited to 30 meters. And we want to overlap this deep-water survey
46 with that shallower diver survey. So, we'll basically have a much
47 more complete survey across all water depths.

48

1 I want to point out that what we're doing here is leveraging some
2 existing funding. So, we've got cooperative research program
3 funding that is paying for that survey in Puerto Rico. So, it's
4 always good to leverage additional funds. So, that cooperative
5 research money, is already there. We're going to add to it with
6 this Inflation Reduction Act Funding.

7
8 And down at the bottom, you'll see this statement in all of the
9 slides I'm going to show you about this funding, which is that the
10 work is coming out of needs identified in the Caribbean Strategic
11 Planning Workshop. That workshop, again, leveraging some dollars,
12 was funded through the Ecosystem Climate and Stock Assessment
13 Improvement Program funding.

14
15 So, again, the second fishery independent survey is a lobster trap
16 survey. It's ongoing in Puerto Rico, but we want to extend it into
17 the Virgin Islands. And again, this is cooperative research that
18 we'll do with U.S. Virgin Island commercial fishers. And this was
19 also identified through the Caribbean Strategic Planning Workshop
20 as work that really needs to move forward.

21
22 I won't get into it here, but there are a lot of reasons why
23 fishery independent surveys are the way to go. There's Plenty of
24 room for fishery dependent information to be included in management
25 decisions, but fishery independent surveys also provide another
26 aspect that are very important to informing how we can manage
27 fisheries.

28
29 So, we also want to get at fishing effort. We want to get a good
30 estimate of overall fishing effort and we want to do that in a
31 project where we're going to provide funding to a University of
32 the Virgin Islands student. What they'll be doing is using, or at
33 least examining the use of remote sensing to estimate total fishing
34 efforts. So, there are a lot of ways that could happen, and we
35 need we need somebody to focus on that, so we would like to hire,
36 you know, fund a student to have them do that work.

37
38 They'll also be developing a way to ground truth that remote
39 sensing information or come up with some other methodologies for
40 counting and classifying vessels to get a total effort. We want to
41 do that pilot work in Saint Thomas, right here. As soon as I have
42 some accounting codes to start spending money, we're going to be
43 working with folks at the University of the Virgin Islands to
44 identify a student to get going on that work.

45
46 And the last bit of this funding we're going to hire another
47 research associate. Again, this is through the Cooperative
48 Institute, but we want we want that job to be located here in the

1 U.S. Caribbean. Whether it's in Puerto Rico or the Virgin Islands
2 is something we can negotiate, but I'd like that person to be
3 located down here. What they're going to do is to help integrate
4 and coordinate fishery independent sampling surveys in the
5 Caribbean.

6
7 As we've all been talking about, not only are we data limited, but
8 we're funding limited, and the likelihood of that getting better
9 in the near future is up to Congress.

10
11 So, I, as an individual, have little or no say in that. So, we
12 can't be inefficient. And so, the idea behind this hire is to
13 improve efficiency. There are often several similar projects that
14 are ongoing that either don't know of each other, don't talk to
15 each other, but in one way or another are not coordinated and
16 organized, and that's not a very efficient way of doing business.
17 So, this hire is meant to identify those projects and work with
18 the PIs on those projects to better coordinate and, where
19 appropriate, integrate those efforts. We can't tell people what to
20 do with their research dollars, but we can certainly try and inform
21 them on how they might consider more efficient ways of working.

22
23 We've also got to develop and identify partnerships with additional
24 Puerto Rico and U.S. Virgin Islands scientific consulting firms.
25 It's one way to get work done down here. We, as the Southeast
26 Fisheries Science Center, it's either impossible or at least very
27 difficult for us to contract with an individual fisher to get work
28 done on the water. So that's why we need to go through consulting
29 firm, and I've talked with several of you about this, and we're
30 moving in the right direction there. And so, this funding may help
31 us better cement those relationships.

32
33 We've also have got to have a good survey design. If we're going
34 to spend money to have a survey, we want to make sure that it's
35 well designed. And again, this is coming out of strategic planning
36 workshop ideas.

37
38 So, the last thing I want to say, I don't have a slide for it
39 because I forgot to put it in. But Vance touched on it earlier and
40 that's SEDAR 84. I think Adyan mentioned it as well.

41
42 The data workshop is coming up by the end of January, so the 23rd
43 through the 25th. It will be in San Juan, Puerto Rico, I think at
44 the Verdanza. We've met there before. In fact, our strategic
45 planning was there. Travel day is on either side of that, so the
46 22nd and 26th. Those of you who have been selected through the
47 Council, through SEDAR, to be involved in that, should be getting
48 that information. It is a public meeting. Anybody's welcome to

1 attend, and we encourage everybody's participation.
2
3 Well, typically the way we work those in the Caribbean is to spend
4 one day per island. Everybody's involved in all of the discussions
5 at some other SEDARS, say in the Gulf of Mexico. There are working
6 groups that break out. There'll be a group that talks about
7 commercial data on their own. There'll be a group that talks about
8 life history on their own. And they bring that back to a plenary
9 presentation to make decisions. We essentially function as plenary
10 group the entire day.
11
12 Everybody is involved in all the conversations, all the
13 discussions. We don't have enough people to spread out among
14 individual work groups, so we do it all together, but we'll do one
15 island per day for the three days of the workshop. They will be
16 full long days, but don't let that dissuade you from joining us.
17
18 Now, if we go to the next slide, I'm going to pass the mic over to
19 Jennifer.
20
21 **JENNIFER WRIGHT:** Can you all hear me?
22
23 **KEVIN MCCARTHY:** Yes.
24
25 **JENNIFER WRIGHT:** Okay. Wonderful. Hi, everyone. For those of you
26 that don't know me, my name is Jennifer Wright, and I am a Marine
27 Planning Coordinator working with NOAA's National Centers for
28 Coastal Ocean Science, NCCOS.
29
30 NCCOS and the Southeast Fisheries Science Center convened multi-
31 day marine spatial planning workshops in the U.S. Virgin Islands
32 and Puerto Rico in late August of this year. And the goals of the
33 workshop were primarily to inventory available spatial data for
34 the U.S. Caribbean and further develop a community of stakeholders
35 to inform future marine planning efforts.
36
37 Roughly 50 individuals attended each workshop, and participants
38 included local agency leaders and planners, environmental
39 organizations, subject matter experts, and members of the
40 Caribbean Fishery Management Council. Staff from NOAA, as well as
41 the Bureau of Ocean Energy Management, and the Department of
42 Defense represent the federal government.
43
44 In order to focus the data conversations, each two-day workshop
45 was divided into 6 ocean sectors and for each sector, we presented
46 the data currently in NOAA's database, and then participants
47 explored three prompting questions in order to guide the data
48 discussions.

1
2 Some highlights from the workshops. Participants cited several
3 datasets that may be missing from NOAAs database particularly
4 natural resource datasets, such as certain protected areas and
5 critical habitats. Many cited the need for higher resolution data
6 particularly for natural resources and Metocean sectors.
7 Suggestions were made to refine essential fish and benthic habitat
8 data, improve understanding of the status of threatened and
9 endangered species, and build greater capacity to track birds,
10 marine mammals and sea turtles.

11
12 At both workshops, which has been mentioned earlier on this call
13 as well, participants acknowledge that the U.S. Caribbean is
14 generally data limited across multiple ocean sectors. Participants
15 identified the need for more data from the fishing community and
16 emphasize that both, fisheries management and conservation, are
17 constrained due to a lack of data for commercial and recreational
18 fishing, as well as location of important spawning grounds for
19 several fish species. Participants also noted the lack of fishers
20 at both workshops and emphasize the need to consistently engage
21 and build trust with fishers.

22
23 So, the workshop outcomes chart a path for increased coordination
24 on marine spatial data between the federal government and its
25 territorial partners and stakeholders in the months years to come.
26 Some of the next steps that were identified include the development
27 of a workshop report which should be published and publicly
28 available next month. Distributing a summary of data need
29 priorities to funded agencies and following up on all the
30 identified data leads from the workshop.

31
32 Also, developing a comprehensive marine spatial planning data
33 inventory as well as a toolbox including an interactive map viewer.
34 And working with territorial and federal governments on future
35 planning priorities and establishing future meetings that would be
36 targeted at specific data categories going further.

37
38 That's it. I'll pass it back over to Kevin.

39
40 **KEVIN MCCARTHY:** Thanks, Jennifer. I think that's our last slide.
41 Maybe the last one says questions or something like that. That's
42 our presentation. Thank you very much.

43
44 **Questions/Comments**

45
46 **CARLOS FARCHETTE:** Thank you, Kevin. Any quick questions for Kevin?
47 We got to take a 5-minute break. Graciela?

48

1 **GRACIELA GARCÍA-MOLINER:** Just to remind the Council that we are
2 working with the Coral Reef Conservation Program and actually doing
3 fishery dependent deep-water snapper fishery around Puerto Rico,
4 and we hope to expand that. Fishery dependent. Getting the
5 knowledge of the fishers into our science and actually sampling
6 the water column for temperature, salinity, etcetera. That way we
7 will have a fairly good picture of why the relationship between
8 oceanographic changes and the deep-water snapper fishery.

9
10 **CARLOS FARCHETTE:** Thank you. Clay?

11
12 **CLAY PORCH:** Yes. Thank you, Chair. I just wanted to make a comment
13 emphasizing the importance of what Kevin described as the fishery
14 independent surveys. That is one of my highest priorities; to
15 establish that basic foundation, which we haven't had before. I
16 mean, we never had any fishery independent surveys that we could
17 use for stock assessments and generating ACL advice. We had some
18 surveys that were done, but not in a way that you could plug them
19 into stock assessments. So, we're emphasizing that now, using
20 cooperative research funds and other sources of funds, such as the
21 Inflation Reduction Act funding.

22
23 But I also want to emphasize that fishery independent does not
24 mean independent of fishers. It means that the fishers are
25 executing a specific survey design, not fishing in their usual
26 way. Because, you know, when populations go down or fluctuate,
27 fishers change the way they fish. Right? So, when you look at
28 fisher catch rates, it's not necessarily in proportion to changes
29 in abundance.

30
31 I mean, I know that from my own experience. I used to catch aquarium
32 fish for a living. That's how I got to graduate school. But when
33 the abundance for one species was down, I would switch and target
34 something else. Sometimes I worked in shallow water. Sometimes I
35 worked in deeper water. It just depends on where I was making the
36 most money. So, if you looked at my catch rates, that wouldn't
37 necessarily indicate the trends in abundance.

38
39 So, for a fishery independent survey that uses fishers, you know,
40 we're taking advantage of their expertise, many times their local
41 knowledge, but also executing a consistent survey design. So, I
42 think that's going to be huge to the future. It's going to inform
43 everything, ecosystem-based management. In tandem with that,
44 National Coral Reef Monitoring Program survey and trying to get
45 that into deeper water as well. So, a lot of good things happening
46 here.

47
48 But I did want to ask a question, with regards to the Caribbean

1 Strategic Planning Workshop. And I'll note that many of the
2 elements that were in that plan, we've done several times over the
3 years, whether it's a catalog for the data or whether it's, we had
4 a data limited methods toolkit that we were putting together. So,
5 we've done those sorts of things. And so, my question to Kevin,
6 for the group is, how is this going to be different so that we
7 don't have to keep doing these steps over and over again?

8
9 **KEVIN MCCARTHY:** So, thanks, Clay. I think the difference is,
10 because this came up during the workshop, people were saying, "Oh,
11 we've done this before. We've done this before." But one of the
12 things that was asked, not by me, but by other folks are, "Okay,
13 where's that documented? And what was the follow-up?" I think the
14 difference here is-- and you can find documentation, but it's in
15 some dusty old SEDAR thing sitting on a shelf, the virtual shelf.

16
17 But there wasn't necessarily a lot of follow-up. And now we've got
18 follow-up and I think we've got much more engagement from a broader
19 scope of folks. We did have the one SEDAR workshop and we produced
20 a pretty significant document, but I don't know that it then--
21 There was a lot of sustained follow-up and I think that's the
22 difference here. And it was 15 years ago. So, a lot has changed in
23 15 years. And then there was a follow-up. There was sort of Science
24 Center Centric for one of the SEDARs, maybe 46. But that was 7
25 years ago.

26
27 So, a lot of these things are getting a little long in the tooth.
28 We thought it was a good opportunity to revisit those. With Rachel
29 on board sort of shepherding this whole thing, we've got somebody
30 who's focused on it, and we've got engagement now, well over a
31 year from the initial workshop, which was specific to the Science
32 Center, you know, getting our house in order as it were. And now
33 6 months gone from the workshop that was held down here that
34 involved a lot of the folks in this room, it's still ongoing.
35 They're still doing work. They're still, getting things done.

36
37 So, I think that's the difference, it was the beginning of a
38 process as opposed to, let's do a check on where we are. So, I
39 think that's the difference. I don't know if that is helpful or
40 not, but that's how I see it.

41
42 **CARLOS FARCHETTE:** Thank you, Kevin. Oh, go ahead, Kevin.

43
44 **KEVIN MCCARTHY:** And I just wanted to mention one other thing. I
45 don't know if I'm accurate in this statement, but I think it's
46 close to accurate, and Clay mentioned it. The inclusion of the
47 fishers in these fishery independent, even though they're fishery
48 independent, it's not independent of fishers as he said, that's

1 unusual in the southeast, I think, for having that close connection
2 with the fishers to get work done.

3

4 I could be misspeaking here, but basically all of our efforts at
5 fishery independent surveys involve the fishers except for SEAMAP-
6 C and the NCRMP Diver Survey. Although they do involve local
7 partners with the universities and other scientists. But all of
8 the other efforts, the lobster project, the deep-water survey, all
9 of those things that we're getting going now, are completely
10 reliant on a partnership between the Science Center, local
11 scientists, and the fishers to get it done. So, I appreciate you
12 all being involved.

13

14 And like I said, with this IRA money, this Inflation Reduction Act
15 money, we're not just going to be working in Puerto Rico anymore,
16 we're going to move to the Virgin Islands as well. Thanks.

17

18 **CARLOS FARCHETTE:** Thanks. I have a real quick question before we
19 break. I got Julian.

20

21 I saw where you said, on one of the slides, about a lobster trap
22 survey for Puerto Rico. How do you define what a lobster trap is?
23 Because the only definition I was able to find was in Florida.
24 How's the definition for lobster trap?

25

26 **KEVIN MCCARTHY:** Right. So, we've completed a year of that. In the
27 first year, the problems we're really trying to solve were
28 logistical ones and making the connections with the fishers and
29 all that. So, the lobster trap was pretty broadly defined. This
30 second round, we're going to build standard traps. And we're going
31 to approach it that way, so that we've got a standard effort, you
32 know. So, it's a great question, and that's phase two.

33

34 **CARLOS FARCHETTE:** Julian?

35

36 **JULIAN MAGRAS:** I just have a lot of questions about these
37 independent surveys or port sampling that's going to be done. Who
38 is going to be doing them? What group is going to be doing them?
39 Because right now, we have a port sampling program in place and
40 it's not getting done because up to now the ice machines from 2017
41 have not been replaced. So, the fishers are not doing port sampling
42 because they can't get their ice to re-ice the fish.

43

44 The true hands-on port sampling is the real port sampling that
45 needs to happen. Where the port samplers come there, and they
46 measure every fish. The fishers that have been part, years back,
47 of a very small sample of taking pictures and measurements, we
48 don't feel that that works. And I want to make sure that that's

1 not the project that's coming to us. What are we going to be doing?
2 How are we going to be moving forward?

3
4 I know the Fisherman's Association requested to work with you guys
5 in getting some of this port sampling done, which is the most
6 important aspect of collecting true data. We have not moved forward
7 with that at all. We haven't. We are stuck for months now and
8 haven't heard anything about it. We are ready to move forward. A
9 lot of port sampling can be done and not the mandatory four port
10 samples a year that's required by fishers right now.

11
12 Fishers are ready to move forward and give more port samplings,
13 get more data into the system, but we need the port samplers. We
14 need that ice, and we need to get it done. It's not happening. Now
15 I understand all agencies are strapped for staff x y z. But we
16 have we have an association that's willing to help with this
17 process, get the process moving, so we could start to collect true
18 data and create a large data set that when we go to these SEDAR
19 meetings, we have what is needed.

20
21 So, I just have questions when I see all of these different
22 initiatives that are coming forward. I'm happy. But I would like
23 to know more about what's coming and where the involvement of all
24 of us are going to fit in. Because the fishers come in at a
25 different time of the day. If there's a very good communication
26 process and the system is set up well, it will happen.

27
28 Right now, I fish at the Gustave Quétel fish house. When I come
29 in, there's a guy that works in the office right there. If I tell
30 him I need to be port sample, he would port sample me right there
31 and then. Other fishers, he would go by other fishers' house.
32 There's a lot of different ways to do it. So, I would just like to
33 get a little more clarity because I really feel right now, that
34 you guys are paying for port sampling, and it's not getting done.

35
36 Four port samples in one year in Saint Croix, that's not port
37 sampling. That's a mandatory for one fisher. Thank you.

38
39 **KEVIN MCCARTHY:** I'll make it quick. Thank you. So, Julian, the
40 fishery independent stuff that I'm talking about here, that's work
41 on the water. So that's different than the port sampling. And
42 you're right about the port sampling, but that has mostly been a
43 staffing issue that I think we're getting past.

44
45 I'm happy to talk with you more about it outside of this meeting
46 or while we're here this next couple of days.

47
48 **CARLOS FARCHETTE:** Okay. Thank you. So, we got to take a real quick

1 5-minute break and then continue the agenda. Only 5 minutes.

2
3 (Whereupon, a brief recess was taken.)

4
5 **CARLOS FARCHETTE:** Okay. So, Alrighty. We're going to continue
6 with the agenda for the Council meeting. Next up is the Fishery
7 Management Plan Amendments and Action Update by María López-
8 Mercer. María?

9
10 **FMPs Amendments and Actions Update - María López-Mercer, NOAA**
11 **Fisheries**

12
13 **MARÍA LÓPEZ-MERCER:** Thank you, Mr. Chair.

14
15 Okay, so this presentation is the one that I normally give to you.
16 It is an overview of where we are with the actions that the Council
17 wants to pursue. I'm going to try to be quick because many of the
18 things that I'll be presenting here, we are going to discuss later
19 in the day.

20
21 I'm just waiting for the presentation to show up in the screen.
22 Okay, next slide. Thank you. Cristina, can you go to the next
23 slide? Okay. That's a little difficult to see, but okay.

24
25 The first two rows are just a reminder to the Council of two
26 regulations that have become effective from amendments to the
27 island-based FMP. The first one is the Framework Amendment 1, the
28 spiny lobster reference point. Those regulations became effective
29 on April 2023 and those were the updates based on the SEDAR 57,
30 which are the spiny lobster assessments. And these are for the
31 three islands.

32
33 The next amendment that the regulations are already effective is
34 the buoy gear, definition and use. This is also an amendment that
35 was done to the three management plans. As you know, this is the
36 one that prohibits the buoy gears for the recreational sector and
37 allows up to 25 hooks on the buoy gear for commercial fishers.

38
39 Now the next four amendments are going to be discussed later on
40 today, so I'm just going to quickly go through that. Framework
41 Amendment 2 is the updated OFL, ABC, and ACL for spiny lobster,
42 and this is based on the 2022 update assessment to the SEDAR 57.
43 This one is the one that sets new ACL for spiny lobster. So, this
44 one right now we are not going to be discussed because the Council,
45 during the last meeting, they took final action to submit the
46 amendment to the secretary.

47
48 And right now, NMFS is developing the proposed rule and reviewing

1 that proposed rule. So, after that, when the proposed rule is
2 published, there's going to be a 30-day comment period on this
3 proposed regulation. And then, after that, NMFS will continue with
4 the development of the final rule.

5
6 So, the next amendment that we are going to be discussing today is
7 Amendment 2 to the Island-Based FMPs, to all 3 of them. This is
8 the trawl, net gear, and descending devices amendment. This is the
9 one that would prohibit the use of all trawl gear, trammel nets
10 and purse seines in the EEZs and will limit the use of gillnets to
11 surface gillnet with specifications for non-FMP species and would
12 require the use of descending devices when fishing for reef fish
13 in the Exclusive Economic Zones of all three islands.

14
15 So, the Council finalized selection of the preferred alternatives
16 at the April 2023 meeting. And then, during the last meeting, they
17 revisited the gillnet action to clarify some items for each FMP.
18 Now, the Council is scheduled to take final action during this
19 meeting and also review the codified text. So, we will go through
20 that, on the next presentation, which I'm assuming will be after
21 lunch.

22
23 The next amendment that we are going to be discussing is Framework
24 Amendment 3. This is only to the Puerto Rico Fishery management
25 Plan. This has to do with the reclassification of the rainbow
26 runner as a pelagic fish. The rainbow runner is currently
27 classified as a reef fish in the Puerto Rico FMP and the Council
28 requested for it to be reclassified as a pelagic species. So today
29 the Council will receive a presentation on the proposed action and
30 how the amendment will look, what is the structure of this
31 amendment so that those changes can be made.

32
33 The next one will be Framework Amendment 4. This is Puerto Rico
34 queen triggerfish reference points. This is based on the queen
35 triggerfish assessment that, as Vance mentioned earlier, the SEDAR
36 80 was already completed. The Council will receive a presentation
37 on the proposed action and on the structure of the amendment during
38 this meeting. Then, it will have the IPT develop the amendment and
39 then the ideas for the Council to, potentially, review the
40 amendment at their next April 2024 meeting. But this is going to
41 be discussed later.

42
43 The other action that we will be discussing today, is a
44 modification of the red hind seasonal closure in the Saint Croix
45 EEZ. This is a request from the Council to evaluate modifying the
46 Lang Bank red hind area closure to allow fishing for pelagic
47 species during the closure. So today the Council will discuss a
48 white paper that was prepared for this. The idea for this, as you

1 will hear, is so that the Saint Croix DAP eventually meets for
2 more information gathering. So, we're going to have a presentation
3 on that and there's still information that needs to be collected
4 to move forward.

5
6 The next amendment is Amendment 3 to the Puerto Rico, Saint Thomas
7 and Saint Croix FMPs. This is about new management measures for
8 the dolphin and the wahoo. It would establish recreational bag
9 limits and size limit for fishing for dolphin and wahoo stocks.
10 So, as you recall the Council chose the preferred alternatives for
11 Puerto Rico and revisited U.S.V.I. alternatives. This is an
12 amendment that is being developed by the IPT, and right now it is
13 scheduled for the Council to review the draft amendment at the
14 April 2024 meeting.

15
16 So, for this particular amendment, we're not going to have a
17 presentation. The IPT is currently working in drafting the
18 amendment. However, I would like to remind the Council of the
19 preferred alternatives that they chose.

20
21 Cristina, if you can go to the last slide, please, and then we'll
22 go back. The last one, please. Yes. That one. Okay.

23
24 So, this is just to remind you because we're not going to be
25 discussing this as part of the presentations or anything else,
26 unless you guys want to discuss it further and then it can be
27 requested to the Chair if you wanted to discuss this at this time.

28
29 So, these are preliminary preferred or preferred alternatives that
30 were chosen, for everybody. For Saint Croix and Saint Thomas/Saint
31 John. The size limit for the dolphin would be a minimum of 24-
32 inches of fork length, and for wahoo, 32-inches fork length. In
33 Puerto Rico the Dolphin 24-inches fork length and wahoo 32.

34
35 So, for recreational bag limits in Saint Croix and Saint Thomas
36 the dolphin is 10 dolphin per person per day, not to exceed 32
37 dolphin per vessel per day, whichever is less. And for wahoo, 2
38 wahoo per person per day, not to exceed 10 wahoo per vessel per
39 day, whichever is less. For Puerto Rico, the dolphin, the
40 recreational bag limit proposed is 5 dolphinfish per person per
41 day, not to exceed 15 dolphinfish per vessel per day, whichever is
42 less. And then for wahoo, 5 wahoo per person per day, not to exceed
43 10 wahoo per vessel per day, whichever is less.

44
45 So, these are the preferred alternatives that you chose and, again,
46 if the Council would like to revisit or to have a little bit more
47 discussion, that's something that can be requested to the Chair to
48 see if there is time.

1
2 So, let's go back to slide number three, please. Let's see. The
3 number 3. No, the next one. No, that one, sorry. I can barely see.
4 Okay. Right.
5
6 So, next is an action for developing a federal permit system. This
7 is an action that was tabled back in 2016 because the Council was
8 waiting for the big project, which was the Island-Based FMPs, to
9 be completed before moving forward with this. A couple of meetings
10 ago, we discussed, we brought back the action because the Council
11 was interested in doing this.
12
13 So, we did an overview of what a permit would look like. Then,
14 during this meeting we have NMFS staff that will guide the
15 discussion about permits, requirements, and considerations so that
16 the Council can have more information of what a permit system could
17 look like. We're also going to have a demonstration of how the
18 permit system operates for other fisheries in the southeast region.
19 So, the idea after this is for an IPT, an Interdisciplinary
20 Planning Team, to be able to start developing an action for
21 permits.
22
23 The Scope of the action needs to be refined. We need to know what
24 we are looking for. Right? Because there's so many things that can
25 be done in the permit, and we're going to be talking about that.
26 However, it will be very important for the Council to provide
27 guidance as to where they want to move forward so the process can
28 be started.
29
30 Next is the queen triggerfish reference point for the U.S. Virgin
31 Islands. There's nothing to add other than what the SSC Chair
32 already told us, or the SSC reported the outcomes during this
33 meeting.
34
35 Another discussion that's going to be had today is the Grammanik
36 Bank and Hind Bank discussion. This was based on concerns that
37 were brought by the Saint Thomas Fishers Association regarding
38 nassau grouper. They had some questions about connectivity between
39 the Grammanik and the Hind Bank, what are the landings? What is
40 the area use? Outreach and education and any other.
41
42 So, the Council tasked staff to look into these issues and address
43 questions through discussion during this meeting. So, that's going
44 to be discussed, I believe, tomorrow.
45
46 The next one was also something that came up at the August 2023
47 meeting. It was discussion about Puerto Rico Bajo de Sico and
48 nassau Grouper. This is because the researchers and fishers

1 requested changes to management in Bajo de Sico to address the
2 nassau grouper recovery, access to fishing deep-water fishing
3 grounds and enforcement of the ESA listing for the nassau grouper.
4 So, the Council tasked staff to look into the issues and address
5 questions. This is not going to be addressed at this meeting, but
6 it will be addressed at a future meeting.

7
8 Okay. So, I'm almost done, but I just wanted to bring into the
9 Council's consideration some items that could be addressed or
10 should be addressed during 2024.

11
12 So, one of them, we have mentioned this before, is the 2023 AM
13 Discussion. This is revisiting ACLs for stocks that will fall under
14 enhanced reporting because of the new management regime under the
15 Island-Based FMP's. So, this is basically stocks that may continue
16 to exit the ACL due to improved reporting. This is, probably,
17 because the species were not included in the forms before. They
18 were included later on because of the way that the stocks were
19 grouped together. So, there are patterns that these specific stocks
20 will follow, and this is something that the Council may want to
21 task staff, the SSC, SERO and the Science Center to compile
22 information so that the SSC can evaluate this.

23
24 Another thing that the Council may need to take into consideration
25 for 2024 is determine actions to be taken when the pelagics annual
26 catch target is exceeded. So, pelagic do have an accountability
27 measure that is different than other species. However, there's not
28 a specific action defined for when the ACT is exceeded. This is
29 different to other species that when you exceed the ACL an
30 accountability measure is triggered, and it can be implemented.
31 Then if it's not decided that it was due to enhance reporting or
32 improve reporting, then, the fishery is closed for the amount of
33 time that it's needed for the ACL not to be exceeded again.

34
35 So, this is not the case for pelagics, and there's reasons for
36 that. One of them is that these are new species that came from
37 management, so there's still a lot that we don't know. However,
38 because of the importance of the species, commercial and
39 recreational, and the amount of land, etcetera, it's important
40 that there are measures to account for any exceedances on the ACTs
41 and the ACLs so that we can manage these stocks properly.

42
43 Another thing that will come toward 2024 is regarding management
44 of coral sea urchins and sea cucumber and any other species perhaps
45 that have stock prohibitions. So, the Council may want to discuss
46 a potential reclassification on this species as an ecosystem
47 component species, which are species that you don't have to set
48 ACLs, or AMs for them, but you keep an eye on them because they

1 have a very important role in the ecosystem.
2
3 This is something that during the development of the Island-Based
4 FMPs was something that we consider doing for corals, for sea
5 urchins, and sea cucumbers, which are species that have stocks
6 that, basically, have an ACL of 0. It's very difficult to know
7 because there's no data to know what the overfishing status is,
8 because an SYL was not set, because there was no data.
9
10 So, right now in the status report, is set as an unknown. That's
11 not ideal. Right? So, the Council may need to consider other ways
12 of managing the species. If in the future, I mean, I doubt it for
13 corals, but if in the future they wanted to move the species into
14 a regular management, that should be done through the regular
15 Amendment process and discussion.
16
17 So, another one is the changes to framework actions that can be
18 taken under each FMP. Part of the process of the Island-Based FMPs
19 is that we are going to be discovering things that we can do
20 better, or we can do more effectively. Right? This is part of the
21 amendments that we're going to be doing.
22
23 So, our framework actions, we would like the Council, if the
24 Council is interested, to make changes to address actions that are
25 more routine. For example, additional changes to reference points
26 or gear types, or others to streamline the process a little bit
27 better, which we think can be done.
28
29 Framework amendments are still, you saw it, they go pretty much
30 through the same process. They may take less time to develop
31 because you don't have the same amount of time for reviews. That
32 doesn't mean that there's any shortcuts. Everything is going to be
33 evaluated. However, there's ways of making these changes more
34 efficient, so they don't take as long.
35
36 Another one will be the queen conch rebuilding plan. This is
37 something that-- The rebuilding plan for the queen conch finished
38 in 2020. This is something that the Council has not done yet.
39 Evaluating if adequate progress was made on this rebuilding plan.
40 If the queen conch population was rebuilt, or if there is a need
41 to conduct a new rebuilding plan. So, we obviously don't have the
42 answer to those questions, so this is something that needs to be
43 done, and it needs coordination between SERO, the Science Center,
44 and the Council's SSC.
45
46 And then lastly, I just wanted to show you. These are just two
47 actions that I just wanted to mention. I think the Council decided
48 last time that they would bring this later on. So, one was the

1 trap reduction plan for the U.S. Virgin Islands EEZ. That was
2 evaluating compatibility with the trap reduction program, and that
3 was the Council postponing until there was more information and
4 more interest on it.

5
6 And then the other one does the timing of the seasonal area
7 closures for the red hind grouper in the Puerto Rico EEZ. So, it
8 was discussed during the August 2023 meeting, briefly discussed,
9 and there were some discussions about postponing it until more
10 information was collected from the species in these areas.

11
12 So that's all I have. It's 12:07. There are other presentations.
13 I don't know if you want to move those, start the presentations of
14 the amendments after the launch or if you want to continue right
15 now. The next presentations are mine. So, Mr. Chair, whatever you
16 want to do with this.

17 18 **Questions/Comments**

19
20 **CARLOS FARCHETTE:** Yeah. I don't know how much time people need
21 for lunch. I mean, I would like to at least get 1 or 2 presentations
22 done. But I got a question about the future discussions in the sea
23 cucumbers, sea urchin part of it.

24
25 Didn't we, a few years ago, move to prohibit the harvest of these
26 species? Are we going to, when we move it to the ecosystem, is it
27 still going to be managed by us or is it going to take that away
28 from—

29
30 **MARÍA LÓPEZ-MERCER:** No. The difference is that we keep an eye on
31 them. We still manage it, but it's not the regular management like
32 we have right now with an ACL or AMs, right? So, I mean, the
33 harvest is prohibited. That will not change. It's just that it's
34 difficult to assess the status and this is a requirement that we
35 have to do for species that we don't have data on. So, if you move
36 them into an ecosystem component species, because they're very
37 important for the ecosystem, then you, kind of, like, keep an eye
38 on them, and in the meantime go through the process of collecting
39 data. But for any of the species that have harvest prohibitions or
40 any other changes anything would have to go through the Council
41 process and the amendment process. Any changes to harvest,
42 prohibitions or allowances have to go through the Council amendment
43 process.

44
45 So, nothing really changes in terms of that, other than those
46 management reference points that would be not applicable any
47 longer. So, that's a discussion that we can have and then the
48 Council will be, obviously when we have that discussion, they can

1 go through everything that's needed. There may be other options
2 that we could do, but that's something to explore eventually.

3
4 **CARLOS FARCHETTE:** Okay. Because in our local Fisheries Advisory
5 Committee, we did recommend to the commissioner to prohibit the
6 harvest of those species also. So, we just want to just stay within
7 that framework.

8
9 **MARÍA LÓPEZ-MERCER:** Yeah. This is one of those things-- I mean,
10 I don't know if you have it explicitly in your regulations for the
11 sea cucumbers and the sea urchins. I don't think you guys have a
12 compatible regulation, but at least for federal waters, the harvest
13 is prohibited for all three groups.

14
15 **CARLOS FARCHETTE:** Yeah. We just made the recommendation. It hasn't
16 been approved yet, but probably will be. So, if, no one has a
17 problem, maybe we can hear at least one other presentation from
18 María before we break for lunch. Sounds good.

19
20 **Framework Amendment to the Puerto Rico FMP to Reclassify the**
21 **Rainbow Runner as a Pelagic Species – María López-Mercer, NOAA**
22 **Fisheries**
23

24 **MARÍA LÓPEZ-MERCER:** Okay. I'm going to request a change. I would
25 like to do the rainbow runner presentation first because I think
26 this is an Action that is a little bit simpler. At this point we
27 don't have a document created, so it would be just a presentation.
28 If there are any questions from the Council, we can take them from
29 there. So, it will be the rainbow runner, Cristina.

30
31 So, as I mentioned earlier, this is a request from the Council
32 that came from some concerns from the DAP members of Puerto Rico.
33 The rainbow runner was classified, under the Puerto Rico FMP, as
34 a reef fish. By being classified as a reef fish, there are certain
35 regulations that directly apply to the species. However, the
36 species behaves more like a pelagic species. Right? And it's fished
37 as a pelagic species, so the Council requested the species to be
38 reclassified as a pelagic species.

39
40 So, the rainbow runner is also known as 'salmón' in Puerto Rico.
41 It's primarily a pelagic fish of the jacks family. The species is
42 widespread to the tropical and subtropical waters and can inhabit
43 coastal and also offshore areas. Often forms schools of variable
44 sizes. It is an important species for recreational fishers, and
45 there are several different techniques that game fishers use, such
46 as trolling, live bait, and jigs, for example.

47
48 So, it was added as a new species to the Puerto Rico fishery

1 management plan, which as you all know became effective on 2022,
2 and it was included under the reef fish component along with the
3 other jack species, but it is managed as an individual stock.

4
5 So, basically, like I said earlier, because it's included as a
6 reef fish the species is subject to management measures applicable
7 to the reef fish. So, for example, seasonal closure in the Bajo de
8 Sico area, which reef fish is not allowed to be fished during the
9 seasonal closure, and there's also recreational bag limits that
10 apply to reef fish, among other things.

11
12 So, the rainbow runner is managed with annual catch limit for each
13 of the commercial and recreational sectors. There's a reef fish
14 specific accountability measure, and there's also recreational bag
15 limits. In addition, regulations applicable to reef fish such as
16 a ban on the use of certain gear types and a prohibition on reef
17 fish harvest and possession during October 1st through March 31st
18 each year in Bajo de Sico, apply to this species.

19
20 Next.

21
22 So, this is the background. At the April 2023 Council meeting, the
23 Puerto Rico District Advisory Panel discussed with the Council an
24 enforcement issue that was related to the harvest of the rainbow
25 runner during the Bajo de Sico closure. As I mentioned, reef fish
26 harvest is prohibited during the seasonal closure. So, this
27 prompted the Puerto Rico DAP to advise the Council that, indeed,
28 the rainbow runner is targeted as the pelagic fish that inhabits
29 the water column, and it is captured in certain ways such as
30 trolling and with live bait.

31
32 So, the DAP of Puerto Rico recommended that the Council reclassify
33 the species from a member of the reef fish component to a member
34 of the pelagic fish component of the fisheries. Then based on that
35 recommendation, the Council tasks their SSC to evaluate the
36 available information and make a recommendation as to whether
37 reclassifying the rainbow runner as a pelagic species was
38 warranted. So, during their May 2023 meeting, the SSC recommended
39 the reclassification of the species, as a pelagic under the Puerto
40 Rico FMP.

41
42 This is only for the Puerto Rico FMP because this species is not
43 one that is included for management in the U.S. Virgin Islands. So
44 then, at the August '23 meeting, the Council accepted the SSC
45 recommendation and then decided to move forward with an amendment
46 to the Puerto Rico FMP to make this change, and this is what we're,
47 discussing today.

48

1 So, this amendment is going to be a little bit different than what
2 we're normally used to. Okay? This is because, at least for the
3 National Environmental Policy Act requirements, we have to analyze
4 if the action has the potential to cause significant environmental
5 effects. That's when you do one environmental assessment, which is
6 what we typically do with our actions. If, after that, it is
7 determined that there are significant environmental effects,
8 that's when we move to an environmental impact statement.

9
10 So, bottom line is that this change could classify as what under
11 NEPA is known as a categorical exclusion, which is a class of
12 actions that a federal agency has determined does not have
13 individually or cumulatively significant effect on the human
14 environment, so you don't have to do an environmental assessment
15 or environmental impact statement.

16
17 So, what does that mean? That we are not going to arrange this as
18 your typical action with a bunch of alternatives to analyze,
19 because in reality there's only a couple of things that we can do
20 here. It's pretty much you either reclassify it as a pelagic fish
21 or you don't. Right? And then after that, if you do reclassify it
22 as a pelagic fish, then there are certain things that need to be
23 decided, which is, for example, we already have an ACL. We're not
24 changing that, right? Because this is not part of what was tasked
25 and what the Council was interested in doing, but then an ACT has
26 to be calculated.

27
28 Because purpose and need is usually something that we use for our
29 NEPA document. Let's called this an objective, right? So, the
30 objective would be to ensure that the species is managed in
31 accordance with its life history characteristics and fishing
32 patterns, which are consistent with the Council management of
33 pelagic species. So, as I said, the proposed option will be to
34 reclassify the rainbow runner from the Puerto Rico reef fish group
35 to the Puerto Rico pelagic group through Framework Amendment 3, to
36 the Puerto Rico FMP.

37
38 So, what we're expecting to see from here, is that all the
39 regulations that apply to the reef fish such as the recreational
40 bag limit and the prohibition for the harvest of reef fish species
41 in the Bajo de Sico area and that reef fish-specific AM will not
42 apply to the species any longer. So basically, by doing this
43 reclassification those three things basically fall off, right?
44 Because since it is not a reef fish anymore, you don't have to
45 have that.

46
47 And then specific regulations that apply to the pelagic species
48 then would be applicable to the rainbow runners. Like I said, the

1 annual catch target, based on the current ACL of the species and
2 then pelagic species AMs, which have already been set by the
3 Council.

4
5 So, this is the other proposed option. Because if you decide to
6 reclassify the fish as a pelagic, then, you have to establish an
7 annual catch target because that's how you decided you were going
8 to manage the pelagic species group. So, this action or this option
9 would establish a commercial and recreational ACT that will be
10 based on the ACLs that were set for the species. And that would be
11 equal to the 90% of the commercial ACL and recreational ACL, which
12 there's nothing different in here. This is how The Council decided
13 that they were going to manage pelagic species, and if this species
14 is being changed to a pelagic species, then this will also apply
15 to it.

16
17 So, as I mentioned earlier, for pelagic stocks an AM-based season
18 length reduction in the event of an ACL overage would not be
19 applied. That's not the accountability measure that you decided,
20 but if the annual catch target is exceeded, then the Council will
21 have to coordinate with Science Center and the SSC to make a
22 determination of what to do. And that is one of the things that I
23 mentioned in the previous presentation that would be ideal for the
24 Council to address in 2024. Right? But this is not relevant for
25 purposes of this amendment right now, but it's something that would
26 affect the species in the future.

27
28 So, this just says what the AM applicable is to the pelagic stocks,
29 this is from the Island-Based FMPs. I'm going to read it.

30
31 "Process for triggering an AM for the listed pelagic stocks/stock
32 complexes. An AM would be triggered if the applicable landings,
33 that is, sector landings, as available exceed the applicable ACT.
34 For example, the sector ACT for that stock/stock complex.

35
36 Regarding the applicable ACT, where landings data are available to
37 manage by sector, the ACT is the sector ACT, and sector landings
38 are compared to the sector ACT." Right? The sector meaning
39 commercial or recreational. "The AM would be triggered only for
40 the sector that exceeded the ACT. However, if landings data are
41 not available to manage by sector," you know, if there is no
42 monitoring or data available from the recreational sector "the ACT
43 for the sector with available landings would be the ACT for the
44 stock/stock complex as a whole, and available sector landings are
45 compared to the ACT for the stock/ stock complex as a whole." Which
46 is pretty much what we do." Which is pretty much what we do, with
47 the ACL for the other species. The difference here is that this is
48 an ACT which is a percentage of that ACL that was put on to ensure

1 that is not exceeded to ensure some sustainability for the ACL.
2
3 And then, how do you apply an AM? "If an AM is triggered, the
4 Council in consultation with the Science Center will assess whether
5 corrective action is needed." And this is something that Hasn't
6 changed. This is in the Island-Based FMPs and the Puerto Rico FMP.
7 This is the triggering and the application of the AM functions for
8 pelagic species. So, once you change it to the pelagic species
9 this is what it would apply. It will apply to it same as for
10 others.

11
12 Okay. And the next slide, these are the documents that would be
13 developed by an IPT. There will be the framework amendment that I
14 have here as one action, but in reality, is two, because one is
15 reclassifying, and the other one is setting the ACT. And then,
16 because of requirements of the Magnuson-Stevens Act, and I'm not
17 talking about NEPA here. There are some requirements that we have
18 to comply with in an amendment, right?

19
20 Normally, when we do an amendment, we have both things together,
21 you know, the Magnuson-Stevens Act requirements and the National
22 Environmental Policy Act requirements and that's all together in
23 that document, right? Sometimes you could do it separately and
24 there's going to be certain requirements that you have to comply
25 with for one or the other.

26
27 So, from the MSA perspective, we will include a description of the
28 fishery and then some biological, social and economic effects. You
29 know, that won't be as detailed as what we normally include when
30 we're evaluating alternatives, but it will be included in there as
31 much as we can do with the limited information. However, like we
32 said, this is not an action that would be-- you know, we're not
33 expecting this to be significant. This is more like, sort of, an
34 administrative action, but there's other things that we need to do
35 such as setting the ACT, etcetera, that our process doesn't allow
36 to do without this kind of amendment.

37
38 There will be the economic reviews, such as regulatory Impact
39 Review, Regulatory Flexibility Analysis, which are their own Act
40 Analysis that we normally include on this amendment. Then, as I
41 mentioned earlier, the document that will be used for this is the
42 Categorical Exclusion, and that is under category A1, which is an
43 action that is a technical correction or change to a fishery
44 management action or regulation, which does not result in a
45 substantial change. And that's the trick here, this is not a
46 substantial change. Right? We're not changing how the fishery
47 operates, how people are fishing, etcetera. It doesn't result in
48 a substantial change in fishing location, timing effort,

1 authorized gear types, or harvest levels. Okay. So, as I mentioned,
2 this is different than what we normally do, but it's simpler.
3 Right? We're not going to be here saying "Action 1, Alternative 1,
4 2, 3," and compare a lot of that because we don't have to do that
5 this time. Okay? So, we're expecting this to be a pretty
6 straightforward process.

7
8 Okay, and then the next slide is the last one.

9
10 This is the action items and the next steps of what we have to do.
11 So, during this meeting you are just reviewing what the proposed
12 action plan is for this, for the development. And then if you want
13 us to move forward, then the IPT will develop Framework Amendment
14 3, And then the Council would review the draft framework amendment
15 and may want to take final action during April 23 pending the
16 development status of the amendment.

17
18 So, if the IPT, creates the document and develops the document and
19 everything is Fine, we bring it in in April 2024, which is the
20 expectation, and then the Council can just take final action. After
21 that, NMFS would develop the proposed rule, publishes a proposed
22 rule, has a comment period, and then, after that, develops the
23 final rule, publishes the final rule, and then the amendment
24 becomes effective. And hopefully we can do all of that in 2024.
25 Any questions?

26 27 **Questions/Comments**

28
29 **MIGUEL A. ROLÓN:** María, will you need a Council motion at this
30 time to pursue this or is it understood that this is the intention
31 of the Council?

32
33 **KATHERINE M. ZAMBONI:** This is Kate Zamboni for the record. Unless
34 there's something that the Council would like to do differently
35 than what María has laid out, I don't think there's a need for a
36 motion. But if there's any cause for concern or you want to analyze
37 a different option, this would be a good time to identify that.

38
39 **MIGUEL A. ROLÓN:** Mr. Chairman, just in order to save time. We
40 have discussed this several times before, the information that has
41 been presented by María today. I believe that we are on the right
42 direction so we can allow the staff to continue working on this
43 and then have the presentation at the April meeting.

44
45 **CARLOS FARCHETTE:** I have Nelson.

46
47 **NELSON CRESPO:** Thank you, Mr. Chair. María, I'm a little concerned
48 about the ACL, ACT assignment for the commercial fishers. Because

1 in my town, I saw landings of 100 of pounds from commercial
2 fishers. So, maybe they don't report the catch. I don't know what's
3 going on, but I can guarantee you that that is not always because
4 the rainbow runner is not a target fish that they fish for every
5 day. But when they go, they're always landing 1, 2, 300 pounds per
6 trip. So, I'm a little concerned about that.

7
8 **MARÍA LÓPEZ-MERCER:** Thank you, Nelson, for the comment. Well, we
9 do have an ACL that was set for the species, based on the landings
10 information that was available at the time. So, the harvest should
11 be bound to that ACL, right? And then, we have that ACT that was
12 set lower that will basically tell us, "Hey, you are approaching
13 your ACL. You need to take some measures." Right? So, the question
14 in here is, what are the measures that you want to take?

15
16 I mean, the Council can meet with the Science Center or the SSC
17 and maybe decide if they should set an accountability measure that
18 would close the fishery, or maybe they should put a closure, or
19 maybe they should just monitor this area better. You know,
20 something like that, but that is something that is not included in
21 the plan at this time. It was left open, so that is something that
22 the Council may want to discuss further.

23
24 So, the species would still be monitor, the difference is that if
25 they reach their ACT, it's not closed, right? But that doesn't
26 mean that the Council cannot take an action to deal with that.
27 Hope that answers your question. Thank you for the concern.

28
29 **CARLOS FARCHETTE:** Yeah, I had the concern as Nelson when I saw
30 the difference between the commercial catch and the recreational
31 catch. It seemed like the recreational targets the species because
32 their number is pretty high. And I am concerned what happens if
33 now that it has been moved to a pelagic species, the commercial
34 sector decides that they're going to target it more. And then what
35 happens?

36
37 I don't think that they should be punished just because they're
38 harvesting more. I think if there's a possibility that we can
39 revisit that ACL if we notice that the data that's coming in is
40 different, I'm not sure.

41
42 **MARÍA LÓPEZ-MERCER:** Thank you, Carlos. You know, revisiting the
43 ACL is something that the Council can request, at any time. And my
44 understanding was that in previous meetings there had been
45 discussion about revisiting certain ACLs. So, that's something
46 that the Council can definitely pursue. However, if you don't think
47 that this action should take place the way that it is right now,
48 nothing is bounding you to do that. You know, if you want to do

1 something before this change is made, then you're certainly able
2 to do that.

3

4 **CARLOS FARCHETTE:** Okay. Because that number for the commercial
5 catch is pretty low. This is really a Puerto Rico issue because it
6 seems like the U.S.V.I. is not managing this species, so they can
7 do what they want with it. I think that's, something we ought to
8 look into also.

9

10 **SENNAI HABTES:** If I may. I think it's beneficial to make a decision
11 in the direction we want to go. We created IBFMPs. We set ACLs. We
12 had distinctions for which species were managed in which, and now
13 we've decided that we want to make a change and move it to the
14 pelagic. We can't keep doing the decisions by piecemeal every time
15 we identify, or it will go on in perpetuity, and there are multiple
16 things that we, as a Council, need to get done.

17

18 So, I think if we want to make a decision to changes that we're
19 going to ask the staff to make for this management decision, we
20 make that decision now, or let them move forward with simply making
21 the management recommendation which we asked them to do, which was
22 simply to move it into a pelagic from a reef fish. If we want to
23 change that, to looking at revising the ACLs, that is a different
24 management request that we are asking of them, and we should make
25 that decision now or move forward with this and make that at a
26 different time.

27

28 **CARLOS FARCHETTE:** I agree with that. I mean, it's a given that
29 it's a pelagic species. I don't know who in the world came up with
30 it being a reef fish, but I do think that we need to revisit that
31 ACL for the commercial sector. That is a really low number,
32 especially after what Crespo was just stated.

33

34 **MARÍA LÓPEZ-MERCER:** So, if I may, Mr. Chair. It's very possible
35 that this was an oversight, maybe. Because we have three stocks of
36 jacks, which two of those stocks probably behave a little bit
37 different than this one. So, it's possible that it might have been
38 an oversight. So, this could be a correction of something that was
39 done in the Island-Based FMP and throughout time we're going to be
40 finding things that are there because obviously this is something
41 that is new for us.

42

43 So, the question that Sennai was saying is, like, what do you want
44 to do now, so we can have guidance to move forward? There are two
45 different processes. If you want to move forward with this, then
46 you can request staff to move forward this. And then, later on, if
47 you want to, you can revisit those ACLs and that can be another
48 request. Or you can just say we're going to keep it as a reef fish

1 for now until we can get information to change the ACL.
2
3 So, the decision is a Council decision. There are things like, if
4 you want to keep it as a reef fish, how it is right now, then,
5 keep in mind that there are regulations that apply to the reef
6 fish, which was the reason why it was originally brought to the
7 Council's attention. Reasons such as the recreational bag limit,
8 the way that the species was behaving. The people who were
9 targeting the species were pelagic fishers, not reef fish.
10
11 So, I understand the need for making changes to the ACL, but if
12 you look at it, at least the way I'm looking at it, if the species
13 is being fished as a pelagic fish, then, you know, the Council may
14 want to address that. And then, if there are changes that need to
15 be done to the ACL to accommodate changes in the fishery, and
16 that's why these fishery management plans should be adaptive enough
17 to be able to accommodate that, then that's something that can be
18 requested as well.
19
20 **CARLOS FARCHETTE:** Okay. Well, in my opinion, it's not a reef fish.
21 So, I think we need to keep it as a transition into a pelagic. But
22 I still think that we should revisit that ACL and get some input
23 from Nelson. I mean, it's not affecting the U.S.V.I. at all, but
24 I'm just saying. Although I'm U.S.V.I., I think it's important for
25 the Puerto Rico commercial sector to have that revisited, the ACL.
26 Katherine?
27
28 **KATHERINE M. ZAMBONI:** Mr. Chair, yeah. Kate Zamboni for the
29 record. In light of the conversation, I think it would be helpful
30 if the Council voted on whether staff is to proceed as María has
31 laid out on just the reclassification alone. And then, if you want
32 to take a separate vote as to whether or not to revisit the ACL in
33 a separate action. I think it would help for clarity of the record
34 if the Council would take such a vote.
35
36 **CARLOS FARCHETTE:** I'm good with that. Vanessa?
37
38 **VANESSA RAMÍREZ:** Thank you. Vanessa Ramírez for the record. Thank
39 you, Katherine. I think that you responded my question that I was
40 going to make.
41
42 I suggest that we then make a motion or a vote to move forward
43 with the decision to change the rainbow runner to a pelagic as
44 this has been discussed already, and then make another vote to
45 revisit the ACL. It's very important for the commercial sector.
46
47 **CARLOS FARCHETTE:** So, do we put that up on the screen?
48

1 **MIGUEL A. ROLÓN:** Cristina can you put it up on the screen and see
2 if Kate can help us with the language, simple language, for the
3 first one and the second, please.
4
5 **KATHERINE M. ZAMBONI:** I can provide, a sample motion language.
6 Are you ready? So, looks like you're ready. So, yeah, there would
7 be 2 separate motions.
8
9 So, the first motion would be, "Motion for staff to proceed with
10 developing a framework amendment to the Puerto Rico Fisheries
11 Management Plan to reclassify rainbow runner as a pelagic species."
12 So that would be the first motion.
13
14 And then a second motion would be, "Motion to request staff to
15 revisit the rainbow runner ACL under the Puerto Rico FMP."
16
17 I would just keep it general for now as opposed to specifying
18 recreational, commercial, just Consider them together. You can
19 make it plural ACLs. That's fine.
20
21 **VANESSA RAMÍREZ:** I move, *Motion for staff to proceed with*
22 *developing a framework amendment to the Puerto Rico Fisheries*
23 *Management Plan to reclassify rainbow runner as a pelagic species.*
24
25 **CARLOS FARCHETTE:** So, we need a second.
26
27 **JAMES R. KREGLO:** Second.
28
29 **CARLOS FARCHETTE:** Any discussion? Vance?
30
31 **VANCE VICENTE:** I don't recall if discussed this during the last
32 meeting but is there any specific life history information like
33 length at infinity, age at maturity, growth rates, and that-- I
34 don't remember. So, I'm just asking. No. There's nothing.
35
36 **CARLOS FARCHETTE:** Okay. Any more discussion? Any nays? Any
37 abstentions? *The motion carries.*
38
39 The motion was, "Motion for staff to proceed with developing a
40 framework amendment to the Puerto Rico FMP to reclassify rainbow
41 runner as a pelagic species." Okay. Next motion.
42
43 **VANESSA RAMÍREZ:** *Motion to request staff revisit the Rainbow*
44 *Runner ACLs under the Puerto Rico FMP.*
45
46 **CARLOS FARCHETTE:** We need a second.
47
48 **JAMES R. KREGLO:** Second.

1
2 **CARLOS FARCHETTE:** It's a motion by Vanessa, second by Kreglo.
3 Motion is to request staff to revise the rainbow runner ACLs under
4 the Puerto Rico FMP. Open for discussion. Sennai?
5
6 **SENNAI HABTES:** So, given the need to have more information, I
7 think, on the landings, my question is, it doesn't seem to me that
8 those numbers are based on a typo, based on the landings
9 information that's posted. It just seems like there isn't reporting
10 of that data. Right? And my question becomes, how will we be able
11 to set an effective ACL without any more data on that species for
12 this region?
13
14 What would be the process by which we are going to undertake
15 setting a different management limit with no more data than we
16 have than what was already presented. So, I think if we have a
17 clear understanding of that, then I would be in favor of looking
18 at reclassifying those ACLs. I think if we don't have that, it
19 makes it difficult to make a determination as to--
20
21 Well, maybe not. Maybe there is a way to make that determination
22 without that data. Okay.
23
24 **KATHERINE M. ZAMBONI:** Mr. Chair, if I may respond to the question,
25 because I think it's a great question Sennai.
26
27 And maybe really the proper way to rephrase this motion is, to
28 task the SSC with looking at those ACLs to determine if there is
29 new information. Because whatever the ACL, it has to be based on
30 the best available information and if the information hasn't
31 changed, what would the rationale be for making an adjustment?
32 That I don't know.
33
34 So, the way it's phrased doesn't mean that the ACL would change.
35 It means, "Hey, let's look to see if there's any new information
36 that should be considered." And I think everyone understands that
37 this would happen after the reclassification. So, the one Amendment
38 would, kind of, come back to you first, but in the meantime, there
39 would be that undertaking to see if there's additional information.
40
41 **CARLOS FARCHETTE:** Okay. So, are we going to task the SSC or are
42 we going to leave the motion as is?
43
44 **MIGUEL A. ROLÓN:** Just have the motion as is and then we can talk
45 to the SSC Chair and put it together. Graciela can take a note and
46 they can discuss it.
47
48 **CARLOS FARCHETTE:** Okay. Sounds good. I think that's important.

1 María?
2
3 **MARÍA LÓPEZ-MERCER:** Based on the recommendation that Kate had
4 earlier, it should be, motion to request the SSC to revisit, not
5 staff. So, that something that the person who put the motion
6 together, perhaps they want to make a change?
7
8 **MIGUEL A. ROLÓN:** María? You have the document for that? To present
9 it to the SSC or just one line?
10
11 **MARÍA LÓPEZ-MERCER:** Well, those are two different things. So, for
12 motion number 1, there's an IPT, and the IPT would move forward
13 with the development of this amendment, and they will be coming
14 with that amendment April.
15
16 Then the second topic will be, you know, a task for the SSC to
17 look into the information that is available and see if it's
18 warranted to make a change to that ACL based on that new
19 information. So, that's something that we, the staff, will not be
20 working with. We can work with the Science Center collecting all
21 the information that the SSC will need to make their decision but
22 that will be two different processes based on the way that this
23 was set up.
24
25 **MIGUEL A. ROLÓN:** Because that's important Mr. Chairman, but that's
26 a task that Vance will undertake on the next SSC meeting.
27
28 **CARLOS FARCHETTE:** Okay. I have Sennai and then Graciela.
29
30 **SENNAI HABTES:** Thanks, Mr. Chair. I was just going to make a
31 motion to revise the motion to read "request the SSC to revisit
32 the rainbow runner ACLs under the Puerto Rico FMP."
33
34 **CARLOS FARCHETTE:** Graciela?
35
36 **GRACIELA GARCÍA-MOLINER:** So, staff would need to require, or the
37 Council will need to request from the Science Center any
38 information from the rainbow runner that needs to be assessed by
39 the SSC. So, it's staff and the SSC.
40
41 **MIGUEL A. ROLÓN:** But the point is that we have the language that
42 would allow us to do that, and then we would take details later
43 on.
44
45 And if we follow what Vance was saying, there's nothing that we
46 can offer them next time. There's no information. But we'll go
47 through the process, and we'll give you [inaudible].
48

1 **CARLOS FARCHETTE:** So, the motion maker, Vanessa, you agree with
2 the change?

3

4 **VANESSA RAMÍREZ:** Yes. I agree with the changes.

5

6 **CARLOS FARCHETTE:** Kreglo, the second, do you agree with the
7 change?

8

9 **JAMES R. KREGLO:** Yes, I second.

10

11 **CARLOS FARCHETTE:** So, the motion has been revised to say motion
12 to request the SSC to revisit the rainbow runner ACLs under the
13 Puerto Rico FMP.

14

15 Any more discussions? Okay. Taking it to a vote. Any nays? Any
16 abstentions? *Hearing none, motion carries.*

17

18 **Review and Final Action for Amendment 2 to the Island-Based**
19 **FMPs: Trawl, Net Gear and Descending Devices - María López**
20 **Mercer, NOAA Fisheries**

21

22 **MARÍA LÓPEZ-MERCER:** So, Mr. Chair, the next presentation, it's
23 also my presentation. It shouldn't be very long depending on if
24 the Council wants to discuss, hoping that everybody's not super
25 hungry. Right? But that will put us back on track. Right?

26

27 Okay, so Cristina, can you go to the trawl and net gear
28 presentation?

29

30 Okay. So, this is Amendment 2 to the Puerto Rico, Saint Croix, and
31 Saint Thomas, and Saint John FMPs. This is trawl, net gear and
32 descending devices.

33

34 So, these are the outcomes from the August 2023 meeting. The
35 Council had already chosen preferred alternatives for the action
36 that deals with the trawl, for the purse seines and also for the
37 trammel nets. So, this is just to remind you how the actions were
38 set up. So, under Action 1, everything is related to Puerto Rico.
39 So, Action 1(a) is trawl net, Action 1(b) gillnets, Action 1(c)
40 trammel nets.

41

42 We need to go back one more. Oh, it's okay. That was my bad then.
43 Alright. So, hold it until you can. So, anyway, otherwise I will
44 just read it.

45

46 And then, Action 2 is all of the same things but for Saint Croix.
47 And then, Action 3 is all of the same gear types but for Saint
48 Thomas and Saint John. And then, Action 4 is one that applies to

1 the three islands, and this is the one for descending devices.
2 Right? This is the requirement to have descending device ready for
3 use when you're fishing for reef fish.

4
5 Okay. So, the purpose and need, is to prevent potential damage to
6 habitats, including essential fish habitat, from certain gear
7 types, protect species associated with such habitats, as well as
8 to promote best fishing practices and enhance the survival of
9 released fish in the EEZ around Puerto Rico, Saint Croix, Saint
10 Thomas/Saint John.

11
12 The need for this amendment is to minimize potentially adverse
13 effects of fishing to habitats and associated species, and to
14 minimize the mortality of bycatch species.

15
16 This is something that we have discussed in many meetings, and it
17 is just a reminder of what the purpose and need was that the
18 Council set.

19
20 Okay. So, this is a summary of the actions with their preferred
21 alternatives, and this is included in a document that you will
22 have. It is version 3.3 from November 2023. This is the document
23 that is in your briefing book.

24
25 Okay. So, Actions 1(a), 2(a), and 3(a) modifies the use of trawl
26 gears in federal waters around Puerto Rico, Saint Croix and Saint
27 Thomas respectively, like 1(a), 2(a), and 3(a). So, the alternative
28 that you chose as a preferred for all three islands, is to prohibit
29 the use of trawl gear for all fishing in the EEZ for each one of
30 the three islands. So, as you know, trawl gear is not a gear that
31 is being used or has been used in the past. This is more like a
32 preventive measure used to protect all the habitat that is in the
33 Caribbean that is very special.

34
35 So, Actions 1(b), 2(b), and 3(b) is modifying the use of gillnets
36 in federal waters around Puerto Rico, Saint Croix, and Saint Thomas
37 respectively, 1(b), 2(b), and 3(b). On this one, the alternative
38 would say "prohibit the use of gillnets in the EEZ around Puerto
39 Rico. There were 3 different sub-alternatives. So, the sub-
40 alternative that you all chose for all three islands was modified
41 based on the discussion that we had in August 2023.

42
43 I'm going to read it, how you presented it. "For fishing for all
44 federally managed species and limit the use of gillnets in the EEZ
45 around Puerto Rico or Saint Croix or Saint Thomas and Saint John,
46 depending on the sub-alternative, to fish for non-federally
47 managed fish species with surface gillnets that meet the following
48 specifications and requirements. Number 1, mesh size of the surface

1 gillnet must be 0.75-inches square, or 1.5-inch stretched." We
2 talk about this being the specific measurement of that surface
3 gillnet. "Number 2, there will only be one surface gillnet up to
4 600 feet in length that would be permitted per vessel. Number 3,
5 the surface gillnet must be used 20 feet or more above the bottom.
6 And number 4, the surface gillnet must be tended at all times."

7
8 So, this is the way that the IPT, wrote what you expressed during
9 the last Council meeting.

10
11 For Actions 1(c), 2(c) and 3(c) modify the use of trammel nets in
12 federal waters around Puerto Rico, Saint Croix and Saint
13 Thomas/Saint John respectively, actions 1(c), 2(c) and 3(c). The
14 preferred for all three islands is to prohibit the use of trammel
15 nets for fishing in each one of the EEZs of Puerto Rico, Saint
16 Croix and Saint Thomas/Saint John respectively.

17
18 So, regarding this one. The trammel net is something that is
19 prohibited already in U.S.V.I. territorial waters. So, this would
20 be something that will make that regulation compatible. In Puerto
21 Rico, trammel nets are something that is allowed to be used in
22 state waters. However, trammel nets have been already prohibited
23 for use in the EEZ for reef fish and spiny lobster. So, this will
24 be extending those prohibitions of this gear to the new pelagic
25 species, as well as to all fish because it is for all fish. So,
26 this also includes non-managed species.

27
28 Actions 1(d), 2(d) and 3(d) will modify the use of purse seines in
29 federal waters around Puerto Rico, Saint Croix, and Saint
30 Thomas/Saint John. So, this one will prohibit the use of purse
31 seines for all fishing. Not only managed species, but also non-
32 managed species.

33
34 This is a gear that is not used in the waters of Puerto Rico or in
35 the U.S. Virgin Islands, so this is a preventive measure that will
36 prohibit the use or the potential use in the future.

37
38 The last action is a requirement for use of descending devices for
39 the reef fish component of the Puerto Rico, Saint Croix, Saint
40 Thomas/Saint John FMPs. The alternative that was chosen for all
41 three islands is to "require descending device be on board a
42 commercial or recreational vessel and readily available for use
43 while fishing for or possessing species in the reef fish component
44 of the Puerto Rico, Saint Croix and Saint Thomas/Saint John FMPs."

45
46 I don't know if you guys want me to read what the descending device
47 is. I can read it. "For the purpose of this requirement, a
48 "descending device" means an instrument to which is attached a

1 minimum of 16 ounces of weight and a length of line that will
2 release the fish at the depth from which the fish was caught or a
3 minimum of 60-feet. The descending device attaches to the fish's
4 mouth or is a container that will hold the fish. The device MUST
5 be capable of releasing the fish automatically, by the actions of
6 the operator of the device, or by allowing the fish to escape on
7 its own. Since minimizing surface time is critical to increasing
8 survival, descending devices shall be readily available for use
9 while engaged in fishing."

10
11 As a reminder, this regulation would not require persons to use
12 the descending device, right, because the use of a descending
13 device is not always needed. Right? So, for those fish that show
14 signs of barotrauma, the requirement is to have the descending
15 device ready for use in the vessel. Right? So, in case you need
16 it, then you go ahead and use it as a way of minimizing the
17 mortality of the fish that you are returning to the water.

18
19 Now, as a reminder to the Council, this was one action that needed
20 the Council to take some measures regarding outreach and education,
21 because, obviously, this is going to be a requirement for fishers,
22 and there's a lot to do. Right? We cannot require something from
23 a person if there is not a proper outreach in education of what
24 they have to do. Right?

25
26 We also talked about the descending devices having a very low cost.
27 You can create a descending device with materials that you may
28 already have in your boat. There are also programs that can provide
29 descending devices for you, or they can also be purchased, but
30 they are not very expensive. So, all of this was discussed in the
31 past in previous meetings.

32
33 So, what are the action items and the next steps? So, during this
34 meeting the Council would review the final draft of the amendment,
35 version 3.3, that is in your briefing books. There's also a draft
36 codified text, which is basically the regulations that would be
37 implementing this amendment, so that regulations can become on the
38 changes that were presented and preferred in here.

39
40 And then if the Council wants to move forward, then at this meeting
41 they can approve the amendment for submission to the Secretary of
42 Commerce, allowing staff to make editorial edits. So that's
43 something that can be done today. Before we move forward with
44 this, Kate is going to be bringing up the draft codified text for
45 your review.

46
47 The plan is, for NMFS to prepare the notice of availability for
48 this amendment in 2024, which is basically publishing the amendment

1 for your review. And then, after that, the proposed rule that would
2 be implementing that amendment will also publish. So, there will
3 be two opportunities for the public to comment. One for the
4 amendment and one to the proposed regulations.

5
6 When the time comes to do that, there will be instructions in
7 fishery bulletins and other outreach and education about this that
8 I'm pretty sure staff from the Council will ensure this goes out
9 and everybody has an opportunity to know what's going on. I believe
10 that this may include also, you know, having information in
11 Spanish. So, after that, NMFS would prepare a final rule, right,
12 if everything goes well, and then that's also published. And then,
13 after that, there's a cooling period and then the amendment will
14 become effective.

15
16 So, if we move forward today, then this is something that will
17 most likely, I mean, assuming that everything moves
18 straightforward that could become effective in 2024. So, I think
19 either questions first or and then Kate can go ahead and review
20 the codified text, or however you want to do this, Mr. Chair.

21
22 **CARLOS FARCHETTE:** Miguel?

23
24 **MIGUEL A. ROLÓN:** We were discussing, María and Kate, the
25 possibility of allowing the public to get information on the
26 descending devices. Kate suggested that the mere fact that you
27 approve this doesn't mean that you all have the implementation all
28 at the same time on a specific day. Can you elaborate a little bit
29 more?

30
31 **KATHERINE M. ZAMBONI:** Sure. Thank you for the question. Kate
32 Zamboni for the record. When NMFS publishes a proposed rule, it
33 often, for things like this, will ask the public, "Hey, let us
34 know if you think additional time is needed to come into
35 compliance," in which case, it is not uncommon for the agency to
36 delay either the effective date of a certain part of the rule or
37 the requirement to have those descending devices, you know, not
38 get kicked in for some period of time.

39
40 And so, I would encourage the Council to just, instead of directing
41 NMFS how much time is needed, just let NMFS do that as part of a
42 proposed rule process, in which case the public can comment on,
43 how much time is needed. Again, the default is generally a 30-day
44 cooling off period. And so, if it makes sense for the public to
45 have more time than that, NMFS can ask for can ask the public for
46 that input.

47
48 **MIGUEL A. ROLÓN:** So, if I may, Mr. Chair. After the presentation

1 then, what do you need from the Council at this time is a motion
2 to what?

3
4 **KATHERINE M. ZAMBONI:** So, I haven't gone over the codified text
5 yet, and María said-- unless-- I don't know. I can go over the
6 codified text now, or if there's questions about María's
7 presentation it might make sense to entertain those or if there's
8 any concerns about the framework amendment that's in the briefing
9 book. Chair, would you like me to proceed with the codified text?

10
11 **CARLOS FARCHETTE:** Sure.

12
13 **KATHERINE M. ZAMBONI:** Okay. Can you pull that up? It is part of
14 the briefing material. So, I'll just walk through what the changes
15 would be in the regulations. And it starts with the table, if you
16 will, that's codified in 50 CFR 600.725.

17
18 And this is the table that lays out what the authorized gear types
19 are. What this amendment would do-- So first, we see the Puerto
20 Rico FMP. And under B, if you scroll down to the next page, under
21 the commercial fishery, right there, the word "gillnet" will no
22 longer appear. And so, it's deleted from there. But currently,
23 gillnet is an authorized gear for reef fish that are managed under
24 the FMP. And that's going to go away because this, what I'll call
25 the surface gillnet, is only going to be used for the non-FMP
26 species.

27
28 And then similarly, if you see under the pelagic fish, the word
29 "gillnet" will be gone. It will be retained, for the non-FMP.
30 You're not seeing that because there's no change, but that will
31 remain there. And under G, yeah, right where you are, the word
32 "trawl" will be gone because that will no longer be an authorized
33 gear for any fish species in the Puerto Rico EEZ.

34
35 And then similar changes for Saint Croix. So, again, the word
36 "gillnet" will be removed from the reef fish FMP species for-- Oh,
37 it's not there anyway. It's there for pelagic, currently, under B.
38 And so that will be deleted from the commercial. It will be
39 retained, for the non-FMP pelagic and "trawl" will be removed from
40 non-FMP commercial fishery under G. And then same changes for Saint
41 Thomas/Saint John.

42
43 So, that's the authorized gear. And then if you continue scrolling
44 down, when we get to regulations that are specific for each island
45 FMP, it starts with 50 CFR 622.437. This is specific to Puerto
46 Rico. It is currently a section that talks about prohibited gear,
47 and it's going to be brought in now to cover prohibited and
48 required gear and methods. And that first sentence is the general

1 prohibition now for trawl, trammel net and purse seines. They're
2 all prohibited. What that means is, by having it show up here as
3 a prohibited gear, no one can petition the Council to allow it to
4 use it even though it's not an authorized gear.

5
6 The next change would be in Subparagraph (a). We're going to define
7 reef fish so it's pretty clear to everybody that it means the
8 species that are defined in 622.431. Again, that's specific to
9 Puerto Rico.

10
11 And then the rest of it is just like a little bit reorganized. So,
12 you have the poisons. That doesn't change at all. For powerheads,
13 we're going to delete what used to read as "a rebuttable," that
14 said, "the possession of a mutilated reef fish in or from the EEZ
15 around Puerto Rico and a powerhead constitutes a rebuttable
16 presumption." We're going to take that out. And then under (3),
17 it's just going to say "gillnet." Whereas it used to say gillnets
18 and trammel nets, there's no longer now a need to say, "Trammel
19 nets are going to be prohibited for reef fish" because now it's
20 just prohibited for everything up above.

21
22 Similarly, we're going to take out the language about there being
23 a "rebuttable presumption." We're going to get into the
24 requirements for using a gillnet a little bit further down, but,
25 for now, you'll now see a new paragraph (4). This is going to be
26 the requirement to have a descending device to be on vessel and
27 ready for use. This doesn't talk about when it would be effective.
28 Again, we could handle that in the final rule, after getting
29 comments on it. So, that's going to lay out the requirements for
30 the descending device.

31
32 And then, if you continue to scroll down, there's now a new
33 subparagraph (b). Oh, and I'll note that the descending device, it
34 is specific to the reef fish, right? So that's why it shows up
35 under that subparagraph (a). Subparagraph (b) is just currently
36 blank. It's been reserved. So, we're going to use it now for
37 pelagic fish. And like for the reef fish, we're going to tell the
38 public exactly what we mean by that, and it's the species defined
39 in 622.431 for Puerto Rico. And, it's going to specifically say
40 that "A gill net cannot be used in the EEZ around Puerto Rico to
41 fish for pelagic fish," meaning those pelagic fish that are
42 managed. (c) is currently for spiny lobster. We don't change (c)(1)
43 but for (c)(2), we're going to take out trammel nets. Again,
44 because it's now prohibited for all the fish species taking out
45 that rebuttable presumption language.

46
47 And then we have a new subparagraph (d). So, Subparagraph (d) is
48 not specific to reef fish. It's not specific to pelagic. It's not

1 specific to spiny lobster. It applies to everything. And this is
2 where you see that a gillnet may be used in EEEZ around, in this
3 case Puerto Rico, to fish for species not listed in 622.431. So,
4 these are your not managed species. It can be used by commercial
5 fishermen if the gillnet meets the following requirements. And so
6 here are the specifications that the Council has specified. Has to
7 be tended to or supervised at all times; the mesh size
8 requirements; the limit to one gillnet per vessel; the maximum
9 length; and the fact that it has to remain contact with the surface
10 and can't be used within 20 feet of the bottom.

11
12 And then all those changes get repeated, in 622.477, which is
13 specific to Saint Croix. So, I won't repeat everything, but the
14 changes are exactly the same.

15
16 And then, scrolling further down, 622.512 would contain all those,
17 changes for the Saint Thomas/Saint John FMP. And I'm happy to
18 entertain any questions about that.

19
20 **CARLOS FARCHETTE:** Any Council member wants-- I have Tony Blanchard
21 that wants to make a comment about descending device, but I want
22 to give the Council members priority. Everybody good? Okay.
23 Blanchard.

24
25 **LOUIS A. BLANCHARD:** Morning, everybody. Tony Blanchard for the
26 record, commercial Fisher. The problem I see with descending device
27 is, here we're going to add on another regulation. The practicality
28 of the descending device, to me, doesn't really make sense. And I
29 will explain to you why.

30
31 I think it's more practical, since we're using this for reef fish,
32 to use the syringe where you poke the fish to release the air,
33 than the descending device. You are pulling in the fish from
34 bottom, and then you want to slack him back down. Number 1, you
35 got him hooked up to a device to begin with. He's an automatic
36 target.

37
38 I think it would be more practical for fishermen to use the syringe
39 than to actually try and take the time to put each fish in a hook
40 or whatever it is, or in a tube, whatever you choose to use, and
41 send it down to the bottom. Now I don't know how much of us in
42 here have actually fished with traps, especially with traps. You
43 might have 10, 15 fish that need to go to the bottom. The amount
44 of time that is expended the fish suffering is number 1 and number
45 2, to go and do the same process with 15 fishes is very time
46 consuming.

47
48 So, to me, I think what we have here is a problem that I have seen

1 throughout the years where we have regulations. There's no way to
2 enforce the regulations to begin with. And some of the regulations
3 just don't make sense to a man that has been doing this for so
4 long.

5
6 So, the practicality for me, it makes less sense to do that. It's
7 better if you just tell me, take the needle, poke the fish, and
8 throw him back over border. That's what makes sense to me. But to
9 tell me I could take another half hour to do my job, number 1,
10 you're putting the fish to suffer more than anything else. The
11 chances of them making it back to the bottom is probably good.
12 It's probably less than you just throwing them back over.

13
14 So here, we would have another regulation that would be put on the
15 fishers that at the end of the day, I really don't think we're
16 getting any benefits out of it, meaning the fishery. So that's
17 basically my comment on that.

18
19 The other part I see is where they say, when we have nets, we can't
20 have them no closer than 20 feet to the bottom. Once again, how
21 are you going to manage this? Who is going to actually go overboard
22 when the net is slack to make sure you're at least 20 feet from
23 the bottom with that net?

24
25 So once again, we have regulations here that makes no sense.
26 Because if you can't enforce it, it doesn't make no sense. Why
27 have the regulation? All we are having this regulation upon
28 regulation upon regulation that don't make no sense and can't be
29 enforced. And then you want to ask the officials or let's say,
30 MRIP, to go out there and explain to the fishers why they need to
31 use these devices.

32
33 I go and I tell the rest of them fishermen that this is what we
34 got to do, to send the fish back to bottom. They go watch me and
35 laugh. Because they know I know better. So, I think we need to
36 stop fooling each other, and let's just be honest with what is
37 practical and not practical? And what can be enforced and what
38 can't be enforced? And that may minimize some of the headache and
39 the leg work. That's just my comment.

40
41 **CARLOS FARCHETTE:** Thank you, Tony.

42
43 **KATHERINE M. ZAMBONI:** So, I don't know if that was directed to
44 me. But just in response to the codified text, the proposed text.
45 Again, the language would not require anybody to use the descending
46 device, and I think that's very much on purpose because, you know,
47 to your point, how would you enforce that? Not everyone might quite
48 know exactly how to use it. But the requirement is simply to have

1 one on board for those that would know when to use it appropriately
2 and how to do it. It is there and ready for use. But there's no
3 requirement that it actually be put to use, so that we don't
4 inadvertently create more harm than good here. But others may have
5 more to say about the gentleman's comments.

6

7 **CARLOS FARCHETTE:** Clay.

8

9 **CLAY PORCH:** Yeah. And I appreciate Mr. Blanchard's comments. We've
10 had these same discussions with the South Atlantic and Gulf of
11 Mexico Fishery Management Councils. It is particularly challenging
12 for commercial fishermen who are landing a lot of fish to release
13 all these with the typical single fish descender devices.

14

15 Venting, where you use a hypodermic needle to vent the fish, can
16 work, but it has to be done right. So, professionals who do it a
17 lot probably can do it pretty well. We find a lot of times
18 recreational fishermen don't do it so well, and descending devices
19 work better. But I've also seen some pretty ingenious devices where
20 people use things like, built crates and invert them, take the
21 fish down to the bottom. You can put multiple fish in them at once.

22

23 So, I wouldn't throw the baby out with the bathwater. I think there
24 are some ways fishermen can come up with to get the fish down to
25 the bottom quickly and protect them from predators. But I agree
26 that it's not always completely practical for commercial fishermen
27 to use the typical descender devices that people think of, you
28 know, like, the things with a little hook that drag them down to
29 the bottom.

30

31 **CARLOS FARCHETTE:** Miguel?

32

33 **MIGUEL A. ROLÓN:** Yeah. I would go back to what Kate said. You
34 know? This is not a regulation that will force everybody to do it.
35 In addition, we received money from National Marine Fisheries
36 Service to buy the darn thing. \$25,000. I had to buy it before
37 December 31st without any money because we had problem with the
38 [inaudible].

39

40 We, also hired, Dr. Michelle Schärer. She's working with Marcos,
41 and they put together a video for outreach and education and Dr.
42 Alida Ortiz is working on a fact sheet. So, the Council already
43 decided, in a way, to go with the descending device, but we have
44 not decided, and I believe that what Kate said is the best way,
45 it's not to have a regulation that would be mandatory for
46 everybody, for every fish, to hook it on the descending device and
47 send it down there. It would be impractical to do it. It will be
48 almost laughable. It already is. Commercial fishers are laughing

1 about it.

2
3 So, if the Council agrees with what we have seen today, we can
4 proceed with this. Also, we are going to be distributing the
5 descending devices. Some people will have it at hand. Recreational
6 fishermen have approached me and said, "Miguel, if you had that,
7 I would like to use it." And, of course, you cannot compare the
8 operation of a recreational fisher with a commercial fisher for
9 the same species, but it's there.

10
11 **CARLOS FARCHETTE:** María?

12
13 **MARÍA LÓPEZ-MERCER:** So, one of the reasons that the Council wanted
14 to do this was because it is part of what is considered best
15 fishing practices, right? So, this fish that you return to the
16 water, maybe a regulatory discard, a fish to which a regulation
17 might apply. For example, a fish that is in a closure, a fish that
18 doesn't comply with the minimum size. So, these are fish that, you
19 know, by law, you are required to return to the water, right?

20
21 So many of the times because of the fishing gear or the way, like
22 you said, there's a trap that has many fish, many of these times,
23 these fish are not going to make it. So, what this what this is
24 trying to do is increase the opportunities for those fish to
25 survive. That's it. Right? We want to give them the best chance.

26
27 There's the other type of discards, which are the ones that are
28 more related to the market. There's going to be fish that you're,
29 like, "I'm not keeping this fish because I cannot do anything with
30 this," or "it's not a desirable species," etcetera. Again, what
31 this is trying to do is to improve the chances for this fish to
32 live.

33
34 There are going to be some that are not going to make it, but there
35 may be others that may make it because of something that you do.
36 But again, this is not required. It's just something that is a
37 best practice. Right?

38
39 There are other fishers that may prefer to vent the fish, right?
40 And there's not a requirement to vent the fish. So, what we're
41 trying to do here, what the Council is trying to do with this is
42 to improve the chances for those fish that are returned to the
43 water. You know, this is not so much about enforcement, but this
44 is more about caring for the resource, right? It's, like, if we
45 want to see it that way.

46
47 How can I, if I'm taking so many measures to protect the species,
48 why not take that extra step, when I'm able to, because, again, as

1 I said, you are not always going to be able to return that fish
2 alive. Maybe you return the fish and maybe a shark will eat it. Or
3 the fish is in so much trouble that there's no way. I mean, if you
4 catch a fish that is from very deep water, why are you even using
5 a descending device? That fish is already a goner. Right? So, you
6 use your expertise and your experience to decide what to do. Okay?

7
8 Again, what we're trying to do is increase the chances of these
9 fish, that we protect so much, to survive.

10
11 **CARLOS FARCHETTE:** Clay?

12
13 **CLAY PORCH:** Yeah. I would just add that there's abundant research
14 that various types of descending devices and venting, when it's
15 done right, decreases the discard mortality substantially. And,
16 actually, even if the fish comes out with the stomach everted out
17 of its mouth, if you can get it down, a lot of them, surprisingly,
18 survive.

19
20 In the South Atlantic and Gulf Councils, sometimes where we can
21 demonstrate that the devices are being used and estimate a lower
22 discard mortality rate, it translates into more fish that can be
23 landed. Because what matters is the total number that's being
24 killed by the fishery. So, if you can reduce the dead discards, it
25 means you can keep more in the boat.

26
27 So, it makes sense to pursue, regulations like this. And even if
28 you're not requiring the individual to use them, that's difficult
29 to enforce, a lot of the Councils are still investing heavily in
30 education, teaching people how to use them, particularly for the
31 recreational fishery.

32
33 **CARLOS FARCHETTE:** Okay. No. I agree. The more tools you have for
34 fish to survive, the better. But when it comes to the outreach and
35 education, that video that's being developed, I would like a copy
36 to put in the Saint Croix enforcement office. Because they have a
37 monitor as you walk in there and while you're waiting for your
38 boat registration, you can see this descending device being used.
39 I think that's kind of important to have there. Especially, like
40 Clay said, the recreational fisher more than the commercial fisher.

41
42 **MARÍA LÓPEZ-MERCER:** So, the next step is if the Council wants to
43 proceed with this amendment, and they thinking that this amendment
44 and the regulations are ready to move forward, then they can put
45 a motion to approve the amendment for submission to the secretary.
46 And then a motion to deem the codified text. We can help staff to
47 create those motions if you want to.

48

1 **CARLOS FARCHETTE:** So, what we'll do is we'll break for lunch while
2 the staff develops the motions and then, come back in and take
3 care of that. Sounds good? Yeah. One hour. So, It's 1:22. So, we'll
4 be back at 2:30.

5
6 (Whereupon, the meeting recessed for lunch on December 5, 2023.)

7
8 - - -

9
10 DECEMBER 5, 2023

11
12 TUESDAY AFTERNOON SESSION

13
14 - - -

15 **CARLOS FARCHETTE:** Okay. We're going to get back to work. So we're
16 going to go over the motion for the trawl net gear and descending
17 device. We need to put an "l" after "traw". Down below also. Number
18 5.

19
20 Alright. Okay, so here are the motions for the net gear and
21 descending device. So, we need a Council member to move on this.

22
23 **VANESSA RAMÍREZ:** To present the motion, the *Council moves to*
24 *approve Amendment 2 to the Puerto Rico, Saint Croix and Saint*
25 *Thomas/Saint John Fishery Management Plans: Trawl, Net Gear and*
26 *Descending Devices with preferred alternative/sub-alternatives for*
27 *each action as identified in the presentation and submit the*
28 *amendment to the Secretary of Commerce for approval.*

29
30 **JAMES R. KREGLO:** Second.

31
32 **CARLOS FARCHETTE:** Okay. So, motion by Vanessa, seconded by Kreglo.

33
34 The motion is, "the Council moves to approve Amendment 2 to the
35 Puerto Rico, Saint Croix and Saint Thomas/Saint John Fishery
36 Management Plans: Trawl, Net Gear and Descending Devices with
37 preferred alternative/sub-alternatives for each action as
38 identified in the presentation and submit the amendment to the
39 Secretary of Commerce for approval."

40
41 Any discussion? Having none, any nays? So, all in favor, say aye.

42
43 **GROUP:** Aye. Aye.

44
45 **CARLOS FARCHETTE:** Okay. Any nays? Any abstention? One absent,
46 which is Sennai Habtes. *Motion carries.*

47
48 Our next motion, Kreglo?

1
2 **JAMES R. KREGLO:** I move that *the Council moves to allow staff to*
3 *make editorial, non-substantive changes to the Amendment 2 to*
4 *Puerto Rico, Saint Croix, Saint Thomas/Saint John Fishery*
5 *Management Plans: Trawl, Net gear, and Descent Devices. Any changes*
6 *will be reviewed by the Council Chair.*
7
8 **CARLOS FARCHETTE:** Need a second.
9
10 **VANESSA RAMÍREZ:** Second. Okay.
11
12 **CARLOS FARCHETTE:** Motion made by James Kreglo, seconded by Vanessa
13 Ramírez.
14
15 The motion is "the Council moves to allow staff to make editorial,
16 non-substantive changes to the Amendment 2 to Puerto Rico, Saint
17 Croix, Saint Thomas/Saint John Fishery Management Plans: Trawl" I
18 think there is an "l" "Net gear, and Descending Devices. Any
19 changes will be reviewed by the Council Chair."
20
21 All in favor, say aye.
22
23 **GROUP:** Aye.
24
25 **CARLOS FARCHETTE:** First, I ask if there's any more discussion on
26 that. I missed that one. Okay. Any nays? Any abstention? *Motion*
27 *carries.*
28
29 Number 5?
30
31 **VANESSA RAMÍREZ:** Motion reads, "*The Council moves to deem the*
32 *regulations presented by staff as necessary and appropriate for*
33 *implementing Amendment 2 to the Puerto Rico, Saint Croix, Saint*
34 *Thomas/Saint John Fishery Management Plans: Trawl, Net Gear and*
35 *Descending Devices, and to give the Council Chair the authority to*
36 *deem any modifications made to the proposed rule as necessary and*
37 *appropriate for implementing Amendment 2.*"
38
39 **CARLOS FARCHETTE:** Okay. Do we have a second?
40
41 **ROBERTO SABATER:** I second, Roberto Sabater.
42
43 **CARLOS FARCHETTE:** Motion by Vanessa, seconded by Sabater.
44
45 Motion is, "The Council moves to deem the regulations presented by
46 staff as necessary and appropriate for implementing Amendment 2 to
47 the Puerto Rico, Saint Croix, Saint Thomas/Saint John Fishery
48 Management Plans: Trawl, Net Gear and Descending Devices, and to

1 give the Council Chair the authority to deem any modifications
2 made to the proposed rule as necessary and appropriate for
3 implementing Amendment 2.”

4

5 Any discussion? Sennai?

6

7 **SENNAI HABTES:** So just clarify for me again as to why we need to
8 have it where it can't go back for review. Like, I just what kind
9 of amendments will the chair be making towards that one? That's
10 just my one question. Is it just grammatical--

11

12 **CARLOS FARCHETTE:** I believe is just-- Yeah. By staff.

13

14 **SENNAI HABTES:** Okay.

15

16 **CARLOS FARCHETTE:** Katherine?

17

18 **KATHERINE M. ZAMBONI:** I'll answer that question. Oftentimes in
19 the rule making process, staff might identify a need to make a
20 change and rather than bringing it back to the whole Council, this
21 motion basically empowers the Chair to review those changes and
22 approve them. And this is all tied to-- like, the regulations have
23 to be, what is the phrase? Necessary and appropriate, for
24 implementing the amendment. And so, this is the Council sometimes
25 acting through the Chair saying “Yes, we agree that these
26 regulations are necessary and appropriate to implement the thing
27 that we want done.”

28

29 But the changes wouldn't originate from the Chair. The changes
30 would originate from staff and it's, again, just usually as part
31 of the rulemaking process. Maybe we identify a better way of saying
32 something or maybe even through the public comment process, you
33 know, there is a desire to make a change.

34

35 **SENNAI HABTES:** Great. Thanks, Kate. That satisfies my question.

36

37 **CARLOS FARCHETTE:** Thanks, Sennai. Thank you, Kate.

38

39 So, any further discussion? Hearing none, all in favor say aye.

40

41 **GROUP:** Aye.

42

43 **CARLOS FARCHETTE:** Any nays? Any abstentions? Hearing none, *motion*
44 *carries.*

45

46 Alrighty. So, we're going to make a little change to-- María, are
47 you finished? Yeah, okay. Thanks. A little change to the agenda
48 and we're going to have Wesley Merten discuss Updates on

1 Dolphinfish Project.
2
3 **CRISTINA OLÁN MARTÍNEZ:** Wessley can you hear us?
4
5 **GRACIELA GARCÍA-MOLINER:** Wess, can you hear us? Wess? Wess, your
6 microphone is off. Can you hear us?
7
8 **WESSLEY MERTEN:** Can you guys hear me?
9
10 **GRACIELA GARCÍA-MOLINER:** Perfect. Thank you.
11
12 **WESSLEY MERTEN:** Hello. Can you guys hear me?
13
14 **CARLOS FARCHETTE:** Yes.
15
16 **WESSLEY MERTEN:** Okay. Thank you very much. I forgot I was an hour
17 back from Atlantic Standard Time. So, let me just pull up the
18 presentation. Okay. So, let's see. Do you see presenter view or
19 the actual presentation view?
20
21 **CRISTINA OLÁN MARTÍNEZ:** We are not seeing your presentation.
22
23 **WESSLEY MERTEN:** Okay. Hold on one second. Okay. So, you should
24 see the presentation view now. Is that correct?
25
26 **GRACIELA GARCÍA-MOLINER:** Yes.

27 28 **Update on Dolphinfish Project-Wessley Merten**

29
30 **WESSLEY MERTEN:** Okay. Excellent. Alright. So, sorry about that.
31 Good afternoon, ladies and gentlemen. Thank you very much for the
32 opportunity to present here today. So, our last talk with regards
33 to our research was actually on August 16th, this past summer. And
34 then the one previous to that, to the Council was on December 8th,
35 2021. So, so 24 months ago. We also presented our FAD research 18
36 months ago.
37
38 And so, I just like to thank the Caribbean Fishery Management
39 Council for your continual engagement with our research program
40 and interest in our research, especially during these important
41 meetings. And so, today's talk is really to serve as an update to
42 this past Summer's talk.
43
44 So, just as a refresher, our tagging program known as Dolphinfish
45 Research Program is an international tagging program designed to
46 collect movement, life history, and population trend data on the
47 species. This program began as a state funded study in South
48 Carolina back in 2002. It went to the private sector in 2006, and

1 we are now at the end of our 22nd year. With more than 35,000 tagged
2 dolphinfish, 808 recaptures and 97 satellite tag deployed and 14
3 publications, our citizen driven effort is continuing to expand.
4

5 And now what dovetails nice with our tagging work is working with
6 anglers relative to fish aggregating devices. And so currently
7 there are 20 active FADs up the North Coast of Puerto Rico, and
8 we've logged 2,996 catch and effort trip reports since this work
9 began. 1,171 fish have been tagged and released at FADs within the
10 Caribbean Sea, and that is as of today.
11

12 With our FAD work, we are also deploying acoustic tags relative to
13 the FADs, and we have involved 51 vessels in our catch and effort
14 research over time. And so, two papers have been published with
15 relation to this research effort. And so, I present that
16 information to you just to provide you with the origin of the data
17 that we present during our talks to the Council and for our talk
18 today.
19

20 And so, my main objective today is to provide an update of specific
21 data collected through the DRP and our FAD work in the U.S.
22 Caribbean Sea and the broader Caribbean Sea basin.
23

24 So, I'll be presenting 2 case studies. The first is of commercial
25 catch trends off Southern D.R. And then, I'm going to provide a
26 demo of our entire DRP movement dataset, to focus in on the data
27 gaps that remain to be explained to really help us better
28 understand this resource. And so, for case study 1, let's get into
29 commercial catch off Southern D.R. from July until November this
30 past year.
31

32 And so, as I presented this past August, I actually presented this
33 exact slide. We began collecting daily catch data from an active
34 commercial fisherman, fishing south of D.R. And so, over this time
35 period, we logged, 16 trips. So, the average, landings over these
36 trips were 416 pounds of dolphinfish per outing, with a maximum of
37 670 pounds during one trip and a minimum of 40. In total, over
38 those 16 outings, there was 5,430 pounds of dolphinfish landed
39 from this one commercial boat fishing south of D.R.
40

41 Now we've logged over 50 trips up to this point, which is starting
42 to show some more relevant data and trends to our ongoing quest,
43 to better understand population exploitation patterns in the
44 region. And so, a couple points here. So, the image on the left
45 are the images we received after each trip, along with the weight
46 of the species landed. So, the angler actually provides the weight
47 of all species depicted in the images.
48

1 The combo plot in the middle of the slide depicts time on the x-
2 axis and the cumulative dolphinfish catch in pounds on the first
3 y-axis on the left. And then, the number of trips is on the
4 secondary y-axis. So, the blue and the green lines on the x-axis
5 denote where the angler was focusing fishing effort. So blue on
6 the x-axis is for where he's fishing at the 'balsas,' and the
7 'balsas' are also known as the fish aggregating devices in D.R.
8 Green is when he's fishing towards coastal areas.

9
10 So really up until the end of September, all trips were offshore
11 to the 'balsas.' And then, from the end of September until the end
12 of November, just a few days ago, basically over the last 24 trips,
13 only 7 trips were offshore to visit the 'balsas.' And so, effort
14 has shifted more toward the coast, and hence he's catching other
15 types of species, such as wahoo, kings, you know, kingfish,
16 barracuda, tuna, and marlin as well. Which is starting to make up
17 a greater composition of the catch than when visiting the 'balsas'
18 offshore, which is mainly mahi.

19
20 And so, over the 38 outings in which there's actually dolphinfish
21 present in the catch. The average amount of dolphinfish in those
22 outings is 298 pounds per outing, with a maximum of 700 pounds per
23 outing, and a minimum of 12 pounds in an outing. And so, I will
24 state that he mentions that a 1,000 pounds is considered a good
25 outing for a dolphinfish catch, fishing south of D.R. In total
26 we've logged 11,348 pounds in 38 outings from one boat south of
27 D.R.

28
29 And just to provide a couple images here of what these image
30 reports look like. So, this is a typical offshore catch from
31 October 10th, just, you know, about 6 weeks ago, of 260 pounds of
32 dolphinfish caught offshore at the 'balsas.'

33
34 I will state though that there do appear to be some smaller
35 undersized fish mixed into this catch. And so, there are currently
36 actually no regulations, you know, whatsoever for dolphinfish in
37 D.R. No minimum sizes, no commercial daily quotas, bag limits,
38 anything like that for commercial or recreational sector.

39
40 Now the angler reports that fishing the 'balsas' really is from
41 February to the end of September. And so, we're really interested
42 to see how this winter and subsequent spring that's coming up is
43 going to look for his offshore effort.

44
45 And now, the coastal effort though, in a coastal catch is a stark
46 contrast to the offshore fishing. And so, yes, small marlin is
47 being landed here during these coastal outings, along with 100 of
48 pounds of barracuda on certain days, wahoo and kingfish. And so,

1 these images should, should raise your eyebrows. They certainly
2 raise mine. They shed further light on our need to collect data on
3 pelagic catch throughout the Caribbean basin, where data is
4 lacking. I mean, data is definitely lacking in D.R., but it's also
5 lacking in Puerto Rico, the Virgin Islands, Haiti, Jamaica, the
6 Lesser Antilles and throughout the Caribbean basin. And so, we're
7 trying hard to shed some light on these issues.

8
9 And so, you know folks, one of the big questions is, there's an
10 FAO UN FISH4ACP project that's ramping up in D.R., and the question
11 is, how to make the D.R. dolphinfish fishery, and just more
12 generally their FAD and their pelagic fishery more sustainable?
13 And so, I presented this slide this past August, and I wanted to
14 share it again here, today, due to its relevance.

15
16 And recently, D.R. just submitted their 2021 dolphinfish
17 commercial landings value, which is the highest yet. And so, we
18 have had discussions with government officials in D.R. that have
19 stated that there's about 2,369, dorado anglers. And so, remember,
20 we're only recording one catch information, from one angler. The
21 values that we're getting from him are really, to us, kind of
22 shocking. But point being is that with this most recent FAO
23 estimate, the D.R. commercial sector is now nearly the equivalent
24 size as historically the largest single landing entity in our
25 Western Central Atlantic region, which is the Eastern Florida shelf
26 recreational sector.

27
28 And so, the bar plot here on this slide shows the Eastern Florida
29 recreational sector as red, and the D.R. commercial sector as
30 black, during the most recent year when there were estimates for
31 both landings of dolphinfish. Now, if you were to go from D.R. to
32 the Florida Straits along the North Coast through the Old Bahamas
33 Channel, that's only 700 miles. If you were to go from D.R. to the
34 loop current in the Florida Straits via the Caribbean Sea, that's
35 1,000 miles.

36
37 And so, what we have here, is basically a very large fishery that
38 is up current of the Florida Straits, basically in very close
39 proximity to where one of the biggest issues for the species is
40 currently being depicted and that is in Florida Straits where we've
41 seen a stark decline in catch, in size, and fishery trends reported
42 by anglers from Key West up to Cape Canaveral.

43
44 And so, you know, going back to the angler that we have been
45 monitoring. We've only monitored 38 outings, but the amount of
46 fish that we've documented basically almost constitutes 1% of this
47 annual value that D.R. is reporting. But he claims that he makes
48 a 100 to 150 outings per year. And so, we don't know what, we will

1 have when we get to that point. But point being that, you know, we
2 think that this estimate from the government of D.R. is still an
3 underestimate.

4
5 Now here is a plot just showing the U.S. MRIP data for Eastern
6 Florida Shelf recreational sector, which is the red plot, red part
7 of the plot. And then we have the D.R. commercial landings, which
8 is the black part of this line plot. And so obviously the U.S.
9 East Florida recreational sector has been declining through time
10 since 2014. And the FAO D.R. commercial landings has been
11 increasing in time since 2021. But the slope of the D.R. landings
12 is of question, because fishing effort has been high south of D.R.
13 for at least the past 15 years.

14
15 There's a paper published by Wilson et al. from the University of
16 California, Santa Barbara, that depicted that in 2020, with survey
17 data from 2018 and 2019, there were 2,500 FADs south of D.R. And
18 so, there's anglers fishing those FADs. And so, you know, it's
19 likely that the amount of landings being reported, most recently
20 in 2021, could have been the same going back to 2018 and 2019. And
21 so, perhaps they've had this stable amount of catch of around
22 2,000,000 pounds per year, going back in this time series. But
23 right now, you know, as it looks on paper, it's showing an upward
24 trend.

25
26 Looking at all the U.S. MRIP data for the Gulf of Mexico and the
27 Atlantic Coast by state and group through wave 3 of 2023 showing
28 a downward trend for the U. S. recreational dolphinfish fishery.
29 Now if you look at just the total Atlantic recreational, which is
30 the top blue line, then you look at the gray line, which is just
31 the Atlantic Coast, and then the red line, which is the Eastern
32 Florida Shelf recreational sector. All of those are declining,
33 over this time series with the D.R. commercial fishery increasing.

34
35 But the last thing I wanted to point out here is that we lack data
36 in all these locations, these jurisdictions, labeled here in black.
37 And so, we have no data on dolphinfish commercial recreational
38 landings in the Bahamas, in Haiti, on through all the way the
39 southern Caribbean portion of this location over to, you know,
40 Guatemala. And so, we have a lot of uncertainty here with
41 exploitation patterns in this western part of the Caribbean Sea,
42 which is all up current of where we're getting all this input about
43 the decline of dolphin.

44
45 And so now, I'd just like to end here with a tangent into movements.
46 And the reason why I want to open this up is because there's also
47 talk about how the environment could be contributing to perhaps
48 maybe dolphinfish are moving out of the area due to increased sea

1 surface temperatures, or due to changes in heat transport related
2 with the Gulf Stream, environmental factors such as that.

3
4 And so, our program attempts to engage anglers in these
5 jurisdictions and to a good extent we do, but if you're wondering
6 how you could help, you could definitely help us get more connected
7 with anglers in any one of these jurisdictions to help tag dorado.
8 But we have tagged, you know, 35,000 fish over the past 22 years,
9 so we do have some data. And we also lack data in certain locations,
10 which is also important to point out.

11
12 And so here, the Anegada Passage is both a natural geographic
13 barrier between the Lesser and the Greater Antilles, but it's also
14 a natural break in our program's tagging activity. And so really
15 any tagging expedition here would really be very telling to
16 connectivity patterns between both zones of the Caribbean region,
17 being the Lesser Antilles and the Greater Antilles.

18
19 And I mean, get this, we've had over a 1,000 fish tagged south of
20 Anguilla, on down to Antigua, and Barbuda, Guadalupe, Barbados,
21 but only one fish was reported to the west. And that fish was
22 actually eaten by another bull, and then the tag was found in the
23 stomach contents of that bull south of D.R. And so technically we
24 haven't had a movement from the Lesser Antilles connecting the
25 western portion of this region.

26
27 And so, this white line just depicts where that tag was put in the
28 water, in Guadalupe, and then, a big bull ate that fish, and then
29 that fish was captured south of D.R. The angler examined the
30 stomach content, found the tag, and reported it to us. So, pretty
31 phenomenal.

32
33 But I will mention that from the East Coast we have had ten
34 recoveries in the Lesser Antilles. And so, we're seeing that
35 connectivity, but the opposite is not true. We're not seeing the
36 connectivity from the Lesser Antilles to the west. And so, the
37 question is, are fish moving from the northeastern coast of Brazil
38 up through the Lesser Antilles, and perhaps moving back into the
39 equatorial Atlantic? And so that remains a big question relative
40 to the movement of the species in our region.

41
42 Now moving over to Greater Antilles, and I only have a couple
43 slides left here, so I'll get through these pretty quick. So, our
44 satellite tagging around Puerto Rico has revealed some really
45 interesting connectivity patterns. We had one fish carry a tag for
46 almost 57 days down to the southern Caribbean region. That's that
47 bottom light blue line in the bottom of the screen.

48

1 Now we've also had a fish tag off San Juan move to just south of
2 Great Inagua, Bahamas. But those are our furthest deployments and
3 furthest dispersals from the U.S. Caribbean region. So, we really
4 lack data on movements into this part of the Sargasso Sea, and the
5 Western Central Atlantic, where perhaps this is an area that has
6 become a haven for this species in modern times, due to maybe
7 environmental patterns, but also exploitation patterns.

8
9 And so, we're continuing to try to get movement data in this part
10 of the region, but it's extremely difficult. This Thursday and
11 Friday, we'll be trying to deploy some geolocating tags off San
12 Juan with hopes that we get some movement data depicting how the
13 species could be utilizing these areas.

14
15 And then when you expand out into the broader Atlantic, we also
16 lack data in the North and the central part of the Atlantic Ocean.
17 We've only had two recoveries in this part of the ocean, and both
18 of those were for commercial longliners, in the past. And so, you
19 know, we're we strive, on an annual basis, to tag 2,000 fish, and
20 deploy a handful of satellite tags, but even in that amount of
21 effort over 22 years, we still lack a lot of information.

22
23 And so, our quest continues to gather more data on the species,
24 but hopefully both, the case study on the commercial effort and
25 catch in D.R., and this movement portion, has provided you some
26 additional information today.

27
28 And I'll just end by saying that this is a slide that we've included
29 before. One other trend or issue that's coming up nowadays, in the
30 past several months, is maybe size truncation and diminished stock
31 productivity in the population in the Western Central Atlantic
32 Ocean. And so, I'll end, with that and go to questions. Thank you,
33 Wes.

34 35 **Questions/Comments**

36
37 **CARLOS FARCHETTE:** Any questions for Wes? Vanessa?

38
39 **VANESSA RAMÍREZ:** Thank you. I just want to ask if some of these,
40 dolphins have been caught around the Caribbean on the island that
41 are importing to Puerto Rico now, if you have some information of
42 that?

43
44 **WESSLEY MERTEN:** So, if any of dolphinfish have been captured in
45 Puerto Rico?

46
47 **VANESSA RAMÍREZ:** Around Puerto Rico or the other islands that are
48 importing mahi to Puerto Rico. Usually around Guadalupe or those

1 islands down there.

2
3 **WESSLEY MERTEN:** Well, so as I stated towards the end there, we
4 have only that one record showing connectivity from that tag
5 discovered in the stomach contents in D.R. Every year we have
6 people tag fish in Barbados, Guadalupe, Antigua, and so we're
7 collecting that tagging data there. In the Lesser Antilles, we're
8 not collecting commercial catch data like we are in D.R. or to
9 some extent in Puerto Rico.

10
11 So, in Puerto Rico, we tag a lot of fish. We also monitor
12 recreational charter boats with vessel tracking devices. And so,
13 we see those catch trends. In August, I presented that that data.
14 Today, I didn't have the time to do that. But, I don't know if I'm
15 really getting to your question. I'm kind of not really
16 understanding your question fully, though.

17
18 **VANESSA RAMÍREZ:** Oh, it was just to know if those that have been
19 tagged in Puerto Rico have been going around and coming back.

20
21 **WESSLEY MERTEN:** Oh, okay. So that that's pointing. So, we've never
22 had fish tagged in Puerto Rico then come back to Puerto Rico waters
23 after say 200, 300 days. We have had fish tagged off the north
24 drop of the Virgin Islands show that type of behavior.

25
26 And so, we've had fish recovered off of the northern part of Saint
27 Thomas, after 104, up to like 260 days after they're tagged. But
28 in Puerto Rico waters, we haven't seen, what we call, revisit. Now
29 on the East Coast, we've seen revisits where, you know, small fish
30 are tagged off Florida or South Carolina, and then they're
31 recaptured a year later. But we don't have revisit data for Puerto
32 Rico.

33
34 **VANESSA RAMÍREZ:** Okay. Thanks.

35
36 **CARLOS FARCHETTE:** Thank you, Vanessa. So, Wess, what do you do
37 with all that fish? They export throughout the Caribbean?

38
39 **WESSLEY MERTEN:** No. From what we heard, direct communication with
40 government officials, is that it's all consumption on in Dominican
41 Republic. And now, keep in mind, the Punta Cana, La Romana, those
42 areas have just exploded in terms of size and resort capacity since
43 the 2000s. And so, what we're hearing is that the resorts are where
44 a lot of that meat is going to.

45
46 But what's shocking to me is the amount of barracuda being landed.
47 I mean, you know, some of the reports, there's 160 to 200 pounds
48 of barracuda. And I mean, obviously there's ciguatera poisoning

1 that could be in those types of fish. So, it just sheds light on
2 the fact that there are some significant fishery issues present,
3 you know? And our foundation's trying to help with dolphinfish,
4 but it's starting to gather just little snippets of data that are
5 raising eyebrows, at least to me, and I think to you as well.

6
7 **CARLOS FARCHETTE:** Yeah. So, I've had a question from a couple of
8 fishermen that wanted to know if, since the D.R. has 2500 FADs,
9 they believe that the dolphin migrating are being trapped by those
10 FADs and they're not reaching the U.S. Virgin Islands and Puerto
11 Rico. Is that possible?

12
13 **WESSLEY MERTEN:** So horizontal compression. That's the scientific
14 term that are talking about. So, the migration is being compressed
15 horizontally and so obviously gathering data on that is extremely
16 hard. But we have seen vertical compression for the species in
17 ocean basins where, you know, on the vertical z-axis, you have
18 fish being compressed to the top part of the water column. And so,
19 why couldn't you have the same true in the horizontal?

20
21 And so, yeah, when you have that amount of devices, buoys, all in
22 the pelagic realm. 2,000 feet of water, you know, 3,000 feet of
23 water, I don't know the depths of all of them, but they're out
24 there. You know, yeah, certainly we could probably have the species
25 hanging around if there's bait there. But quantitatively, there's
26 nothing showing horizontal compression.

27
28 **CARLOS FARCHETTE:** Okay. Thanks. Any, any more questions for Wess?
29 okay. Cristina?

30
31 **CRISTINA OLÁN MARTÍNEZ:** Marcos Hanke.

32
33 **MARCOS HANKE:** Thank you, Cristina. Thank you again. Thank you for
34 the great presentation like always. Question to you. I know by
35 fact that there are a lot of boats from the U.S., with good amount
36 of money, including clubs, that finance the deployment of FADs on
37 the D.R. in recent years. That's probably increasing the problem
38 on the matter of your discussion. But at the same time, they go
39 back to their States, and they start to complain about the lack of
40 dolphin. Is there any effort on education to the U.S. fleet that
41 do that kind of practice or organizations that are promoting
42 tournaments or promoting activities like that in the D.R.?

43
44 **WESSLEY MERTEN:** To the best of my knowledge, no. I don't know of
45 any talks of sustainable angling among tournaments or any type of
46 fishing in D.R. Now the angler that we're collecting data from,
47 he's also got another person that we're collecting data from. So,
48 we have two, but the other person, he doesn't fish as much, and

1 he's more coastal. And I've seen some even more shocking kind of
2 images come from him of small sailfish being landed and killed,
3 and, you know, it's really sad to see.

4
5 But again, you know, we've got this FAOUN, FISH-4ACP project that's
6 ramping up there. And I hope that officials with that project, and
7 the government can start to make some headway into gathering better
8 data, and spreading better education initiatives in D.R. It's the
9 only way that we can hope to bring back stock productivity across
10 the pelagic ecosystem.

11
12 I mean, so, yeah. Marcos, thank you for your question, but at the
13 best of my knowledge, I do not know of any initiatives in
14 tournaments to educate anglers about sustainable fishing practices
15 there.

16
17 **CARLOS FARCHETTE:** Thank you. Any more questions for Wess? Hearing
18 none, thank you, Wess.

19
20 **WESSLEY MERTEN:** Thank you all. Have a great day. Thank you very
21 much.

22
23 **CARLOS FARCHETTE:** Yeah. A quick question, Wess.

24
25 **WESSLEY MERTEN:** Yes.

26
27 **CARLOS FARCHETTE:** Maturity on wahoo. Do you have information on
28 that?

29
30 **WESSLEY MERTEN:** I wish. No. We don't. I've really set my set
31 sights on collecting more data on wahoo when we started 2 years
32 ago, so I'm very much in the infancy of collecting data on wahoo.
33 So, no. I do not know.

34
35 **CARLOS FARCHETTE:** Okay. Thanks. And Marcos, I didn't mean to
36 ignore your phone call. I missed it during lunch, but I'll call
37 you later on. Don't want you to think that I ignored you.

38
39 Thank you, Wess. Any other thing for Wess? Thanks a lot, Wess.

40
41 **WESSLEY MERTEN:** Thank you all.

42
43 **CARLOS FARCHETTE:** So, next on the agenda is Sarah Stephenson with
44 the Amendment to the Puerto Rico FMP Queen Triggerfish Reference
45 Points Updates.

46
47 **Framework Amendment to the Puerto Rico FMP: Queen Triggerfish**
48 **Reference Point Updates—Sarah Stephenson, NOAA Fisheries**

1
2 **SARAH STEPHENSON:** Yes, thank you. Cristina? Okay. So, while she's
3 pulling up the presentation, this would be a Framework Amendment
4 4 to just the Puerto Rico FMP. As we kind of heard earlier, the
5 U.S.V.I. queen triggerfish SEDAR 80 is not complete yet, so that
6 will be a future amendment to set new management reference points
7 for queen triggerfish in both Saint Croix and Saint Thomas/Saint
8 John.

9
10 So, this is going to be a presentation overview of what Amendment
11 4 to the Puerto Rico one would have based on the Puerto Rico queen
12 triggerfish stock assessment.

13
14 So, Slide 2, please. The stock assessment, SEDAR 80, for Puerto
15 Rico, was presented to the SSC at its August 2022 meeting.
16 Revisions to the model were reviewed the SSC's October 2022 meeting
17 and then finalized during the SSC's November-December 2022
18 meeting. So, we're about a year behind since the decisions were
19 made.

20
21 I did want to point out that recreational catches for this
22 assessment were combined with those of the commercial trap fleet.
23 And that's explained in the SEDAR report and I'm sure Adyan and
24 Kevin can answer questions, if you have questions specific to that.
25 But I wanted to point it out because the last SEDAR assessment and
26 framework amendment we did was for spiny lobster. And spiny lobster
27 doesn't have any recreational information. So, I just wanted to
28 point out that that's how recreational landings for this species,
29 for this island were handled under this SEDAR.

30
31 So, the Council reviewed the SSCs, kind of, recommendations at the
32 Council, the December 2020 Council meeting. The SSC Chair at that
33 time recommended two approaches for the OFL and the ABC values
34 that were projected from the SEDAR 80 assessment. One was, you
35 have a constant number, and that was based on the three-year
36 average of projections from the model. Or, the other approach was
37 called, we're calling it a variable approach.

38
39 If you remember, we did the same kind of process for spiny lobster.
40 At the Council meeting last year, the Council selected to just use
41 that constant approach. So, we're going to use the average values
42 over the three years of 2024, 2025 and 2026.

43
44 At that meeting, you selected the P*, which was the acceptable
45 probability of overfishing for that stock. So, you had a long
46 discussion about what does that mean and you opted for a 0.4
47 probability of overfishing. That's a little bit slightly less than
48 what you picked for spiny lobster, but the rationale at that time

1 was based just on some of the uncertainties that you had at that
2 time, and you didn't want to risk overfishing the stock. So, that
3 decision was already made as well.

4
5 And then, this year at the August 2023 Council meeting, you
6 directed staff to move forward with an amendment to the Puerto
7 Rico FMP. We waited so long because we thought that maybe the
8 U.S.V.I. stock assessments would be finalized at the same time and
9 we could do one amendment based on the same stock assessment and
10 just have different sections of what we did for spiny lobster, but
11 we realized at the time it would be better to just go forward with
12 what we have so the data doesn't get too stale.

13
14 So, the, SEDAR 80, the amendment that will apply to Saint Croix
15 and Saint Thomas and Saint John is still in progress. That will
16 come at a future meeting.

17
18 Under the Puerto Rico Fishery Management Plan, queen triggerfish
19 is managed in the triggerfish stock complex with two other species,
20 ocean triggerfish and gray triggerfish. But at that time, queen
21 triggerfish was selected as the indicator stock for the complex.
22 And that was because the majority, like 99% of the landings that
23 we had during the reference period were queen triggerfish. So,
24 what does that mean, being an indicator stock? That means that the
25 management measures that were set in the FMP, so the SYL, that's
26 Sustainable Yield Level, the ABC and the ACLs were all based on
27 landings during the reference period of queen triggerfish. But any
28 decisions that may be needed, such as an accountability measure,
29 would apply to all the species in the complex.

30
31 At that same time, the triggerfish stock complex was classified as
32 Tier 4a in the Council's ABC control rule. And what that means is
33 that it's a data limited stock complex with no accepted assessment.
34 And the stock has a relatively low vulnerability to fishing
35 pressure. If you remember, stocks with a high vulnerability were
36 classified as a Tier 4b and they had a different process that was
37 used. But The triggerfish stock complex was a Tier 4A. And so, in
38 that FMP and ABC process, the sustainable yield level acts as the
39 OFL, the overfishing level proxy.

40
41 At the time that the FMPs were developed, we had both commercial
42 and recreational landings, and so both commercial and recreational
43 management points were estimated or calculated. So, during the SSC
44 process, how they did that was that all of the values went through
45 the process of selecting the years to use, applying a scaler based
46 on the variability of the landings and then buffered back down
47 based on the SSCs estimation of scientific uncertainty. And so, we
48 did that separately for the commercial landings and separately for

1 the recreational landings.

2
3 But then during the FMP process, we realized that you couldn't
4 have some of these management reference points per sector, so they
5 were added together to get the SYL and the ABC for the stock
6 complex.

7
8 For the triggerfish stock complex under the Puerto Rico FMP, the
9 commercial components of each reference point, so the SYL, the ABC
10 and the ACL was 91.77% of the total. And then, the flip side, the
11 recreational component, if you did the math, it was 8.23. But those
12 percentages weren't set at that time, we just kind of calculated
13 them during this process. And that will kind of come into play a
14 little bit later.

15
16 And here are in the table are the values that were set in the
17 Puerto Rico FMP. And just in case you wanted a refresher, and I
18 believe I'll mention it again later, for the triggerfish stock
19 complex, the ACL was set equal to 95% of the ABC. So, I'll talk a
20 little bit more about that in a minute.

21
22 So, what will this framework amendment to the Puerto Rico FMP do?
23 Based on the SEDAR 80 Puerto Rico queen triggerfish assessment,
24 the triggerfish stock complex would change from a Tier 4A to a
25 Tier 3. And so that Tier 3 just means that it is still data limited
26 but there is an accepted assessment available. The SSC accepted it
27 and the Council accepted it last year. So that's what that means.

28
29 Management reference points that were defined but not specified
30 under the Puerto Rico FMP. For instance, that means like no number
31 was actually able to be calculated would be updated. And I
32 apologize, this first one, the MSY, that's an error and I will
33 work with the stock assessment team to get the right one and I'll
34 send the revised presentation to you when I get the right number
35 for MSY if it was calculable.

36
37 But the MFMT, the Maximum Fishing Mortality Threshold, under your
38 Puerto Rico FMP, we have the formula to calculate that, but we
39 didn't have the means to do that, and the stock assessment provided
40 those means and was able to churn out a number. So now we have a
41 reference point that we can compare fishing mortality, too. And
42 then likewise, that last one, the minimum stock size threshold, we
43 now have a level of biomass that we can kind of monitor too. So
44 all of these numbers would be updated in the amendment and they
45 would be kind of part of your background of the amendment because
46 it was done under the assessment.

47
48 Likewise, the proposed OFL and ABC that came out of the model

1 projections that you've already kind of made some decisions on
2 would be included in the background information. So, the OFL for
3 the triggerfish stock complex would be reduced from 190,000 and
4 change pounds to about 118 pounds. And then, the ABC for the
5 triggerfish stock complex would be reduced from 95,000 and some
6 change to about 91,000 and some change.

7
8 And in the table, you'll see the projections that came out of that
9 stock assessment process that were deliberated at the SSC meeting.
10 The two kinds of approaches, again, shown where you have either
11 numbers that change each year for 2024, 2025, 2026, and that's
12 that variable approach. Or you have a constant approach and that's
13 what the Council identified they would rather have. So, those
14 numbers in bold at the bottom are what would be designated in the
15 framework amendment for this stock complex.

16
17 So, the IPT has only met once. The IPT, again, is the group of
18 team members that covers a wide range of specialties from
19 biologists and, economists and social scientists and lawyers and
20 enforcement. And we get together and we talk things through. We
21 make sure, generally, that one section is not being overlooked.

22
23 So, the draft, kind of, preliminary purpose and need that we
24 discussed and came to an agreement on, is that the purpose is to
25 update management reference points for the triggerfish stock
26 complex under the Puerto Rico Fishery Management Plan to account
27 for the SEDAR 80 Queen Triggerfish Stock Assessment and application
28 of the Council's ABC control rule. And that's in there because
29 we're moving, again, from a Tier 4a to a Tier 3. So, we're
30 acknowledging that we're getting better. And then, the need for
31 this amendment is to update those management measures, based on
32 best scientific information available to prevent overfishing and
33 achieve optimum yield, which is consistent with requirements under
34 the MSA.

35
36 So, now we are getting to what the Council today needs to decide.
37 And that is the ACL for this stock complex. So, just to review,
38 annual catch limit is the amount of fish that can be caught by a
39 fisherman over a one year period, and we generally do calendar
40 years. The ACL is derived from that acceptable biological catch,
41 reduced by The Council's management uncertainty buffer.

42
43 And just to try to put what that term is in common language. The
44 uncertainty buffer is how confident managers feel that the ACL
45 that we put in place will control the amount of fish that's caught
46 in a certain year and how much error there might be in that reported
47 catch. If you have absolutely no qualms and you think that what's
48 reported is what's caught, then you would have basically no

1 uncertainty. But if you're not sure and you have some, that's when
2 you would reduce that ABC by some level of uncertainty to set your
3 ACL. And so that's when we're doing annual monitoring each year,
4 you don't go over that ACL. And if you do, hopefully you don't
5 also go over the acceptable biological catch.

6
7 So, per guidelines, ACLs cannot be greater than the ABC, that's
8 recommended by the Council's SSC. And also, an ACL can apply to a
9 single species or to a group of species. And in this example of
10 this framework amendment, it's going to apply to three species
11 that are in that Puerto Rico triggerfish stock complex: the queen,
12 the ocean and the grey.

13
14 And then the ACL serves as the basis for triggering accountability
15 measures. And I'll talk more about accountability measures in a
16 little bit. But ACLs are generally only, for the Caribbean, they
17 are only applicable in federal waters. So, we set limits for
18 federal waters, that does not automatically dictate what happens
19 in state waters.

20
21 So, selecting the uncertainty buffer. Under the Puerto Rico FMP
22 there were three alternatives that were considered, which were: no
23 uncertainty, meaning the ACL equals the ABC and that means that
24 reported catch represents what is actually caught. And you do not
25 believe that catch is going to exceed that limit that you set.

26
27 The one in bold was the uncertainty buffer that was selected as
28 the preferred alternative, and it was a 5% uncertainty buffer and
29 so the ACL was equal to 95% of the ABC. And that kind of assumes
30 that you have a pretty good handle on what's going on with that
31 stock or stock complex but it's not absolute. So, you just had a
32 little small amount of uncertainty buffer.

33
34 And then the other alternative that was presented was a 10%
35 uncertainty. And so, the ACL would be equal to 90% of the ABC.

36
37 So, the decision today, the first one, is do you want to use the
38 same management uncertainty buffers that were used in the Puerto
39 Rico FMP to set the ACL from the recommended ABC for the
40 triggerfish stock complex. And if you did, this table kind of shows
41 you what the total ACL for the stock complex would look like.

42
43 So, we haven't developed an amendment yet, but if we did and if
44 you wanted to stick with this, alternative one is your typical no
45 action. So, you would stick with ACL that's in place now which is
46 90,552 pounds. Your second one would be the ACL equals the ABC, so
47 there would be no reduction from the ABC recommended by your SSC.
48 Alternative 3 would have a 5% reduction and you can see the ACL

1 there. And then Alternative 4 would have a 10% reduction.
2
3 So, the first question to consider is, do you want to just use
4 those same buffers that you did before, or would you like to choose
5 something else for this stock complex? And then there is a little
6 asterisk there for the no action, and why you generally wouldn't
7 be able to select that one is because we have the accepted stock
8 assessment. And so, the alternative one, sticking with what we
9 have, would not be based on best scientific information, and we're
10 kind of mandated to do so.
11
12 There's an additional kind of step for this framework amendment
13 that we didn't have under spiny lobster and that's sector ACLs.
14 So, depending on what management uncertainty buffers you may
15 select, we would use the same percentages used during the Puerto
16 Rico FMP process to then establish or calculate the commercial ACL
17 and the recreational ACL.
18
19 And so, you could see here in the table, the first column, the
20 total ACLs, those numbers match what we just saw on the previous
21 screen. And these are assuming you want to just stick with the
22 same Management uncertainty buffers that you did before. You don't
23 have any additional concerns where you would want to pick a
24 different reduction buffer. And then you can see there how that
25 plays out.
26
27 And just as a reminder, under the table you could see, so the
28 commercial ACL would be 91.77% of the total ACL and the
29 recreational would be 8.23. Again, Alternative 1 is not based on
30 best scientific information.
31
32 And then, we wanted to point out that at this time, no information
33 is available to revisit the sector allocations, which are those
34 percentages that were used to set the commercial and recreational
35 ACLs from the total ACL. We kind of talked about that a little bit
36 earlier when we were talking about Rainbow Runner. We don't really
37 have any new information, at this point, that we know of that we
38 could use to do that.
39
40 So again, your decision that you need to make is the buffer and
41 the rest would automatically follow.
42
43 This is to give you an idea of the landings, the recent landings.
44 This is the Table 5 in the SEDAR 80 queen triggerfish report. So,
45 you can kind of see there the landings. As we mentioned, they're
46 below the current ACL, and they could potentially be below the
47 proposed ACLs depending on your uncertainty buffer.
48

1 For years, 2001 to 2019, all the landings that were reported in
2 the commercial column were queen triggerfish. So, that's why likely
3 that one was selected as the indicator stock. And then, in 2001,
4 it was almost 100%, but it wasn't 100%, so I put it in there.

5
6 So, since 2012, just to give you an idea too, the majority of the
7 commercial landings for this species were reported from state
8 waters. And then, commercial landings, as I mentioned, are below
9 the current ACL of 83,099 pounds. And so, since they're below, we
10 have not had to trigger an accountability measure.

11
12 So that's just to give you a little bit of a snapshot on how the
13 commercial landings are doing. And as you can see in the table,
14 the recreational landings stopped in 2017, so we don't have those
15 from that point forward. And additionally, we don't have commercial
16 landings for Puerto Rico from 2020 forward. I believe efforts are
17 underway and they're very close to getting those for us, but as of
18 right now we don't have those.

19
20 So just to talk real quick about accountability measures. So, what
21 happens if the ACL that you set is exceeded. So, if landings go
22 over that catch limit, the Council and NMFS must take action to
23 make sure that the next year's harvest is at or below that catch
24 level. You don't want to exceed it again. And so that's what we
25 mean by an accountability measure.

26
27 Accountability measures are generally designed to help prevent
28 overfishing. They are required for fishery management plans and,
29 in this case, also amendments.

30
31 Our accountability measures in our FMPs generally describe 2 parts:
32 a trigger and then an application. So, the trigger is the process
33 for comparing the landings that you have to the catch limit for
34 that sector, if sector information is available. For instance, we
35 don't have sector specific values for the U.S.V.I.

36
37 The trigger also considers if the overage, meaning, if you went
38 over your catch limit, if that was due to enhanced reporting, which
39 we talked a little bit about this morning. And then, also if it
40 exceeds the ACL, then an AM would be triggered unless NMFS finds
41 that the overage was because data collection improvements. So,
42 there's kind of 2 components to the process to that trigger.

43
44 Enhanced reporting would be, for instance, if a new stock
45 assessment came out, and all of a sudden, your management reference
46 points increased by a large amount, then you would be able to take
47 more. And so, you might not need to trigger an accountability
48 measure if all of your reference points were going to increase. So

1 that's kind of why that language got put in there.
2
3 The second part of the accountability measure is the application.
4 So, determining how long the closure is needed, and that's for
5 reef fish and spiny lobster. The application part for pelagics is
6 different, but I won't talk about those since queen triggerfish
7 falls under the reef fish accountability measure. It describes
8 when the closure would occur in the year, and you can see those
9 dates there. So, it's calculated September 30th going closer to
10 January. And then, if that time period isn't enough to make sure
11 landings do not exceed your catch limit, then you would add
12 additional days starting October 1st and going towards the end of
13 the year.
14
15 So, there's kind of two parts to our accountability measure.
16
17 The Puerto Rico FMP has an additional layer, which is that sector
18 specific accountability measures. So, if you have landings for
19 both sectors, then you look at total landing. So, you would add
20 them together. And so, in that instance, if the total catch limit
21 is exceeded, any accountability measure that needed to be triggered
22 and applied would only apply to the sector that exceeded its catch
23 limit. So, it doesn't necessarily mean that if the total is
24 exceeded, that both are going to have a closure unless of course
25 both sectors exceeded their catch limits.
26
27 And then, where we are now, as we've talked about a lot, is that
28 if you only have landings for one sector, what happens? The ACL,
29 the catch limit for the sector that you have landings for, becomes
30 the ACL for that stock or stock complex. So, you don't get the
31 benefit of the total ACL. You can only use the sector that you
32 have data for. And then conversely, if that sector's landings
33 exceed the catch limit, the accountability measure that would be
34 triggered, if it's necessary to be triggered, would be for all
35 fishing. So that would be for both sectors.
36
37 So, that was a little nuance that's in the regulations that I
38 wanted to kind of just talk about. You don't have to make any
39 decisions on that today, but I kind of wanted you to know the whole
40 process and where we are and what the status is.
41
42 And so, this table tries to, kind of, give you an idea of what
43 that would look like for the next few years in light of how we
44 operate. So, the first column is just the calendar year. So, next
45 year would be 2024. Assuming we can get all of the landings caught
46 back up, then generally we have a one-to-two-year lag in the data
47 that's available.
48

1 So, I just assumed that that second column, what landings we
2 actually have to use would be two years old. But hopefully things
3 will get better, and we'll have more recent, more available
4 landings. And so maybe there would only be like a one-year lag.
5

6 And so, what you do is you look at the catch limit in place the
7 year that you have landings for, and you compare those landings to
8 that catch limit. Then, there's also the FMP described a process,
9 since we were basically resetting catch limits and management
10 reference points and accountability measures, they described a
11 spin up process, if you will, meaning we weren't just using a
12 three-year average. We wanted to kind of gradually change, step up
13 to what we used.
14

15 And so, for 2024, which is two years after the implementation of
16 the FMP, we're going to use a two-year average of landings. And so
17 those would be the average of 2021 and 2022. Because as you can
18 see from the 2nd column, 2022 is the most recent year you have, so
19 you have to use that year and the year before. And then you're
20 going to compare them to the average ACLs in those years, generally
21 they're going to be the same, but if you've had a change from the
22 old regime to the Puerto Rico FMP to an amendment, you might have
23 a difference and so you would want to average your catch limits as
24 well as your landings.
25

26 And then, you're going to look at if they are exceeded and if we
27 ask the Science Center, were those due to enhanced reporting or
28 the catch actually went up? Depending on their reply, if we have
29 to apply accountability measure, then you're going to compare that
30 to the catch limit that's on place for the current year, because
31 that's the one that you don't want to exceed. We're assuming that
32 landings in the past are generally going to be representative of
33 landings today and so that's why they're--
34

35 So again, I'm just trying to show you the whole picture because
36 it's not very straightforward. And so, that's what that is.
37

38 So, to try to help, next slide is a flowchart and we presented
39 this to the joint DAPs. Hopefully, it will help just try to put
40 all of that into like, you know, something that's easily to
41 understand.
42

43 So, the first question that we ask at the Southeast Regional Office
44 was, did the landings exceed the catch limit? If they did not,
45 then there's no closure. We don't have to do anything. If they
46 did, then we ask the Science Center, was that overage because of
47 enhanced data collection? If the answer is "Yes, it was," then
48 there's no closure and we don't have to do anything. If the answer

1 is "No," that means that the catch actually did exceed the catch
2 limit and so that's when that application, the accountability
3 measure, those dates, the length of the period, all of that would
4 be calculated.

5
6 And you can see the red arrow. You figure out from September 30
7 how many days you would need to close that particular fishing for
8 that particular stock or stock complex.

9
10 So, trying to bring it back to what you need to do today. You,
11 first, want to decide, do you want to use the same management
12 uncertainty buffers, or do you want to use something different? So
13 that's the first question in this framework amendment. If you can,
14 additionally, also say, "We want to use what we used before and we
15 know what we would prefer to use," you could state that as well.
16 You don't have to, but if you do, it means that the IPT could work
17 on a more complete amendment and bring that back in April.

18
19 There's a couple of chapters that cannot be completed unless you
20 know the preferred alternative, so it, kind of, just depends on
21 how comfortable you feel. Obviously, the amendment that we bring
22 back would show you all the analysis and it would weigh the
23 benefits to the biology of the stock complex versus the economy
24 and social of the fishing community.

25
26 So, your main decision today is to just pick your uncertainty
27 buffer. And then we'll work on the draft amendment. And if
28 possible, we'll prepare the full amendment. And then, if we prepare
29 the full amendment, we would also prepare the regulations, that
30 codified text that Kate read for the trawl amendment. We would
31 prepare that as well.

32
33 And then, at the April meeting, if the full amendment was prepared,
34 you could move to submit to the secretary. If it was not prepared,
35 you would probably be selecting your preferred alternatives.

36
37 This is additional considerations that you might want to think
38 about in light that the U.S.V.I. SEDAR 80 is still undergoing. Are
39 there some decisions that you could make to try to assist with
40 that process? For instance, would you assume the same risk of
41 overfishing for Saint Croix queen triggerfish or Saint
42 Thomas/Saint John queen triggerfish, as you did for Puerto Rico.
43 Obviously, you haven't gotten a presentation from the SSC or the
44 Science Center, so maybe you want to wait on that. But it's
45 something that you could think about going forward as we do more
46 of these stock assessments to just, kind of, help with the process?

47
48 And then likewise, do you think you're always going to want values

1 that stay the same over a certain period. And the two amendments
2 that we've done so far, that period has been a three-year average.
3 So those are things that you can think of too. Again, you don't
4 have to make a decision for this framework amendment, but it's
5 something you can think of.

6
7 And then, also we've mentioned, are there any discussions,
8 questions for the Council's SSC in light of the recreational data
9 and sector specific management in Puerto Rico. And we kind of
10 already had a motion for that with the rainbow runner. So, maybe
11 when the SSC considers that, they can consider more than just that
12 one species.

13
14 And I believe that's it if anybody has any questions.

15 16 **Questions/Comments**

17
18 **CARLOS FARCHETTE:** Any questions for Sarah? Okay. So, we should
19 be--

20
21 **SARAH STEPHENSON:** So, if not, then I would ask the Council the
22 first question. Do you want the IPT to use the same alternatives
23 that were used in the Puerto Rico FMP for management uncertainty
24 buffers. 0%, 5% or 10%. Those are what were used before.

25
26 **VANESSA RAMÍREZ:** I will suggest using the 5%.

27
28 **SARAH STEPHENSON:** So, the framework amendment would have multiple
29 choices. So, you've identified that you prefer 5%, but would it
30 also be okay to analyze, no buffer and 10% buffer, and then we
31 bring you back how that will affect? Or do you want to change it
32 from no buffer, 5 buffer, and then you pick another number as
33 opposed to 10%.

34
35 **CARLOS FARCHETTE:** Miguel?

36
37 **MIGUEL A. ROLÓN:** If we follow what we did before, those are the
38 three alternatives that she mentioned. Remember, you need to have
39 an analysis of the alternatives in order for you to make a final
40 decision. So what Sarah is proposing is probably the best way to
41 go, so you have the elements of information for you to make a
42 decision.

43
44 **CARLOS FARCHETTE:** Right. Right. So, I do agree with using what we
45 had before, but I have got to defer to-- you're doing Puerto Rico,
46 right? Yeah. So, I defer to Vanessa, if she wants to agree with
47 using all three and then we--

48

1 **VANESSA RAMÍREZ:** Yes.
2
3 **CARLOS FARCHETTE:** So, that has to be a motion. Right? No? Okay.
4 Good.
5
6 **SARAH STEPHENSON:** And then just the second part. Vanessa has
7 already identified she prefers 5%. Does the rest of the Council
8 also want to say they agree with Vanessa, or would they like to
9 see the analysis before selecting what they prefer?
10
11 **CARLOS FARCHETTE:** I agree with Vanessa. I have Nelson.
12
13 **MIGUEL A. ROLÓN:** We don't have much time, but the thing is that
14 while she's asking whether your preferred alternative will be 5,
15 if you all agree then they will write the document as such. They
16 will have the analysis of 0 and 5 and the other, but the preferred,
17 so far, would be 5%. Do you all agree?
18
19 **CARLOS FARCHETTE:** Yeah. Nelson?
20
21 **NELSON CRESPO:** Thank you, Mr. Chair. I agree with Vanessa. I
22 prefer the 5%. Yeah.
23
24 **CARLOS FARCHETTE:** Okay.
25
26 **MIGUEL A. ROLÓN:** So, Sarah, then you have the elements adjustment
27 there. 5% is the preferred. Okay.
28
29 **CARLOS FARCHETTE:** Thank you. Okay. So, next, we have development
30 of federal permits program for the U.S. Caribbean. That'll be,
31 Jessica Stephen and Kevin McIntosh.
32
33 **Development of a Federal Permits Program for the U.S. Caribbean,**
34 **Process Overview—Jessica Stephen and Kevin McIntosh, NOAA**
35 **Fisheries**
36
37 **JESSICA STEPHEN:** Good afternoon. I'm Jessica Stephen. I work in
38 the Southeast Regional Office. What I'd like to do today is kind
39 of just give you an overview of the different way in which permits
40 could work if you want to establish a federal permit in the
41 Caribbean.
42
43 Go ahead with the next slide. So, just a little background of where
44 you've been to date. We did have some permit discussion back in
45 2013 through 2016 and there were some scoping hearings that
46 happened around March of 2015 and then in 2016 in Puerto Rico. At
47 that point in time, the idea of permits was tabled. But during
48 that time frame, there were a couple documents that had been

1 developed.

2
3 There was a 2014 white paper. There's also 2015 scoping document.
4 And then, in 2016, another white paper for the lobster U.S.V.I.
5 Back in August of 2022, the idea of permits came back into
6 discussion and I going to kind of get into more information of
7 where we're trying to prep you so you can understand how to think
8 about permits would work for you moving forward.

9
10 So, when you think about permits, you want to think about permits
11 as being just one of the tools that you have in your fishery
12 management toolbox in order to keep sustainable fisheries
13 management. There's a lot of things that permits can assist with
14 doing.

15
16 So, they can identify who your participants are within the system.
17 They can even identify different characteristics about such permit
18 holders. They can be used to control access to your fishery. They
19 could also be used to help enforce compliance within a fishery,
20 making it match what the regulations are doing. And then finally,
21 they can also provide a mechanism to require data collection.

22
23 So, when you think about these three different aspects, you have
24 the permit requirement, you have enforcement compliance elements,
25 and then data collection. And they're all kind of intertwined or
26 connected to each other. Permits provides that framework that you
27 would need to have data collection. So, you'd need to know Who
28 should be supplying you with data? And then, also it provides a
29 mechanism where you could withhold the permit if they are not
30 complying with the regulations.

31
32 When you're thinking about enforcement, the enforcement of the
33 permit and reporting requirements actually can give you
34 information that would better assist in controlling access to the
35 fisheries as well as areas in which you can do sanctions or
36 violations for non-conforming with the regulations.

37
38 So, the heart of this presentation is I'm going to show you the
39 different types of options available when you're thinking about
40 how to create a permit and what would work with each of your
41 individual fisheries that you'd wish to establish a permit. I want
42 to start off with, there's not one type of permit that's going to
43 work for every fishery. So, you do want to take the opportunity to
44 customize where you can and ensure that you're doing what you
45 intended to do with your purpose and needs.

46
47 So, these are just a few of the options that I'm going to cover.
48 I'm not going to go over them here as we'll get into them in each

1 slide.

2
3 So, the first thing to think about when you're looking at permits
4 is, what's purpose of the permit? What are you intending to do
5 with it? I've given you a couple of examples here, of purposes of
6 other permits and other fisheries.

7
8 There can be the intention to protect your resources or your
9 habitat. This is normally through controlling effort. Your permit
10 determines how many people can be out there fishing. Those
11 protections or control of effort can be by specific sectors. It
12 could be just commercial, or it can buy you by a fishery area or
13 a season or even a type of gear. And this is where the different
14 specialization will come into play of how you choose to build a
15 permit.

16
17 Permits are also able to quantify effort in the sense of how many
18 vessels are out there. It can limit the maximum number of vessels
19 that are out there. Keep in mind that even though vessels may have
20 permits does not mean that they are fishing. That's where data
21 collection comes back into play. And the idea of collecting data
22 with your permits will truly tell your total effort, whereas just
23 a number of permits gives you an idea of the maximum amount of
24 effort.

25
26 Permits are often used in conjunction with data collection because
27 they provide that framework for the reporting requirements. You
28 know who should be reporting to you. They're of great assistance
29 in enforcement of the fishing regulations. And then, finally,
30 another purpose could be it helps to characterize your fleet. So,
31 if you don't understand the different aspects of your fleet, you
32 can get information about the vessels. What's their size? What's
33 their home port? Who's operating them? So, it's a lot of really
34 good information when you're looking at social and economic
35 considerations.

36
37 So, questions to think about for the Council. When you're
38 considering your purpose, what is the problem that you're trying
39 to address by using permits, and is that problem the same across
40 all your fisheries? So again, I want to reiterate, it's not
41 necessarily going to be one permit for everything you might want
42 to customize depending on what your problems are within different
43 fisheries.

44
45 So, as I mentioned before, there's different types of permits that
46 you can do. You can do a permit to a different sector, commercial,
47 for hire, or private angler. You can do a permit for a particular
48 species or a species complex. You can also do it for a gear or a

1 particular area. You can also do any combination of these together.

2
3 What I put in here are just a couple of examples using the Pacific
4 Islands since they have, kind of, a nature similar to the Caribbean
5 where they have multiple islands that they're looking at running
6 permits. You can see here that there's different permits that
7 they've created. There's the Guam large vessel bottom fish. So,
8 that is both an area, a commercial, so a sector, and a type of
9 gear, the longline.

10
11 There's also the main Hawaiian non-commercial bottom fish. So
12 again, that's one that's applying to a sector. A Hawaii longline
13 permit, it is just a gear permit. And then, they also have certain
14 ones that are for specific areas, like the remote islands and using
15 a handline gear.

16
17 So, this is just an example. If anyone wants to go look at these
18 presentations afterwards, the links in those will take you to the
19 Pacific Islands pages and explain how those different types of
20 permits work.

21
22 There's also the different type of permit class. When you're
23 thinking of the permit class, think about who are you assigning
24 that permit to? And this one is one that should have careful
25 consideration. The types of permits that we've seen assigned
26 throughout fisheries can be assigned to only an entity. So that's
27 a permit linked directly to a person. You can also have a permit
28 linked directly to a vessel or a combination of an entity and a
29 vessel.

30
31 When you're looking at only assigning a permit to an individual
32 person, keep in mind that's restricted to that person or business,
33 if you allow businesses as entities that can hold a permit. That
34 individual then is responsible for any of the regulatory
35 violations. That permit will travel with them as they move from
36 vessel to vessel. And then the fishing history is attached to that
37 permit holder. So, it's attached to what they're doing as they're
38 moving forward.

39
40 There's also the potential to create what are called operator
41 cards, and I think, here, you talk about your crew as the helpers
42 on it. So, you could also create permits for those helpers or the
43 crew who is on a vessel. When you're looking at only a vessel
44 permit, the permit is restricted to that vessel. So, it cannot
45 move with a person or with a vessel. It's restricted to the vessel.
46 The vessel's owner becomes the responsible party for any regulatory
47 violations, and the fishing history is attached to that vessel and
48 who owns it at that point in time.

1
2 And then finally, the combination of the entity and vessel. This
3 is the current process that the Southeast Region uses for all of
4 our permits in the Gulf of Mexico and the South Atlantic. It
5 applies both to a vessel and a permit holder. It can be transferred
6 among people, but it is that combination that creates your vessel
7 history and what allows the information to be accessed. It does
8 also allow us to have a vessel leased from a vessel owner to
9 another person. If people want more information about that, I don't
10 mind talking about it on a sidebar. I'm not going to get into
11 leasing at this point in time. And then, the permit holder, in
12 this case, is responsible for all the violations. All right.

13
14 The next is the different types of access that you can have within
15 a permit. So, when we're thinking about a permit access type, we
16 have what's called open access. That means there's no limit on the
17 number of permits. Anyone can get one. You can have them go to any
18 number of permits that are out there.

19
20 We also have what we call limited access or limited entry. And
21 this is where there's a finite number of permits. So, there's a
22 maximum that's allowed to be given out. And typically, if someone
23 does not renew their permit or does not transfer it to someone
24 else, the number of permits decreases over time. So limited access
25 and limited entry are really good when you want to slowly,
26 gradually decrease effort within a fishery over time without
27 creating huge social or economic problems.

28
29 And the last type is what we're calling a limited access pool.
30 This is like a limited access in that you have a finite number of
31 permits that are out there, but instead of the permits decreasing
32 over time, if someone failed to renew a permit and it would have
33 terminated or ended, instead, it goes back into a pool that's
34 available for other fishermen to gain that permit through that.
35 So, you keep the same number of permits over time.

36
37 Next slide.

38
39 So, again, here's just a little bit of examples of these different
40 types of permits. I think I've actually probably talked about all
41 of these, so we can go on to the next one.

42
43 The idea is to consider what your fisheries is like. Is there
44 overcapacity or access costs that determine what type of permit
45 you want to have? So, when you're thinking about those different
46 costs, you need to consider, not only what your present fishery is
47 looking like, but what is your expected fishery to look like over
48 time.

1
2 So limited access and limited pool permits really do address those
3 overcapacity issues. They can more directly kind of control what
4 the fishing effort is when moving forward. But when you're looking
5 at historical fishing and the dependence on that fishery, you also
6 want to consider that in your choice. Is the baseline enough for
7 where you want to move with your current effort? How do you think
8 permits or fishing behavior might shift if you limit effort?

9
10 And finally, those economic and social impacts are really important
11 to consider. Does the limited access or limited pool provide the
12 stability you need within the fishery? What's the economic impact?
13 Typically, with a limited access permit the cost to sell that
14 permit to someone else, of which the agency is not involved with,
15 goes up over time. As they become more limited, they have more
16 value. And what would that impact look like on your communities?

17
18 The other one to think about is who's eligible for a permit. And
19 there can be different types of information that you might want to
20 collect in order to have someone eligible for a permit. For the
21 most part, we're probably looking at what types of information do
22 you want to collect. Do you want to collect information on social
23 and economic information as well, so that you can determine more
24 of the characteristics of your fishing community.

25
26 How would those work with state licenses? Would a state license
27 guarantee you a federal permit? Or should a state permit substitute
28 for a federal permit? In all these cases, you really need to look
29 at what are the requirements for both the state and federal and
30 can they work together? There are cases where they can, and there
31 are probably cases where they cannot.

32
33 And then, what would you want to have in order to renew a permit?
34 So, a permit's typically good for one year and then you'd want to
35 renew it. Frequently, what we see if we have reporting requirements
36 attached, is that you must submit your reporting requirements on
37 time in order to renew your permit. Some fisheries require a proof
38 of minimum activity within that fishery. So, we need to know that
39 you don't just have the permit, but you're actually using that
40 permit.

41
42 And then some also had used income requirements to show that the
43 majority of your income is coming from that permit or from the
44 fishing community. This has been a concern in other areas where
45 people end up holding the permits and leasing them out, so the
46 fishermen loses that direct access to it, and that is typically a
47 social concern.

48

1 There are also probably some other types of permit limitations you
2 might want to think about. We have permits that have different
3 trip limits. So, you could have, in the same fishery, a permit
4 that has a small as well as a large trip limit. There's a concept
5 called permit stacking where you can stack multiple permits on the
6 same vessel. Again, I'm not getting into that in this presentation,
7 but if there's questions, I'm happy to answer them on the side or
8 to provide information at another Council meeting.

9
10 We also have seen permit limitations where you have to have an
11 education requirement. Do you know how, for example, to descend a
12 fish properly or how to vent a fish in order to descend it. And
13 then there's limitations on who could receive a transferred permit.
14 And there are also probably other types of limitations that are
15 out there.

16
17 So, I want to go over or kind of talk about what permits do do. I
18 also want to talk about what permits do not do. So, without
19 reporting requirements, permits do not really provide any insights
20 into your catch and effort. They only kind of provide you a minimum
21 boundary for effort. They also will not solve at sea enforcement
22 issues alone by themselves. So, at sea enforcement is best
23 typically done either through monitoring or some type of observers.
24 Monitoring could be vessel monitoring systems or other new
25 technologies coming on.

26
27 So, what types of requirements might you put into a permit that
28 could affect enforcement and compliance? And when you're looking
29 at them, we do have things such as vessel monitoring. If you have,
30 a logbook or reporting requirements, there could be a time frame
31 in which that logbook must be submitted. There must be the need,
32 say, to carry and show your permits onboard your vessel. And
33 there's also ideas such as an observer program. So, the examples
34 I gave you here is an example of what happens in Hawaii with their
35 longline permit.

36
37 Alright. So, now we've moved to the point where we're going to
38 actually show you what our SERO permit system looks like. Kevin's
39 going to be able to do that, and I think we're going to switch
40 screens where you can actually see what it is rather than these
41 screenshots.

42
43 **KEVIN MCINTOSH:** Thank you, everyone. Kevin McIntosh. I'm the
44 Supervisor at the Southeast Regional Office, Permit Office.

45
46 So today, I'm going to demonstrate our online permitting system.
47 I think it's going to be beneficial for two reasons, that if you
48 do decide to go the additional permitting route, you can kind of

1 see what a permitting system would look like. But also, you do
2 have some constituents now that have some permits that are
3 applicable in this area, so you will, kind of, be able to see what
4 they see when they renew their commercial Caribbean small boat
5 permit. Things that are applicable around Puerto Rico.

6
7 First and foremost, this is a web-based system, a browser based
8 system. So, you have the ability to translate this application
9 into any language, including Spanish. So, it's up to the user to
10 look at the steps to take it in their browser, but you can certainly
11 modify the language, into Spanish.

12
13 For the sake of this demo, I'm going to go back to English because
14 my Spanish is not great. So, here's our system. It's available off
15 of the permit's office home page. There are multiple links. If you
16 go anywhere on our home page, you can find multiple links to the
17 online system.

18
19 What's great about this system is that it's available 24/7 and to
20 anybody. So, if you are interested in getting a permit, you can
21 register for an account within our system. Register for the
22 Southeast Region Office Permitting System, and then put in your
23 first name, last name, and email address. That's all you need in
24 order to register for an account.

25
26 The system will send you an email. It will assign you a user ID
27 and then you go through the process of setting up that account.
28 I'm not going to do that for now for time's sake. But during the
29 process, you essentially put in your Social Security number, your
30 date of birth. And if you are a permit holder that has permits
31 with us already, the system will find, link your account, and
32 you'll be able to see all the permits and all the applications you
33 submitted before.

34
35 For the sake of today, I'm going to use, our test environment and
36 a test account to log in as Frank Fisherman. And because it's a
37 test environment, it is little slower than production. So, while
38 the page is loading, you can see at the top here, you've got your
39 "my permits/applications." This is going to show you a history of
40 all the applications and all the permits that you've ever been
41 issued. If there are any applications that have deficiencies with
42 them right now, you'd be able to see that in this tab and the "my
43 info" tab.

44
45 So, for users that are coming in for the first time, you have the
46 ability to create a new application within our system, and you've
47 got a bunch of different options for applications. For this sake,
48 we're going to go with a vessel application or vessel permit.

1
2 So, the requirement for a vessel permit is that you have a vessel.
3 So, by default, if your vessel is U.S. Coast Guard documented, we
4 ask for that number. If it's not, you have the ability down here
5 to check that it's not U.S. coast guard documented it's in fact
6 state documented, and you can enter the state registration number.
7 I'm just going to make up a vessel.
8
9 You can then search the system. Why do we search the system? If
10 this vessel exists in our system that already has permits on it,
11 and the system knows who you are at this point when you log in.
12 I'm Frank Fisherman. This vessel, that I put in here, maybe it's
13 owned by John Doe, two different people. The system is going to
14 say, "Wait a minute. We've got two different owners here. Did you
15 buy this vessel?" And if you select yes, it's going to end any
16 relationship that John Doe had, any permits that John Doe had, on
17 the previous boat. But in this case, the made-up boat is not in
18 our system, so you can save and start an application.
19
20 Here's a couple things before you start, what you'll need. Some of
21 it is "can" language, you know, VMS. We don't know what permits
22 you're requesting yet, so we put in kind of all the all the
23 information that you might have. But during the application
24 process, it will narrow that down. If you don't need a VMS, it's
25 not going to ask you for a VMS.
26
27 So again, putting in your vessel. Vessel name, if you have one,
28 you can put it in. If not, you can check that it has no name. Hull
29 identification number, if you have one. If not, these are not
30 required fields. So, you can put in, the hailing port. Anything
31 that has an asterisk next to it is required and, therefore, needs
32 to be filled in. So, essentially, you're just filling in in this
33 first page all the vessel information. And I'm just going to go in
34 and put values in here. If any information is missed, any of the
35 required fields, it's going to stop you. It's going to tell you
36 that, you know, "we need a value for crew length."
37
38 Now comes one of the most important parts, the ownership of this
39 boat. So, you're going to have to, you have two options here. You
40 can add an individual as the owner or a business. And it really
41 all depends on how you have your vessel registered with the state
42 or the Coast Guard. So, in this case, I'm going to pretend that I
43 own this boat individually, and I'm going to have to fill in my
44 information. I'm going to put in a fake Social Security number.
45 But if it was real, and I'm a known entity in the system, it's
46 going to come up and say, "Do you mean Kevin McIntosh?"
47
48 Almost done. You can validate your mailing address with the United

1 States Postal Service and save the changes to Kevin McIntosh. Now
2 you've added yourself as the owner of this vessel. As Jessica
3 alluded to before, if this vessel is under a lease agreement, which
4 we won't get into now, you can check this box. It will open up an
5 additional section where you can add lease information. But in
6 this case, we're just going to say that I own the boat by myself.

7
8 And now we have a list of all our open access permits. These are
9 permits you can get new from our office today. If you do have a
10 limited access permit, something you want to transfer onto this
11 boat, you can do that by selecting this box. But in this case,
12 we're going to do a simple open access permit. I'm going to say
13 that I want an HMS Commercial Caribbean Small Boat. I will select
14 that permit and hit save and continue.

15
16 This is the Small Business or Organization Certification Section
17 or the socioeconomic information that we ask. So, we'll just enter
18 some information here. And one of the last big steps, once the
19 page loads-- or we get an error. So, this is the test environment
20 for you. So, let me log out; log back in. So, again, in the
21 production system, I'm not going to see these errors. In the
22 testing system, we do.

23
24 So, I can show you, here's an application that I started down here.
25 So, because I logged out and logged back in, I can just continue
26 on that application. Alright. So, it saved everything that I've
27 done so far. I do have to go through each page. There I am as the
28 owner. The permit I selected before, small business, and this is
29 where I was attempting to go to "Required documents field."

30
31 Okay. Jessica wants me to read a little bit about the small
32 business. So, this information we started gathering, I believe, in
33 2017/2018 related what type of business you are. So, we get a lot
34 of questions from folks, for instance, this example, I own the
35 boat. They don't think that I'm a business, but I actually am a
36 business. I'm a sole proprietor. So, I would be responsible. That's
37 why this information came up. I would be responsible for filling
38 out this information. And it's got some, directions on how to fill
39 out this information.

40
41 And the majority of the fisheries-based businesses are listed here,
42 harvesting seafood, for hire fishing for charters, buying and
43 selling seafood for dealers and wholesalers, processing seafood,
44 environmental conservation and wildlife. If there's another
45 industry that you don't fall under, you have the ability to add
46 that. There's a code that you can view here, in this NAICS code
47 here. For instance, we have some people in Florida that are real
48 estate agents by day. So, they're not going to show up here under

1 these primary activities, but real estate, they have a code that
2 you'd put in here. So, this is the information that collecting on
3 this page.

4
5 So, state registration. What you'll need to do is provide us a
6 copy of the vessel registration. So, we ask that you put in the
7 expiration date of that registration and then provide us a copy of
8 that registration by uploading file. So, Puerto Rico, I believe we
9 sometimes have some problems with the registration for Puerto Rico
10 because the expiration date is on the back. So, we get a lot of
11 folks that give us just the front of the registration, that doesn't
12 provide us with the back of it. So, we'll, most of the time, have
13 to send something back to the applicant and say, "Hey. Is there a
14 way that you can provide us with the back of that registration?
15 Because we can only see the front."

16
17 What we do is we cross reference the information listed on the
18 vessel owner's page with who's listed on the registration itself.
19 That way we know that, in this case, Kevin McIntosh owns this
20 particular boat. In the case where the registration is valid for
21 multiple years, we will actually keep that registration on file
22 for that applicant. Come renewal the next year, if it's still
23 valid, for instance, this one's valid until end of December of
24 next year, we'll keep it on file so that you don't have to provide
25 us that registration again until it's expired.

26
27 And last page is just the signature. So, I am the applicant. I can
28 draw my signature using my mouse and "finish and pay." At that
29 point, you're sent off to the U.S. Treasury's pay dot gov system,
30 so outside of our permitting system, you can make the \$25
31 application processing fee payment. Once you make that, the
32 application is submitted and it shows up on the back end, the
33 processing queue for the Permits Office to review.

34
35 In 2020, we started to issue permits electronically. This system
36 kind of streamlined that process. A lot of folks in Puerto Rico
37 that have the CCSB, the Commercial Caribbean Small Boat, opt to
38 have that permit digitally issued to them. And what that means is
39 we used to mail out physical permits to our permit holders prior
40 to this system. Sometimes it would make it to them. Sometimes it
41 wouldn't make it to them.

42
43 So, in the instance where you have an open access permit, we can
44 digitally issue them. And what I'm going to show you now is what
45 happens is you get an email. We've reviewed your application.
46 Everything looked good. We've issued the permits and it's now
47 sitting in your application, your "my permits/applications" tab.
48 There's a link to it. Once it loads, I'll show you. Here is that

1 permit right here, digitally issued. You can view it up to 50 times
2 a year. In this case, here's that federal permit. You have the
3 ability to download that permit and print it out and immediately
4 begin using it.

5
6 And that's the key there. We don't get phone calls anymore about,
7 "Hey, I never received my permit in the mail. It was lost in the
8 mail." You have the ability to go in immediately. Once that permit
9 is issued, it's available for you to view and download and start
10 using.

11
12 In the event that we do find something, wrong with applications,
13 then everything is done electronically. So, in the old system, we
14 would mail you the deficiency letter, which could take days or
15 weeks depending on how close you were to the to the regional office
16 in Saint Petersburg. In this case, you get an email immediately
17 that something is going on. You log back in, and you can see that
18 you can resolve most of these deficiencies within the system
19 itself.

20
21 In this case, let's say I uploaded the-- you know, sometimes we
22 get files that were wrongly selected when uploading, so we get
23 pictures of people's events or whatever, when they meant to provide
24 us with their state registration. So, we'll simply email you back
25 and say that the file you provided is not valid. Please upload a
26 copy of your vessel registration.

27
28 So, what this has done is all of this has streamlined our process.
29 Starting, I think it was when we launched in 2021, we were about
30 30 to 35 days out for processing applications. We had over 800
31 applications waiting to be reviewed in the shelf and over the past
32 two years, while the system's been live, we've been able to knock
33 that down to zero. And so, we're processing almost same day. We
34 have been for almost a year.

35
36 The constituents that need their permits renewed or looking to get
37 into the fishery for the first time, it's usually taking anywhere
38 from a couple hours to maybe a couple of days, depending on the
39 application type, to get their permits back. And that's all I have.

40
41 **JESSICA STEPHEN:** So, if we can go back to the presentation and
42 skip a couple of slides, I think we'll finish up here then. Okay.
43 So, you can just go through the next Couple slides. These are all
44 screenshots of what Kevin presented in case we couldn't get the
45 live demo to work. I think one more. Yep. Okay. Just one more slide
46 after this.

47 So, thinking about everything you've heard, what we'd like the
48 Council to do is think about, how will one or more permits serve

1 you to assist in managing your fishing effort within the Caribbean?
2 Is there a particular permit domain, so a sector or a gear or area
3 or species complex, that is of interest to start working with a
4 federal permit? When you're thinking about that, think about what
5 the types of configurations are. Do you want it attached to a
6 person or attached to a vessel or a combination? Or do you want to
7 have open access versus some type of limited access permit.

8
9 And remember, these will kind of work in with your purpose and
10 needs. So, your purpose and need will drive your configurations.
11 And, of course, do you want to think about any additional
12 requirements that you might want with a permit? The most typical
13 one is having reporting requirements. There are others in other
14 fisheries where they require some kind of monitoring observers. I
15 often suggest, when you're just starting into a permit process,
16 that you might want to start with limited things that you're adding
17 onto it. Don't go full-fledged into everything.

18
19 And then I might have one more slide if you can see if there's one
20 more after this. Oh, yes. Compliance. So, the other thing to think
21 about is how do you want your permit to work with your compliance.
22 Do you want to be able to identify vessels or entities that have
23 permits? If so, do you want to be able to identify them, not just
24 in some database, but be able to see them at sea or at the dock?
25 We often use decal markings on the vessels, to help show. This is
26 done in our Gulf of Mexico for for-hire vessels.

27
28 Almost all of our vessels in the southeast region do require to
29 have the permit on board. That could either be a paper or maybe an
30 electronic equivalent to that, or some other kind of alternative
31 so that when they are encountered, we know that they have a valid
32 permit. And then, are there different things you want to think
33 about to renew a permit? Do you want to make sure that they're
34 really complying with your regulations? Are they giving the
35 reporting? Do they have some minimum amount of harvest. The very
36 basic is, is their information up to date? Is their contact
37 information still good? And then if there is anything you wanted
38 to do as training requirements, that could be added to a permit
39 renewal as well.

40
41 And see if there's one more slide. Yep. That was it. So, we're
42 open to have any questions that you might have. Kevin and myself
43 are happy to answer them.

44

45

Questions/Comments

46

47 **CARLOS FARCHETTE:** Okay. Thank you. I have a question. You said
48 that the permit is attached to the vessel, not the owner?

1
2 **JESSICA STEPHEN:** Yes. So, this gets kind of interesting how we
3 use the language. So, we attach, currently, in the SERO system,
4 the permit to the vessel and the name of the permit holder. There
5 is a chance where the vessel owner may be different than the permit
6 holder. In our regulations, we refer to vessel owner, and that is
7 actually the permit holder, is how we interpret it.
8
9 **CARLOS FARCHETTE:** Okay. So, okay. So, if my vessel breaks down
10 and I borrow someone else's vessel, can I still go out with that
11 permit? That can't work. Right?
12
13 **JESSICA STEPHEN:** Right. So, if you have situations where that
14 happens more often, this goes back to the purpose and need, that's
15 where I think you want to think about, maybe you want a person
16 permit. A permit supplied to a person that can move with them from
17 vessel to vessel versus having it applied to the vessel.
18
19 Those are the kinds of considerations and questions we need the
20 Council to generate so that we can help assist you in figuring out
21 what's the right combination for the fisheries in this region.
22
23 **CARLOS FARCHETTE:** Okay. One second. I lost my train of thought.
24 Like in the Virgin Islands, the law states that the license holder
25 must be on board the vessel. But I think I heard you say that if
26 you own a business, you don't have to be on board that vessel and
27 the vessel's got a permit to fish?
28
29 **JESSICA STEPHEN:** So, in the Southeast Region, we have the vessel
30 and permit holder and we do not have what we call "owner onboard
31 requirements." So, we do have, in the Southeast, a lot of people
32 who own a fleet of vessels. And so that's typically in a business
33 name and then they have captains on it. So, if you're looking at
34 things like that, that's more opportunity to go with the vessel or
35 the vessel entity combination versus the entity only permit.
36
37 **CARLOS FARCHETTE:** Okay. Thanks. I have Nelson and then Wilson.
38
39 **NELSON CRESPO:** Thank you, Mr. Chair. Nelson Crespo, for the
40 record. I want to know if it is possible to establish a special
41 permit for deep-water snappers, especially that Snapper Unit 1, in
42 the Federal waters around Puerto Rico.
43
44 **JESSICA STEPHEN:** So, speaking in just the idea of how you create
45 a permit, you can create permits for just certain species complex.
46 And how it would work here, I'm going to defer to the Council on
47 how they would choose to do it. But the capability of creating a
48 permit for a species complex is something that is done in other

1 regions.
2
3 **CARLOS FARCHETTE:** Wilson.
4
5 **WILSON SANTIAGO:** Yeah, thank you. Wilson Santiago, for the record.
6 I have two questions. I heard that you said that the system can be
7 translated in various languages? So, when Puerto Rican fishers
8 enter, they can select Spanish.
9
10 **KEVIN MCINTOSH:** Yes. It's browser specific though. So, if you're
11 using Chrome or Firefox or whatever. So, our system itself is not
12 translating it but the browser. So, whatever browser-
13
14 **WILSON SANTIAGO:** So, it's the browser. It is not that in the
15 system you can select the language.
16
17 **KEVIN MCINTOSH:** Correct. But, yeah, when I went through and set
18 this up, there were a lot of languages in there that you can choose
19 from. Yes.
20
21 **WILSON SANTIAGO:** Okay. Thank you. Okay. So, the other question
22 is, is this the same system that was created for the Caribbean's
23 small permit? Is it the same system that was created at that time?
24
25 **KEVIN MCINTOSH:** No. This system was launched two years ago.
26
27 **WILSON SANTIAGO:** Okay. My confusion is if a Puerto Rican fisher,
28 right now, or a Caribbean fisher, wants to get a Caribbean small
29 boat permit, do they have to enter to this system or do they have
30 to go first to the HMS form?
31
32 **KEVIN MCINTOSH:** Sorry. I think I misunderstood your question.
33 Yes. You would enter this system to get the commercial Caribbean
34 small boat.
35
36 **WILSON SANTIAGO:** Okay.
37
38 **KEVIN MCINTOSH:** Yep. That was the example I chose, as far as
39 getting a new one was the CCSB, the Commercial Caribbean Small
40 Boat.
41
42 **WILSON SANTIAGO:** Yeah, because this is new for me. The education
43 that I give the fishers is that they have to enter the form from
44 the HMS?
45
46 **KEVIN MCINTOSH:** Correct. And that is the case in some instances.
47 I'm not sure what other permits they have over there, but we do
48 have fishers that need to go to the HMS permit shop to get their

1 permits and also come to our--
2
3 **WILSON SANTIAGO:** But is it the same thing? They can enter through
4 this site and--
5
6 **KEVIN MCINTOSH:** Yes. To get the Commercial Caribbean Small Boat,
7 yes.
8
9 **WILSON SANTIAGO:** Later, can you give me the site or maybe where
10 I can go to--
11
12 **KEVIN MCINTOSH:** Yes. I can--
13
14 **WILSON SANTIAGO:** Maybe we can get it later because of--
15
16 **KEVIN MCINTOSH:** I can tell you. Yeah. The site itself, the URL,
17 I can give you a short link for it. But also, it's off of our home
18 page. But I can tell you that where we usually send folks to is
19 our home page.
20
21 **WILSON SANTIAGO:** Okay. Thank you. Thank you, Mr. Chair.
22
23 **CARLOS FARCHETTE:** María.
24
25 **MARÍA LÓPEZ-MERCER:** Okay. So, basically, if the Council were to
26 develop a federal permit system for whatever the Council decides
27 to do, it could be a permit for species, a general permit,
28 depending on the scope, this will be the system that you will be
29 using. However, it will be tailored, as much as possible, to the
30 particularities of our fisheries. Right? And correct me if I'm
31 wrong, Jessica and Kevin, but there are certain things that are
32 set, but there are other things that could be modified depending
33 on what we're doing, but this is the system. Right? This is the
34 system for the federal permit if that's where we're going. Right?
35
36 So, there's a lot of decisions to make over here, like Jessica was
37 saying, you know, what do you want? Did you want a permit that
38 will be assigned for the person. Did you want a permit that will
39 be on the boat for the vessel? And that has a lot to do with the
40 description of the how the fisheries are operating over here, which
41 are not the same as in the mainland. Right?
42
43 So, that will be something that has to be explored, because the
44 idea will be to have a permit that works for our fisheries, right?
45 This is not something that we're going to do a permit just because,
46 it has to be something that we can definitely use, that is tailored
47 to the specific, you know, is it Saint Croix? Is it Saint Thomas?
48 Is it Puerto Rico? Is it for a species, let's say, like Nelson

1 suggested doing a permit for deep-water snapper, is it going to be
2 a limited access permit or is it going to be an open permit?

3
4 So those are the things that the team needs to be able to see what
5 the scope of this action is of what would you like to do, so we
6 can start working on it. Because the last time that we had this
7 discussion, which was to bring it up to the table again and "Hey,
8 don't forget this is what we discussed before" and you guys said
9 that you were interested. But there's a lot going on and we have
10 to know, what would you like to do?

11
12 Are you trying to control effort? Are you just trying to get a
13 universe of all the fishers that are fishing in the EEZ? Are you
14 trying to control effort on a certain fishery, etcetera?

15
16 **CARLOS FARCHETTE:** Okay. I have Graciela. But one more comment
17 about what Crespo was talking about. What about transiting from
18 the EEZ into the territorial waters and their rules might be
19 different. What happens then?

20
21 **JESSICA STEPHEN:** So, I'll take a stab at this. So, when we're
22 thinking about transiting, you have to make sure that you're
23 properly abiding by all the regulations. So, whatever state
24 regulations are as well as the federal. And when you're thinking
25 about how to do it, you could, if this is an issue, you could
26 brainstorm some ideas. Do you have a transit permit that's simply
27 allowing transit? Is it outside the purview of the federal
28 government to think about how to have that fish land? Do you need
29 to abide by, say, the Puerto Rico requirements as well as the
30 federal to go through things.

31
32 These are the things we're having this open discussion and
33 identifying these potential problem areas can help us scope a
34 permit that's going to work the way we hope for it to work moving
35 forward. And so, the biggest thing here is communication and
36 understanding of how all the different provisions work together.

37
38 Typically, we have the states abiding by the federal regulation.
39 So, I think it's somewhat of a reverse situation here where the
40 state regulation might be more prohibitive than what the federal
41 one is.

42
43 **MIGUEL A. ROLÓN:** I propose that we have a virtual meeting with
44 the local agencies in Puerto Rico, on her office, and then present
45 there exactly what the problem is, the issue that we want to
46 discuss. Because number one, we cannot tell Puerto Rico what to do
47 or not to do. And second, Puerto Rico, I was talking to Ricardo,
48 and they all want the best for the fishers.

1
2 So, I propose to have that in the first quarter of 2024. A meeting
3 where the Chair of the DAP Puerto Rico could be present, Ricardo,
4 and the permit office at the Regional Office. That meeting can be
5 Chaired by Carlos and we can present to the Council, in April,
6 suggestion to proceed.

7
8 But also in the committee, we can talk ahead with Puerto Rico and
9 see if they can look it up with their lawyers or regulations and
10 see what they can come up with. Because the issue is the reverse
11 of what we had before. We have some regulations that prohibit the
12 possession of certain species along with certain gear, but it was
13 not prohibited in Mona Island. So, the fisher were fishing legally
14 under the Puerto Rico law on the island then when cruising the
15 EEZ, they were in violation of federal law and they came with a
16 manifesto and it was solved.

17
18 So, this is the other way around. They are fishing the EEZ but
19 going through Puerto Rico area of jurisdiction, they will be in
20 possession of prohibited species and or gear. And we can address
21 that and come back, if Ricardo agrees, we can come back.

22
23 **RICARDO LÓPEZ-ORTIZ:** Yes. This is Ricardo López, for the record.
24 Thanks for that opportunity. I would really like that to happen.

25
26 **CARLOS FARCHETTE:** Okay. Okay. Alrighty, because there are more
27 questions, but I guess we're kind of short on time here but that's
28 fine.

29
30 **SENNAI HABTES:** Mr. Chair, if I can make a recommendation, maybe
31 table this discussion for tomorrow to continue if there's time
32 available and move on to whatever other business we need to attend
33 to today.

34
35 **MIGUEL A. ROLÓN:** So now that your table is finished, we can also
36 move the Farming of Tropical Seaweed for tomorrow. Cristina, spoke
37 to them and they are willing to present before lunch.

38
39 **CRISTINA OLÁN MARTÍNEZ:** Loretta sent me an email and she will be
40 available from 10 AM until 11:30.

41
42 **MIGUEL A. ROLÓN:** Okay. Do that. The person with the seaweed
43 presentation.

44
45 Okay. Thank you, Mr. Chairman. With us we have a friend of the
46 Council for some time now, Dr. Dalila Aldana, she has been working
47 with us on microplastics. Before I met her with this project, I
48 didn't know anything about microplastics. Now I know that

1 everywhere, and the average person sitting around here, we swallow
2 the equivalent of a credit card microplastic in a year of eating.

3
4 But I also want to mention a couple of things about our
5 distinguished guest today. Dalila has received the order of the
6 French republic, Legion of Honor. That high honor was established
7 by no other than Napoleon Bonaparte. It has more than 222 years.
8 We have the honor of having you here after that. In the screen we
9 have proof of the event.

10
11 But I would like to call to your attention the picture on the lower
12 left hand. Those two ladies Next to Dalila, I met them when they
13 were little kids running around the laboratory. Now they are two
14 professionals. One is a lawyer, and the other one is an MD. And
15 the other fellow, [inaudible], he's the father of those two, and
16 the husband of Dalila Aldana. So, we are really proud to have you
17 here today.

18
19 In addition, the network of Spanish scientists in Mexico gave
20 Dalila the first prize for her work on communicating science in
21 Spanish to the general public and other scientists. And this is
22 something that is not taken lightly in the Spanish community. In
23 order for you to be able to convey the message from English. The
24 scientific jargon in English, you know all the problems that we
25 have. Spanish is worse, because what you say in one paragraph in
26 English, we need to take two. And Dalila is one of the few persons
27 I know that can do that.

28
29 So, with us, today, we have the Dalila Aldana. The title of the
30 presentation, please. Go ahead and present it yourself.

31
32 **Impact of Microplastics Related to COVID-19 Pandemic in the**
33 **Caribbean and the Fishing Activity-Dalila Aldana**

34
35 **DALILA ALDANA-ARANDA:** Spanish to start the first sentence.
36 Agradezco mucho tus cálidas palabras y la invitación del Caribbean
37 Fishery Management Council. Para mí es un honor estar aquí. Este
38 Consejo es parte de mi camino, es parte de lo que he podido llegar
39 con esas fotos que has presentado. Thank you so much for this
40 invitation. I will practice your English with me. Okay?

41
42 I will talk about microplastics related with the COVID in the
43 Caribbean and fishing activities.

44
45 Always, it is necessary to make a question. In this case, my
46 question was where do I start? I decided to start with the time.
47 I invite you to think about the time.

48

1 The earth was formed 5,000,000,000 years ago. This is a lot of
2 time. It's very difficult to think about this time. And then, many
3 years after appeared the Homo sapiens 300,000 years ago. Thus, we
4 have as a species 23,000 times less experience than the earth.

5
6 Last but not the least, with time the plastics appeared. It is
7 necessary to say that in the last 20 years, half of all plastics
8 have been produced. In the only 20 years. Annually, 9,000,000,000
9 tons of garbage are discharged into oceans.

10
11 Plastic makes up 80%. And 50% is packaging plastics. This situation
12 is related with our consumption models. For instance, each minute,
13 1,000,000 bottles of water are sold, which represent 25% of the
14 marine litter.

15
16 And is worse related with the Caribbean? 11% of fishing catch come
17 from this region and 10% of the world's population live there. The
18 Caribbean is also the second sea most polluted marine in the world
19 because of two reasons. One, one third of all waste ends up on
20 clandestine landfills and 85% of the wastewater is not treated
21 before reaching the sea.

22
23 About microplastics. Where do they come from? The microplastic
24 come from two places, plastic fragmentation and spheres produced
25 by the industry that are incorporated into the toothpaste and the
26 creams. The problem with the microplastics is that they are
27 associated with the POPs, the Persistent Organic Pollutants, as
28 organochlorines, such as fertilizer and these substances are very
29 dangerous for the human health. The other problem is the
30 bioaccumulation in the chain's nutrition.

31
32 During COVID, the plastic production increased due to the face
33 mask, gloves, online shopping. In 2020, Around 129,000,000,000
34 face masks and 65,000,000,000 gloves were used monthly around the
35 world.

36
37 To study the impact of COVID on fishing activity in the Caribbean,
38 we carried out a survey with close and open question. Google Forms
39 were available in Spanish, English, and French. This form was sent
40 to fishermen via WhatsApp. The survey had six topics related to
41 the impacts of COVID. About human health, consumption habits,
42 fishing catch, fishing markets, and marine pollution.

43
44 We obtained responses from six countries where at least 30
45 fishermen responded to the survey. The countries were Belize,
46 Dominican Republic, Jamaica, Mexico, Panama, and San Andres
47 Island.

48

1 Results on the effect of COVID on human health. The first answer
2 was that our fishermen were not the youngest people. Fishermen
3 were 50 or older in the Dominican Republic, Jamaica, Mexico, and
4 Panama. 40 in Belize and 35 in San Andres Island.

5
6 Results to the question, do you have social security? 80% to 100%
7 of the fishermen in Jamaica, Mexico, and Panama do not have social
8 security. While in Belize and Dominican Republic, 90% do have this
9 benefit.

10
11 Results to the question, during COVID time, did you use a face
12 mask? Between 20% to 60% of the fishermen used a mask. Only
13 Dominican Republic fishermen did not use any protection.

14
15 Results to the COVID vaccination. Almost all Caribbean fishermen
16 received the COVID vaccine. Dominican Republic, Jamaica, and San
17 Andres only an 80%. The percentage of infected varied between 18%
18 in San Andres to 100% for the Dominican Republic that were infected
19 by COVID.

20
21 Results to the question, how much do you spend per week on anti-
22 COVID medication? It is interesting to say that the fishermen in
23 the Dominican Republic were the ones who spend the most. An average
24 of \$140 per week. Fishermen of Jamaica, Panama, and San Andres
25 spent the least.

26
27 The question related with the impact of consumption. The product
28 that fishermen generally stopped consuming was meat, canned food,
29 and fast food during the COVID period. The other items fishermen
30 stopped buying were clothes, shoes, and fashion accessory.

31
32 Results of the effect on fishing catch. Most of the fishermen say
33 the catch did not decrease during COVID, it's a logical situation.
34 Although in most countries, there were mobility restriction. In
35 general, the fishermen work two or three times per week.

36
37 Results on the impact on fishing market. In all countries,
38 fishermen observe a decrease in demand for fish and seafood, except
39 in San Andres Island. The fishermen observed that conch and lobster
40 were the ones that presented low demand during this COVID period.

41
42 Results on the question, why was the seafood market was affected?
43 The fishermen offered this reason, mobility restriction, hotel
44 restaurant and ports closed, as well as low price for this product
45 during this period.

46
47 Results on marine pollution by COVID. 80% to 100% of the fishermen
48 observed plastic pandemic during this period in our area, except

1 in Jamaica.

2

3 Results to the question, did you observe pandemic plastics? Most
4 of the fishermen observe face mask, of course, and gel containers,
5 except in the Dominican Republic.

6

7 Today's microplastics are not yet the microplastics derived from
8 the plastics used during Covid. However, we studied microplastic
9 in these twelve commercial fishes. What was the results found in
10 these fish? All fish have microplastic, and their abundance was
11 higher in fish from coastal and reef waters. You can observe in
12 this picture, these carnivorous that I show with the red line are
13 the ones that present the highest values of microplastic
14 contamination. Pejepuerco, pargo prieto, sama and arrayado.

15

16 The dominant form of microplastic was fibers. The other aspect
17 that is very important, you can observe it in this picture of
18 microfibers. The arrow showed a bacterium. In the last picture you
19 can observe a bacteria added to the fiber. This situation is very
20 frequent in microplastics.

21

22 In conclusion, 50% of the fishing population was infected by COVID.
23 Fishermen spent a lot of money in face masks and medication. The
24 diet was modified by stopping different items. The fish and seafood
25 market were affected by mobility restriction, close restaurant,
26 hotel and ports. All the fish analyzed present microplastic; this
27 being more abundant in coastal and reef fishes. The microplastic
28 frequently showed microorganisms as bacteria.

29

30 An aspect that is very important to pay attention to. Markets are
31 already requesting certification of microplastic contamination.
32 Fish, and seafood will not be the exception.

33

34 Recommendations. It is very important to show the relationship
35 between microplastic pollution and human activity. At this
36 meeting, I will suggest preparing an exhibition with this topic.
37 In order to exhibit, to show this invisible pollution that is
38 associated with our production model of consumption and
39 production.

40

41 It is necessary to repeat that we need to live like this and not
42 like this. It is necessary to stop this plastic soup and make more
43 activities with education, outreach program, and sustainable
44 action.

45

46 I finish with this sentence In Spanish, of course, de Eduardo
47 Galeano. Humanitos... Ya no sabemos si somos obras maestras de
48 Dios o chistes malos del Diablo. Thank you for your attention.

1
2 **Questions/Comments**
3

4 **MIGUEL A. ROLÓN:** God is not with me today. Well, anyway, it's
5 interesting that they say, "Human beings, either we are
6 masterpieces of God or bad jokes of the devil," because of the
7 things that we do to the environment.
8

9 I want to be the first one to thank, Dalila Aldana for this
10 excellent work. We probably need to talk about future endeavors
11 with this, especially with Dr. Alida Ortiz. She's interested in
12 working together to have the outreach and education that we need,
13 the one that you suggested for the microplastics.
14

15 I've been in correspondence with Dr. Dalila Aldana about
16 microplastic. This is becoming a worldwide issue, especially after
17 COVID. It's beginning to worry the fishing industry because if
18 there's a push for certification of seafood with microplastic and
19 somebody comes with a level, then it might affect the way that you
20 catch and sell your species. Some species will be more-- the
21 carnivores, for example, accumulate more microplastic than the
22 others.
23

24 The other thing is that microplastics alone, is okay. We can digest
25 it and throw it out. But microplastics, as she shows, carry
26 bacteria and viruses that might be harmful to you. Anyway, I'll
27 stop here. I believe that Roberto wants to say something.
28

29 **CARLOS FARCHETTE:** Roberto.
30

31 **ROBERTO SABATER:** Is this microplastic in the skin or on the flesh?
32

33 **DALILA ALDANA-ARANDA:** Okay. In our case, we studied the
34 microplastic in two system. The digestive system, of course, and
35 the muscle. Okay. In the muscle they are present as well.
36

37 **RICARDO LÓPEZ-ORTIZ:** Dalila, nice to meet you in person. We
38 exchanged some texts and some messages by email. As you know, I
39 used to have a student that was working with microplastics. Her
40 results were very similar to yours.
41

42 One of the things that was fascinating to me was that she compared
43 the fish captured by SEAMAP, which are more randomly collected,
44 with the fish collected by fishermen, which you know that they go
45 to a special place where they know they're going to have a good
46 fishing time.
47

48 The fish collected by fishermen have the most microplastic

1 quantities. I guess it is because of the upwelling. You know, the
2 water coming up the column and bringing up the microplastic with
3 microorganisms. Fish go there to eat, and fishermen go there to
4 fish.

5
6 So, again, thanks for that presentation. If you're planning to
7 work further with education, I know that Yesenia Marín, which is
8 the student, she will be available for you and for the Council to
9 work on that too. Thank you.

10
11 **DALILA ALDANA-ARANDA:** Okay. Thank you so much.

12
13 **CARLOS FARCHETTE:** Vanessa?

14
15 **VANESSA RAMÍREZ:** Yes, thank you, Mr. Chair. Dalila, thanks for
16 that presentation. I just want to put a comment on the table. From
17 what we see every day, with our new generation of fishermen, is
18 that they are the ones that are throwing a lot of garbage. For
19 example, water bottles. They just go out with 10 of them, come
20 back with them empty, and instead of taking them out, they just
21 leave them in the boat, and the next day you can see them floating
22 around the bay.

23
24 So, any suggestion on how we can make a good campaign to teach the
25 new generation of fishermen the importance of taking the example
26 from our older generations. They used to have a water can, reusable
27 one, and go every day with it, refill it again instead of using
28 all those bottles and bags that they are throwing outside every
29 day. They are making the fish that they are bringing to the table,
30 practically, make the human, in a lot of situations, sick with
31 what we already know as cancer. Any suggestion for outreach and
32 education?

33
34 **DALILA ALDANA-ARANDA:** Yes. There are a lot of actions, programs,
35 that are necessary. For me, the most important one is relating
36 human activity with pollution. In general, humans don't relate
37 daily activities with pollution. This is very important. It is
38 very important to show that there is a direct relationship between
39 those. So, it is necessary to educate the adults. It's very
40 important in environmental science.

41
42 In general, kids receive the education in school by the adults,
43 no? The adults are very important because they are the consumers.
44 This is economical active. So, for me, step by step I learned that
45 it is necessary to do this relationship. Our activities, the daily
46 activities, with pollution. This is important.

47
48 Another aspect that is necessary to transmit to the fishermen is

1 to pay attention to the catch. I think, at this moment, in my
2 country, in Mexico, the fishermen don't pay attention to the catch,
3 to the fish. It is necessary to learn more or less like the Japanese
4 people with the fish. No? With the fish, that catch is a baby. No?
5 And they protect the baby very quickly in the freezer. In Mexico,
6 the fishermen throw out the fish. No? What do you say? Se golpea
7 todo el tiempo in the boat?

8
9 When you work with the microplastic, it is necessary to pay a lot
10 of attention to all the line that you use. The item must never
11 touch, of course, the plastic containers. It is necessary to use
12 glass or the metallic object, never any kind of plastic.
13 Because all plastics, deliver microplastic. So, it is necessary.

14
15 In the fishing activity, there is a lot of the plastic that we
16 use. The containers are the first. The containers, the object with
17 what you cut the fish, how you obtain the fillet. So, it is
18 necessary to use metal tables, and pay attention to the catch.

19
20 Step by step, I think the market imposed the microplastic
21 certification. I am sure of this.

22
23 **CARLOS FARCHETTE:** Ricardo?

24
25 **RICARDO LÓPEZ-ORTIZ:** Thank you, Mr. Chairman. So do you think
26 that the-- If I understood, do you think that the microplastic
27 that you found on the meat of the fish is because of the
28 manipulation of the fishermen, or it was systemic coming from the
29 digestive system? Both ways?

30
31 **DALILA ALDANA-ARANDA:** Both ways. Okay. Both ways. It is necessary
32 to pay attention to the line of manipulation because this is one
33 way that the pollution, the contamination, starts. The other, of
34 course, they are the microplastic. The smaller, can cross the
35 different barriers in the body.

36
37 **CARLOS FARCHETTE:** Miguel?

38
39 **MIGUEL A. ROLÓN:** Just one comment. There's very little that the
40 Council can do in terms of management, but there's a lot that we
41 can do helping with the outreach and education. So, what I suggest
42 is that I would talk to Ricardo, to Sennai, and Alida. Alida, for
43 health reasons is not here, but she will be tomorrow, via Zoom
44 with us, with a presentation, and that's a project that we can
45 undertake. Not only for the U.S. Caribbean, but also under WECAFC
46 we can help spread the word around like we did with Dr. [inaudible]
47 a long time ago, for other issues that we have together.

48

1 My worry is that if the public is not aware of this, you don't
2 have the understanding, and then you have the support that you
3 need for this. The other worry I have is that the fishers can be
4 affected. The socio-economy of the fishery. Because if I were a
5 fisherman I would say, "I have problems with ciguatera and now I
6 have to think about plastics? Come on." But sooner or later, that
7 will come to your table and might create a problem.

8
9 Actually, for me, when you started talking, I felt guilty all of
10 the sudden because I have a bottle in front of me. And now the
11 fancy hotels, they have some tube that I didn't know what it was.
12 Well, this hotel has it. They are three fountains, and you can put
13 your metal bottle there to refill it. This way you avoid throwing
14 plastic into the sea or to the environment.

15
16 So, Dalila, I really thank you for coming over here with your
17 presentation, I congratulate you for the honors that you received.
18 Thank you, Diana, for initiating that.

19
20 And then, Mr. Chairman we will continue working with Dalila in
21 2024- '25 and Alida and we will report back to you. And, of course,
22 with the two local governments, see if we can join efforts for
23 outreach and education. But thank you again, Dalila. And

24
25 then, Julian told me to mention this to the group. Are we legal,
26 Katherine, yes? Are we going to miss the federal governments today
27 with us? The feds, can they come join us tonight?

28
29 **KATHERINE M. ZAMBONI:** I'm going to give you the answer I received
30 from the Department of Commerce Ethics Office.

31
32 Federal employees that plan to attend tonight, should be prepared
33 to pay the fair market value of tonight's event for a person. So,
34 whatever that might be. I'm not the one to say what that fair
35 market value is. So, whatever they tell us that is. Personally,
36 and I'm going to speak for myself, I'm going to do that and ask
37 for a receipt, and I will leave it at that.

38
39 **MIGUEL A. ROLÓN:** Okay. I will collect that for how many feds do
40 we have here?

41
42 **KATHERINE M. ZAMBONI:** The amount is to equal the fair market
43 value. And like I said, that is not for me to judge. Whatever one
44 tells me that fair market value is, that is what I will pay and
45 then it's up to each individual employee to determine if that's
46 what they're comfortable doing or, if they're able to attend.

47
48 **MIGUEL A. ROLÓN:** It is beginning to sound like when the IRS told

1 me to send in the percentage of everything that I buy from-- never
2 mind.
3
4 **CLAY PORCH:** I'm not worried about paying, but is this event open
5 to everybody that's in this room? Anybody that comes to the Council
6 meeting?
7
8 **MIGUEL A. ROLÓN:** Anybody.
9
10 **CLAY PORCH:** So, it is a widely attended event.
11
12 **MIGUEL A. ROLÓN:** Yes.
13
14 **CLAY PORCH:** Yeah. I think when I talked to Julian, he said anybody
15 can come. Your friends can come.
16
17 **MIGUEL A. ROLÓN:** Yeah. It's open it's open to everybody. We can
18 also call a special public hearing to know about lobster.
19
20 Well, I don't envy Katherine Zamboni's shoes because you have to
21 be legal all the time. But, anyway, it's up to you if you are in
22 violation of the law because you don't get the appropriate receipt,
23 or the receipt is lost. You know? But the point is that the taxis
24 will be at the lobby here. It will be \$15 round trip. And we are
25 supposed to be there at 6-6:15. So, we have five minutes to run to
26 our rooms and go back to the lobby.
27
28 **CARLOS FARCHETTE:** Sennai
29
30 **SENNAI HABTES:** Mr. Chair, I would recommend if we're done
31 discussing business for the day, we let everyone know online so
32 they can sign off if they're done and we can sign off as well.
33
34 **MIGUEL A. ROLÓN:** So, we'll be in recess until tomorrow at 9
35 o'clock. eight for the panel.
36
37 **VANCE VICENTE:** One question.
38
39 **LOUIS ANTHONY BLANCHARD:** I got a quick correction. I'm a little
40 confused here. Mr. Julian asked me to make sure that everybody in
41 this room gets to this party. I don't think anybody has to pay
42 anything. The only thing we have to pay it's the taxi. I am a
43 little confused--
44
45 **MIGUEL A. ROLÓN:** Wait. Wait. Wait. Wait. Wait. I'll unconfuse you
46 when we finish, but I'll let you know.
47
48 **LOUIS ANTHONY BLANCHARD:** Okay.

1
2 **CARLOS FARCHETTE:** So, they said that the taxi is a color champagne
3 and there are three taxis that are going to be waiting and a maroon
4 van. But, anyways, we'll be in recess until tomorrow at 8AM.

5
6 (Whereupon the meeting recessed on December 5, 2023.)

7
8 - - -

9
10 DECEMBER 6, 2023

11
12 WEDNESDAY MORNING SESSION

13
14 - - -

15
16 **CARLOS FARCHETTE:** So good morning. We're going to start in about
17 1 minute. Continuation of the CFMC 183rd Council Meeting in Saint
18 Thomas at the Frenchman Reef. It's 8:03, December 6, 2023.

19
20 So, I'm going to do a roll call. I'm going to start on my right
21 this time with Graciela.

22
23 **GRACIELA GARCÍA-MOLINER:** Buenos días. Graciela García-Moliner,
24 Council staff.

25
26 **CLAY PORCH:** Good morning. Clay Porch, Southeast Fisheries Science
27 Center.

28
29 **FRANCISCO E. WERNER:** Good morning. Cisco Werner, NOAA Fisheries.

30
31 **KATHERINE M. ZAMBONI:** Good morning. Kate Zamboni, NOAA's Office
32 of General Counsel.

33
34 **MARÍA LÓPEZ-MERCER:** Good morning. María López, NOAA Fisheries,
35 SERO.

36
37 **MIGUEL A. ROLÓN:** Good morning. Miguel Rolón, Council Staff.

38
39 **HELENA ANTOUN:** Good morning. Helena Antoun, NOAA Fisheries.

40
41 **CARLOS FARCHETTE:** Morning, Carlos Farchette, Council chair.

42
43 **VANESSA RAMÍREZ:** Good morning. Vanessa Ramírez, Vice-chair.

44
45 **RICARDO LÓPEZ-ORTIZ:** Good morning to everybody. Ricardo López-
46 Ortiz, Puerto Rico DNR, Council member.

47
48 **JAMES R. KREGLO:** Good morning. James Kreglo, Council member, Saint

1 Thomas/Saint John.
2
3 **ROBERTO SABATER:** Good morning. Roberto Sabater, Council member,
4 Puerto Rico.
5
6 **LIAJAY RIVERA GARCÍA:** Buenos días. Good morning. Liajay Rivera
7 García, Council staff.
8
9 **CRISTINA OLÁN MARTÍNEZ:** Good morning. Buenos días. Cristina Olán,
10 Council staff.
11
12 **LINDSEY KRAATZ:** Good morning. Lindsey Kraatz, NOAA Fisheries.
13
14 **MARIANA C. LEÓN-PÉREZ:** Good morning. Mariana León-Pérez, ISER
15 Caribe.
16
17 **GERSON MARTÍNEZ:** Good morning. Gerson Martínez, DAP Chair.
18
19 **JULIAN MAGRAS:** Good morning. Julian Magras, DAP Chair, Saint
20 Thomas/Saint John.
21
22 **NELSON CRESPO:** Good morning, everyone. Nelson Crespo, DAP Chair,
23 Puerto Rico.
24
25 **ALEXANDRA STEVENSON:** Good morning. Alexandra Stevenson, I'm with
26 East Carolina University.
27
28 **CYNTHIA GRACE-MCCASKEY:** Cindy Grace-McCaskey, East Carolina
29 University.
30
31 **MAGGIE RÍOS-MOTIANI:** Good morning. Maggie Motiani, U.S.V.I.
32 Department of Planning and Natural Resources, Division of Fish and
33 Wildlife.
34
35 **ZOLA ROPER:** Good morning. Zola Roper, U.S.V.I. Department of
36 Planning and Natural Resources, Coastal Zone Management.
37
38 **KAREN M. URELIUS:** Good morning. My name is Karen Urelius. I'm
39 with the U.S. Army Corps of Engineers.
40
41 **Good morning. Freddy Dueñas. Puerto Rico. 00:06:58**
42
43 **AMY C. DEMPSEY:** Good morning. Amy Dempsey, BioImpact.
44
45 **WILSON SANTIAGO:** Good morning. Wilson Santiago, Puerto Rico
46 Fisheries Liaison.
47
48 **ADYAN RÍOS:** Buenos días. Adyan Ríos, NOAA, Southeast Fisheries

1 Science Center.
2
3 **KEVIN MCCARTHY:** Good morning. Kevin McCarthy, Southeast Fisheries
4 Science Center.
5
6 **LAURA CIMO:** Good morning. Laura Cimo, NOAA Fisheries, Office of
7 International Affairs, Trade and Commerce.
8
9 **JESSICA STEPHEN:** Good morning. Jessica Stevens, Southeast
10 Regional Office, NOAA Fisheries.
11
12 **KEVIN MCINTOSH:** Good morning. Kevin McIntosh, Southeast Regional
13 Office.
14
15 **MARLON HIBBERT:** Good morning, everyone. My name is Marlon Hibbert,
16 I'm the director for the Division of Coastal Zone Management with
17 the Department of Planning and Natural Resources here in the Virgin
18 Islands.
19
20 **CRISTINA OLÁN MARTÍNEZ:** People in Zoom are Martha Prada, Alida
21 Ortíz Sotomayor, Andrés G. Bisonó León, Andrew Mcgraw-Herdeg,
22 Áurea E. Rodríguez-Santiago, David Dale, Dinorah Chacin, Ernesto
23 Otero Morales, Frank Hernandez, Frank Mueller-Karger, Jennifer
24 Schull, Joy and Sergio, Nadine Heck, Sarah Stephenson, Sydnee
25 Grushack, and somebody on their iPhone.
26
27 **CARLOS FARCHETTE:** Okay. Thank you, Cristina.
28
29 **CRISTINA OLÁN MARTÍNEZ:** You're very welcome.
30
31 **CARLOS FARCHETTE:** So yesterday we didn't get to finish the last
32 item of Farming and Tropical Seaweed, but we're going to move that
33 to after the next agenda item, which will be Aspects of Science
34 Management and Industry on Sargassum, by Helena Antoun.
35
36 **Aspects of Science, Management, and Industry on Sargassum—**
37 **Moderator, Helena Antoun, NOAA Fisheries**
38
39 **HELENA ANTOUN:** Thank you, and good morning, everyone. We will be
40 opening today with a panel discussion to discuss the impacts
41 sargassum in the Caribbean. The goal of today's discussion is to
42 understand the dynamics of sargassum, its ecological importance,
43 scientific gaps, management challenges for coastal communities in
44 the U.S. Caribbean.
45
46 We will start with a series of short presentations given by each
47 panelist, followed with approximately 30 minutes of discussion
48 questions at the end of the presentation session. Joining us today

1 as panelists are Dr. Cisco Werner, Director of Scientific Programs
2 and Chief Science Advisor, NOAA Fisheries. Mariana León, Marine
3 Scientist, ISER Caribe. David Dale, Fishery Biologist, Habitat
4 Conservation Division, NOAA Fisheries. Karen Urelius, Project
5 Manager and Lead Project Manager for the U.S. Virgin Islands, U.S.
6 Army Corps of Engineers, Permit Section. Sydnee Grushack, Project
7 Director, Newlab. Marlon Hibbert, Director, Coastal Zone
8 Management, U.S.V.I. DPNR. Ricardo Colón, Management Officer,
9 Northeast Natural Reserves, Puerto Rico DNER. Andrés Bisonó, and
10 Christopher Walker, SOS Carbon.

11
12 Each panelist will be given 10 minutes to give their presentation
13 or remarks. Folks may ask clarifying questions at the end of each
14 panel's presentation. However, we are kindly asking that
15 discussion questions be kept for the end of the presentation
16 session. And with that, we may begin.

17
18 So, with the first presenter, we're going to have Dr. Werner.

19
20 **Pelagic Sargassum Population in the Tropical Atlantic**

21
22 **FRANCISCO E. WERNER:** Okay. All right. Well, good morning, and
23 thanks for the opportunity to kick off this conversation, which is
24 going to be really interesting. I've been able to take a peek at
25 the presentations coming. In this this opening presentation I want
26 you to picture some ideas of how the sargassum population--

27
28 (Part of Dr. Werner's comments are inaudible on the audio
29 recording.)

30
31 **LIAJAY RIVERA GARCÍA:** Please hold. We are seeing on the chat that
32 some people on Zoom cannot hear the audio. It seems like they
33 cannot hear anybody here right now, so give us a moment. Thank
34 you.

35
36 **FRANCISCO E. WERNER:** Okay. All right. So, they didn't hear
37 anything I said? Okay. Well, I'll restart, real quick. Okay, so
38 again, thanks for the opportunity for offering some remarks on
39 this panel on the sargassum, which is such a timely topic for this
40 part of the world. I'll be talking about, you know, some ideas of
41 how the sargassum population was established in the tropical
42 Atlantic, as well as some ideas, maybe, on the predictability and
43 the seasonality of it.

44
45 The presentation today is one that we prepared between myself and
46 Frank Muller-Karger at the University of South Florida, and it's
47 based on a paper that was led by Libby Johns at the University of
48 Miami, published in 2020 or 2021. Details are there.

1
2 So, if I could have the next slide. What I'll be talking about is
3 the big picture of the establishment of the sargassum. We really
4 started seeing these events, at least the most recent ones,
5 starting in about 2010, 2011. And in that paper, we outlined,
6 roughly, four steps of the establishment. First, how is it that
7 the sargassum may have left or transported out of the Sargasso
8 Sea, sort of a long-distance dispersal event, indicated by the
9 number 1 there. Then, it's entrainment in the Canary Current.
10
11 Then, following the entrainment in the Canary Current, in this
12 part number 3 here, is really the dynamics I'm going to be focusing
13 on mostly today. In terms of what happens in the tropical Atlantic
14 in terms of the source of the nutrients, the Inter-Tropical
15 Convergence Zone shifts north and south. And then also, you know,
16 how this contributes to the seasonality and the interannual
17 variability, possibly. And then the fourth one is, of course, the
18 transport out of the tropical Atlantic into the Caribbean, which
19 I think is going to be the focus of a lot of the conversations
20 today, and I'm not going to touch upon.
21
22 So, I'm going to focus here. What happens once it's left the
23 sargassum, made it into the Canary Current, and then what happens
24 in the tropical Atlantic?
25
26 And so, if I could have the next one. Next slide, please. So,
27 you're going to see a bunch of slides like this one. So, I'm going
28 to spend a little bit of time on this slide. And really, the
29 question that we're trying to address is, what fuels the recurrence
30 of the blooms and what determines their seasonality.
31
32 So again, you look at this picture here, you've got South America
33 on this side, you've got Africa on this side. You've got the
34 equator, over here. And it's, I guess you could say it's a
35 relatively complicated system. You know, we have the ITCZ. I'm
36 going to be focusing on the ITCZ a fair bit, the Inter-Tropical
37 Convergence Zone, in this case indicated by this blue line here.
38
39 There's a complex set of currents in the tropical and the
40 equatorial Atlantic. There's the north equatorial current, the
41 south equatorial current. The countercurrents, the Brazil current,
42 the Guiana current, etcetera. So, it's kind of a complicated part
43 of the world. And the dynamics between these various systems, if
44 you will, as well as the underlying of the subsurface dynamics in
45 terms of the nutrient sources and such, is kind of what the
46 composite of things, results in some of the features and some of
47 the characteristics that we see of the sargassum dynamics, if you
48 will.

1
2 So summarizing, the sargassum patches aggregate in windrows along
3 the ITCZ, that convergence zone and they're exposed to high
4 sunlight and an upward flux of nutrients. And then, if you're just
5 jumping straight to the northern spring and summer, the sargassum
6 drifts north with the ITCZ. In the northern hemisphere summer, the
7 ITCZ shifts north. These are indicated by these red dots. These
8 red dots are indicative of the distribution of sargassum. And then,
9 portions are advected into the Caribbean.

10
11 The actual magnitude, if you will, or one way to explain the actual
12 magnitude of the sargassum, is related to wind mixing and mixed
13 layer dynamics. It is that classical idea that, you know, if the
14 mix layer exceeds the climatological nutricline. In other words,
15 you know, if the mix layer reaches into where the nutrients are,
16 then that upward entrainment of nutrients can help fuel the bloom
17 of sargassum. And that's really it in a nutshell, the rest is
18 details.

19
20 Okay. So, the next slide. I told you. Now this is going to be
21 looking at what is the seasonality? What's the seasonal dynamics
22 of what we see here? And this is the average January, the average
23 February, the average-- In other words, the average monthly picture
24 between 2010 and 2018. So, we just took the average distribution
25 over those nine years or so.

26
27 Starting at the top, it's January, February, March, all the way to
28 September, October, December. So, you can see the idea of how the
29 sargassum dynamics develops or evolves in this tropical Atlantic
30 equatorial region. So, starting in January, And the left over from
31 the previous year, there's a population of sargassum, which you
32 can see up there. It's sort of the lighter yellow and the lighter
33 blue colors.

34
35 February, still sort of, relatively weak winds and such. March,
36 April, the ITCZ, the Inter-Tropical Convergence Zone, begins to
37 strengthen, if you will. You begin to see the accumulations. You
38 can see the redder colors occurring in the sargassum. These are
39 based on satellite images, model outputs, etcetera. There's a whole
40 host of things that went into this thing.

41
42 You get into May, June, July, and you begin to see much redder
43 colors, in part fueled by the convergence of the sargassum
44 populations, if you will. As well as, now you're beginning to fuel
45 with nutrients from below, as well as now you have sunlight, no
46 sunlight. And then you begin to see the eastward distribution of
47 the sargassum, as it enters the north equatorial countercurrent.

48

1 So normally, the currents are, you know, the North and South
2 equatorial currents are going westward. The countercurrent goes
3 eastward. But this one then, basically, expands it, along the
4 equatorial region. And then you have these long windrows along the
5 equatorial region, which, as the ITCZ moves north, as indicated by
6 these open arrows, you know, then gets to the point where you can
7 begin to have the advection into the Caribbean region through,
8 say, the North Brazil Current, the Guiana Current, and others.

9
10 And then, as the season goes on the ITCZ and the dynamics of the
11 wind calm down, so then they are not as strong as before. The ITCZ
12 begins its southward migration, if you will, and then you have the
13 remnant population in November, December. And then, the cycle
14 repeats in the following year.

15
16 Okay. The next slide then talks about, what about the interannual
17 variability? You know, how is it that now I'm talking about July
18 2011, 'twelve, 'thirteen, 'fourteen, 'fifteen, 'sixteen. And what
19 you see is that not every year is the same.

20
21 So why was it, for example, that in 2013 we didn't see the similar
22 signal that we saw in other years? And the very quick explanation,
23 the next slide, is that thing that I talked about, the mixed layer
24 depth. So how do you read this picture? This is 2010 to 2018, 2019
25 or so. When the blue line is above the dash line, it means the mix
26 layer goes below what's called a nutricline. So, it can actually
27 bring up nutrients.

28
29 What you see is when the blue line is positive, you get these
30 larger peaks of the bloom, because you were able to bring up these
31 nutrients. When the blue line is below or higher than the
32 nutricline, or below the nutricline, you don't get enough
33 nutrients. So that's one way of explaining it. I'm not saying it's
34 the only way of explaining it, but one way of explaining it is
35 this mixed layer dynamics.

36
37 Next slide. Predictability. This is a recent paper, by Jouanno and
38 others. And all I'm going to say is that it's a really nice paper
39 in, I think, geophysical research letters that takes a model,
40 initializes it with a distribution of the sargassum. And the point
41 is the predictability. The point is that the redder the color, the
42 better the predictability. And what they actually find, is that
43 they can actually predict the distribution of the sargassum with
44 almost a 7-month lead. So they can start something and actually
45 predict the distribution over 7 months. Initializing, you know
46 what happens here.

47
48 Next slide. And I'm almost done. It's again the same schematic I

1 started with, but it's a little bit, sort of, a review. You know,
2 we started off with these extreme events in the sargassum, got
3 caught in the Canary Current. I talked a little bit about the
4 equatorial tropical dynamics, and then its recurrence and its
5 seasonality and its variability, depending on particular
6 conditions at any one year.

7
8 And the last slide, I think I've said this already, but we feel
9 that there is a way of explaining what happened in 2010- '11
10 through a long-distance dispersal event associated with an extreme
11 event of the North Atlantic Oscillation. The establishment of the
12 sargassum is a result of wind surface currents, ITCZ, mixed layer
13 dynamics and nutrient dynamics. We think we can predict it to 7
14 month forecast yield. At least there are some nice studies that
15 show that.

16
17 And of course, there's a key question that we'll probably be
18 talking about later in terms of, how do we know what starts it,
19 when it starts it, and so on. In particular, as it comes into this
20 region. And so that's it. Thanks very much. I hope I stayed on
21 time and thank you again.

22
23 **HELENA ANTOUN:** Thanks. Excellent. Thank you, Dr. Warner. If there
24 are any quick clarifying questions, you have a few minutes, seconds
25 actually that you may ask them. If not, we may move on to the next
26 presenter. Mariana?

27
28 **CARLOS FARCHETTE:** While we're setting up for the next presenter,
29 I want to recognize, Sennai Habtes representing the V.I. government
30 as present, on the record.

31
32 **Sargassum In the Us Caribbean: Impacts on EFH and Management**
33 **Implications**

34
35 **MARIANA C. LEÓN-PÉREZ:** Hello. Good morning. First, I want to thank
36 the Caribbean Fisheries Management Council for inviting me. Okay,
37 so thank you. Today I'm going to talk about the impacts of
38 sargassum on essential fish habitat.

39
40 Give me just one second. Okay, perfect. My name is Mariana León-
41 Pérez. I'm representing ISER Caribe. And today I'm going to talk
42 about the impacts of sargassum on essential fish habitats and its
43 management implications.

44
45 The three island-based fishery management plans that were made
46 official in 2022 incorporate some of the following categories of
47 species and their essential fish habitats which basically are,
48 important habitats for the different life stages of these species.

1 And when we when we look at them, we realize that some of them and
2 many of them are within coastal areas that are impacted by
3 sargassum influxes. And this includes mangroves, seagrass, coral
4 reefs, hard bottom, etcetera. Also, nearshore areas in the water
5 column.

6
7 So, in the following slides, I'm going to describe the benefits of
8 sargassum in the open ocean and also the impacts of sargassum on
9 the essential fish habitats that I just described.

10
11 So, starting, with the open ocean. It is important to recognize
12 that sargassum is an important habitat in the open ocean and it is
13 considered an essential fish habitat for many managed species of
14 fish. It is also important for sea turtles listed in the endangered
15 species act.

16
17 However, these scenarios changes when sargassum starts to arrive
18 at coastal areas in massive quantities since 2011. This impact
19 starts, for example, by blocking the sunlight that reach seagrasses
20 and coral reefs. It also smothered coral and seagrass in areas
21 that are shallow and also in Keys. And then it starts to accumulate
22 in the shoreline, and it can smother mangrove roots, seagrass beds
23 as well.

24
25 It also, following a few days, starts to sink and also then
26 accumulates on top of benthic habitats. It also represents a
27 physical obstruction for nesting sea turtles and hatchlings who
28 are more vulnerable to exhaustion, [inaudible] and predation.

29
30 Then the sargassum decaying process starts. It creates the
31 sargassum-brown tide. The sargassum-brown tide is a color
32 dissolved organic matter that is created by sargassum decay. It
33 comes with reduction in oxygen. It could be hypoxia or anoxia. It
34 also, comes with increased turbidity. The waters turn a little bit
35 more acidic. It also has a lot of nutrients, and it can cause
36 eutrophication of coastal waters. It develops, also, sulfur
37 waters, which are toxic to seagrass tissue and also to fish.

38
39 So, all of this combined causes mortality of seagrass, associated
40 fauna and corals. It also has been documented variations in
41 zooplankton functional groups associated to sargassum arrival.

42
43 So, the question is, what are the long-term impacts of sargassum-
44 brown tide on coastal ecosystems? I conducted a study using remote
45 sensing in La Parguera, Puerto Rico, in a time series of 6.5 years.
46 And what I found is that sargassum was present every month of the
47 time series, either as fresh sargassum and decomposing sargassum
48 or as sargassum-brown tide. Also, it shows that Sargassum brown

1 tide, persisted for periods of more than 7 months every year. So
2 overall, it tells us that the impacts of sargassum is not only
3 occurring during the sargassum season, but it has lingering effects
4 and continues throughout the rest of the year.

5
6 Also, in another study conducted in the same area, it shows that
7 mangroves had the lowest litterfall production, where sargassum
8 accumulates, and also presented mortality. The recovery of
9 impacted seagrass meadows may take years or decades. And if it's
10 recurrent, it can be permanent and that's what we have been
11 observing that these accumulations occur every year.

12
13 So, some of the questions that we need to start asking is, how
14 does this degradation of essential fish habitats directly impact
15 the life stages of managed species in the U.S. Caribbean? For
16 example, in a study conducted by [Dr. Haibo Zhou?] showed that
17 spawning aggregation sites for red hind and mutton snapper were
18 connected to the shelf of the Puerto Rico Virgin Islands and
19 Southwest of Puerto Rico, respectively.

20
21 So, it's some of the questions that we need to start asking. Also,
22 how do management interventions contribute to the recovery of
23 impacted habitats and long-term sustainability of these
24 ecosystems?

25
26 Now moving to management implications. I think we all agree that
27 we want to support the benefits of sargassum as an essential fish
28 habitat, but also to reduce, at the same time, the impacts that it
29 has on the coastal area. In terms of the U.S. Caribbean, we are an
30 unincorporated territory of the United States and therefore
31 there's a joint responsibility between the local governments and
32 the U.S. Federal Government.

33
34 In 2022, for the first time in history the U.S. Virgin Islands
35 declared a state of emergency due to sargassum influx that was
36 affecting territorial water supply. This is just an example of how
37 we have this joint jurisdiction. In this case, it was an emergency
38 response, but we need to implement long-term sustainable solutions
39 that help us address this issue in the long term.

40
41 So, in another study that I conducted I looked at all the laws,
42 regulations and permits that apply to sargassum removal in the
43 ocean and on land. Also, sargassum disposal, more focused on Puerto
44 Rico, but some of the results apply also to the rest of the U.S.
45 Caribbean.

46
47 I conducted semi-structured interviews with agencies, federal and
48 local agencies. And then, a workshop to clarify all these aspects.

1 So, we co-develop this permit flowchart that guides a proponent of
2 a management action through the steps that it needs to go through
3 and then to understand the permits that need to apply for the
4 different management strategies. All this information is currently
5 under review in the Marine Policy Journal and so soon it will be
6 available.

7
8 As part of this research, I also identify obstacles between
9 agencies' processes and relevant groups' needs. One of them was
10 the lack of knowledge of the permits that were needed. Also,
11 discrepancies between agencies understanding of the permits and
12 process that apply to the to the different actions. As well as a
13 time lag between the urgency of relevant groups' needs and the
14 development of government policies. So, all of these are the
15 obstacles that we identified were happening in Puerto Rico.

16
17 Also, we ask participants for their recommendations. The main ones.
18 First one, was to create a territory-wide plan to respond to
19 sargassum influxes. Currently in Puerto Rico we have a protocol
20 for managing sargassum. This is more like an action plan. So,
21 participants suggested to conduct, to develop a more comprehensive
22 plan to better respond to this situation in Puerto Rico. Also, to
23 develop plans in local areas that are recurrent in sargassum
24 arrival and to create application packages for those areas to
25 improve. And finally, to conduct workshops. Keep conducting
26 workshops and having these types of conversations that we're having
27 today to further clarify the sargassum legal regime in Puerto Rico,
28 and also in the U.S. Caribbean.

29
30 So, with that, I'm going to finish. This is my email just in case
31 we can keep the conversation, for the ones that are connected
32 virtually. Thank you.

33
34 **HELENA ANTOUN:** Thank you very much, Mariana. Excellent
35 presentation. Next up, we have David Dale, from NOAA Habitat
36 Conservation Division. He will be presenting the sargassum as
37 essential fish habitat virtually. Sorry.

38
39 **DAVID DALE:** Alright. Are you going to pull my presentation up
40 there? Or--

41
42 **CRISTINA OLÁN MARTÍNEZ:** If you want to share your screen, let us
43 know, we can make you a cohost and you can share your screen.

44
45 **DAVID DALE:** You can drive the PDF I sent you yesterday.

46
47 **CRISTINA OLÁN MARTÍNEZ:** Okay.

48

1 **Sargassum & EFH**

2
3 **DAVID DALE:** So as that's coming up. Thank you, Mr. Chair and
4 Council members and staff for having me present to you today. My
5 name's David Dale. I'm the National Marine Fishery Services
6 Southeast Regional Essential Fish Habitat Coordinator.

7
8 Next slide. So, those who were in attendance of the December 2021
9 Council meeting and paid attention, these slides will be very
10 familiar to you. So, these were the objectives that I presented
11 back in 2021. So, I'll touch on all these today, but a little
12 briefer concerning the time and the format we have today.

13
14 So, next slide. I work in the Habitat Conservation Division at the
15 Southeast Region, and the reason I've been invited here today is
16 because the essential fish habitat designation is a tool we use to
17 protect and conserve important fish habitat from coastal,
18 nearshore and offshore development activities.

19
20 Unlike the sustainable fisheries division and protected resource
21 divisions at NOAA Fisheries, we have most of our workforce located,
22 scattered throughout the southeast region's area of
23 responsibilities. Ginny Fay is our regional coordinator or
24 regional administrator for Habitat Conservation Division. I work
25 for her in Saint Petersburg. And in the U.S. Caribbean, we have
26 Jose Rivera located in Puerto Rico and Dinorah Chacin on Saint
27 Croix. So, look for those folks if you have any questions about
28 what the Habitat Conservation Division does.

29
30 Is just a graphical representation of where we're located. And we
31 can go on to the next slide. So, in 1996, the amendments to the
32 Magnuson-Stevens Fishery Conservation and Management Act, congress
33 gave us the following definition of essential fish habitat. EFH
34 means those waters and substrate necessary to fish for spawning,
35 breeding, feeding or growth to maturity. The act also included
36 requirements for the Secretary of Commerce, delegated through the
37 National Marine Fisheries Service and the Regional Fishery
38 Management Councils to identify and describe EFH. It requires
39 federal agencies to consult with the National Marine Fisheries
40 Service regarding the effects of their programs and activities on
41 EFH. And it also requires the National Marine Fisheries Service
42 and the Regional Fish Management Councils to minimize the adverse
43 effects of fishing activities on EFH.

44
45 The implementing regulations were first published in 1998 as
46 interim final rules. Final rules were published in 2002 after we
47 had implemented this new EFH program for a few years. The
48 regulations expand the statutory definition providing clarifying

1 language for certain terms, including waters, substrate,
2 necessary, and spawning, breeding, feeding, and growth to
3 maturity. For our discussion today regarding sargassum in the
4 Caribbean, what's most important is the definition of when
5 sargassum meets the threshold for being a habitat that is deemed
6 necessary for spawning, breeding, feeding, or growth maturity for
7 species managed under the Magnuson-Stevens Act.

8
9 "Spawning, breeding, feeding, or growth to maturity" is meant to
10 capture the entire life cycle of each managed species. The
11 definition of "necessary" means the habitat required to support a
12 sustainable fishery and the managed species Contribution to a
13 healthy ecosystem.

14
15 "Healthy ecosystem" is also defined in the EFH regulation. Meaning
16 an ecosystem where ecological productive capacity is maintained,
17 diversity of the flora and fauna is preserved, and the ecosystem
18 retains the ability to regulate itself. Such an ecosystem should
19 be similar to comparable, undisturbed ecosystems with regard to
20 standing crop, productivity, nutrient dynamics, trophic structure,
21 species richness, stability, resilience, contamination levels, and
22 the frequency of diseased organisms. As Mariana just touched on,
23 I think, this definition, we'll garner further conversation as we
24 go on through the panel discussion today.

25
26 So, the Magnuson-Stevens Act and the implementing regulation tells
27 us what EFH is, and how the fishery service and Council should
28 identify and describe EFH, which we did in the late 1990's. The
29 Caribbean Council originally described EFH in 1998, and as a result
30 of the lawsuit, NOAA Fisheries was required to revisit the
31 designations made by several of the fishery management Councils,
32 including the Caribbean Council, and we had to expand our NEPA
33 analysis regarding the effects of fishing on EFH.

34
35 So, since the early 2000, we've been operating under the EFH
36 descriptions contained in the 2004 Environmental Impact Statement
37 and the 2005 amendment to the Caribbean Fishery Management Plans.
38 Those designations were based on literature reviews, which created
39 a series of life history tables describing the habitat requirements
40 of each major life stage necessary for each managed fish by the
41 Council to spawn, breed, feed, or grow to maturity. You know, EFH
42 as defined in the Magnuson Stevens Act.

43
44 The EFH regulations require EFH information to be reviewed every
45 5 years, which the Caribbean Council has done. And when the
46 Council's island-based fishery management plans were developed,
47 the EFH descriptions for species currently managed by the Councils,
48 at that time, were carried forward. For newly added species to the

1 management units and plans, the same life history association
2 method was used to identify and describe EFH for those species.

3
4 The Highly Migratory Species Branch of the National Marine
5 Fisheries Service has also identified EFH in the Caribbean for
6 those highly migratory species managed by the National Marine
7 Fisheries Service rather than the Councils. Those EFH designations
8 were first made in 1998 and have been reviewed and revised, both
9 in 2009 and 2017, and HMS is currently in their cycle of reviewing
10 their EFH information. Those EFH designations are based on presence
11 data obtained from fishery independent surveys and research.

12
13 So, as an example, here is the EFH identification and description
14 for reef fish in the 2005 Caribbean amendment. It's important to
15 recognize that this was based on a literature review which created
16 a series of tables for each managed species and the habitat
17 necessary for each major life stage of those species to spawn,
18 breed, feed, or grow to maturity. Again, keen on those words
19 defined in the Magnuson Act and the EFA regulation.

20
21 So, while the associations were made for each life stage of each
22 species managed by the Council, in the end, the EFH description
23 for reef fish was consolidated into a single definition for the
24 entire fishery management unit. And you can see that sargassum
25 here referred to as drift algae occurring from mean high water to
26 the 100-fathom depth contour is identified and described as EFH.

27
28 This does not mean sargassum is EFH for all reef fish, you need to
29 dig back into the life history tables to find the specific species
30 and life history habitat associations which met the criteria to
31 know that sargassum is EFH for greater amberjack and almaco jack.

32
33 In the island-based fishery management plans, the Caribbean
34 Council provided a bit more clarity for the newly added species.
35 As I mentioned earlier, the existing EFH identifications and
36 descriptions were carried forward from the 2005 amendments into
37 the island-based plans. When new species were added, the same
38 method of identifying EFH was used when individual descriptions
39 were provided for species new management under the act. So, this
40 is an example from the Puerto Rico plan, and the description of
41 EFH for great triggerfish. And Mariana showed the other species
42 that have sargassum as EFH in the island-based plan. So, we can go
43 on to the next slide.

44
45 So, what the Habitat Conservation Division does with EFH
46 designations is, in our habitat conservation role, we provide
47 consultation services where we consult with agencies who are
48 permitting, licensing, funding, or undertaking activities in the

1 coastal zone that affect marine and estuarine habitat, including
2 habitat identified as EFH. Though we have been doing consultations
3 for many decades, the 1996 amendments to Magnuson Act provided a
4 focus on habitats needed for important commercial and recreational
5 fisheries.

6
7 So, being identified and described as EFH does not prohibit
8 harvest. In the southeast and up the Atlantic coast, for example,
9 oysters are essential fish habitat for various managed species,
10 yet their harvest is allowed. So being designated as EFH only
11 triggers a requirement for federal agencies to consult with NOAA
12 Fisheries regarding activities that they are funding, permitting,
13 licensing or undertaking, which may adversely affect designated
14 EFH.

15
16 "Adverse effect" is defined in EFH regulations has any impact which
17 reduces the quantity or quality of EFH. Which is basically a very
18 low threshold.

19
20 So, what is an EFH consultation? Basically, an EFH consultation
21 consists of a federal agency sending the National Marine Fisheries
22 Service an assessment which describes their proposed activities of
23 the effects on EFH, what their conclusions on those effects are,
24 and if they are mitigating any of those effects. National Marine
25 Fisheries Service is then to provide recommendations for
26 protecting conserved EFH. When fisheries send EFH conservation
27 recommendations to federal agencies, they are required to respond
28 in writing on how they are incorporating our recommendations or
29 not. The federal agency is not bound by our recommendations. They
30 are, however, required to indicate how they are addressing our
31 recommendations on the record.

32
33 So, when we're talking about sargassum, an EFH consultation would
34 apply to a federal activity or permit, which is occurring below a
35 mean high-water line or out in the open water. And then we, the
36 Habitat Conservation Division, would then assess the value of the
37 EFH being affected to determine what appropriate conservation
38 recommendations might be.

39
40 If sargassum is on the beach above mean high water, we would not
41 necessarily need to consult on that activity. However, if it is on
42 the beach below mean high water, while technically requiring
43 consultation, we would consider the value of the EFH at that
44 location to be so low and not meeting the definitions of being
45 necessary to the spawning, breeding, feeding, or growth to maturity
46 of fish managed under the Magnuson Act, that EFH conservation
47 recommendations would probably not be required.

48

1 If we're talking about sargassum nearshore, say, around a water
2 intake structure, the value would be assessed higher and that it
3 may be providing some of those necessary spawning, breeding,
4 feeding, or growth to maturity functions, and whether that would
5 trigger any EFH conservation recommendations would depend upon the
6 nature of the activity. As we move further offshore, the value of
7 sargassum to manage fish becomes much higher, so we would give
8 much more scrutiny to any activities that may affect its value as
9 EFH in those instances.

10
11 Alright. So, this is the last slide. So, I've listed a few other
12 things to consider regarding the conversation regarding sargassum.
13 The South Atlantic Fishery Management Council has an approved
14 fishery management plan for sargassum, which limited harvest off
15 of North Carolina and prohibited any harvest south of North
16 Carolina/South Carolina line. The prohibition is not because it is
17 identified and described as an EFH, but because it was identified
18 as a species qualifying for management under the Magnuson-Stevens
19 Act, which required conservation and management measures. As a
20 managed species, it has its own EFH identified and described in
21 the South Atlantic.

22
23 As you can see here, we've also seen some proposals from the U.S.
24 Department of Energy, who's exploring biofuels and has been
25 circulating some ideas about propagating and harvesting sargassum
26 as a potential source of fuel. We've also been approached by some
27 researchers who are interested in trying to figure out at what
28 point sargassum is no longer in EFH and maybe should be considered
29 a harmful algal bloom.

30
31 Hopefully, some other presenters will be talking about some of the
32 other management implications from harvesting sargassum from the
33 open ocean where there are endangered species act and bycatch
34 issues. We know sea turtles and managed species such as juvenile
35 mahi and marlin and other pelagics can be found in sargassum and
36 could be captured by certain harvest methods. So, hopefully, we
37 have others who will speak to those concerns.

38
39 And final slide, if anybody has any questions, needs to contact
40 me, I'm done.

41
42 **HELENA ANTOUN:** Thank you very much, David. Next up, we have Karen
43 Urelius from the Army Corps of Engineers.

44
45 **CARLOS FARCHETTE:** So, while we're getting ready, I want to also
46 recognize Vance Vicente as present, for the record, SSC Chair and
47 Liandry De La Cruz.

48

1 **Sargassum Management Structures and Work in Waters of the U.S.**

2
3 **KAREN M. URELIUS:** Alright. Good morning, everybody. My name is
4 Karen Urelius. I'm with the U.S. Army Corps of Engineers in
5 Regulatory. So, we regulate work in waters of the United States.
6 I'm really excited that the other presenters were able to really
7 lay the foundation. We have some great tools out there telling us
8 when sargassum is coming. We know that sargassum has some really
9 adverse impacts in the nearshore environment. We know that it's
10 regulated under different laws. So, now that we know it's coming,
11 we know that there's adverse impacts. What are we going to do to
12 actually manage sargassum and keep our near shore environments
13 healthy?

14
15 So, I'm going to talk a little bit about our regulatory program
16 and how we coordinate and collaborate with other agencies. And one
17 of the things that we are trying to put into the cooker to make
18 these consultations go more quickly.

19
20 I'm with the Antilles Permit Section. We are based out of San Juan.
21 I primarily work on projects in the U.S. Virgin Islands. We have
22 three other project managers in Puerto Rico that do the Puerto
23 Rico projects, but I also have Culebra and Vieques, and I
24 occasionally take other projects as well throughout Puerto Rico.

25
26 So, our regulatory mission-- This is regulatory, so if you need
27 that second cup of coffee, go grab it now. --is to protect the
28 nation's aquatic resources and navigation capacity while allowing
29 reasonable development through fair and balanced decisions. We
30 have two primary laws that we regulate under Section 10 of the
31 Rivers and Harbors Act dating back to the late 1800.

32
33 So basically, under Section 10, we're trying to preserve the
34 navigable capacity of our nation's waters. Under section 404 of
35 the Clean Water Act, we regulate the discharge of dredged or fill
36 materials. Some of the things associated with sargassum
37 highlighted in yellow are things like booms, mooring/anchors,
38 shoreline, stabilization, beach management. Because we're in the
39 navigable waters, both of these laws may apply, depending on what
40 the activity is.

41
42 So, let's move on. Okay. This is just a quick slide, of our limits
43 of jurisdiction. So, basically, we're looking at the mean high
44 tide or the High tide line, depending on which law.

45
46 So big question, does the USACE, U.S. Army Corps of Engineers,
47 regulate sargassum management and/or sargassum removal? And the
48 answer is yes and no. So, it depends on the activity. So, some

1 regulated activities that we would regulate include these
2 sargassum booms that are being placed in waters of the U.S. to
3 control sargassum, keep them off the beaches. Sometimes they're
4 funneling the sargassum towards a point on the beach where the
5 sargassum can then be removed. These sargassum barriers, this is,
6 a lot of times, as you come to the beach, you need a stiffer
7 barrier to direct the sargassum onto the beach, and at that point,
8 they would remove the sargassum. So that would be both Section 10
9 and 404, because we'd have a discharge of fill as you bury that
10 fence into the beach.

11
12 Important thing that we do not regulate and under our program are
13 these sargassum removal vessels. Some of you have probably seen
14 them. We do not have, I don't think, as far as I know, we haven't
15 used them yet in this region, but they do seem somewhat effective,
16 and I'm definitely interested in exploring them more. But, USACE
17 doesn't regulate vessels, fishing, or harvesting removal of
18 seaweed using a vessel.

19
20 So, is a USACE permit required for this? For the vessel, no. But
21 you could see that barrier in the back? Yes. So, we would regulate
22 the installation and management of that barrier. Another question,
23 is a USACE permit required for harvesting by hand on the beach?
24 Typically, no, if somebody is just out there raking it up. However,
25 over time, if you're taking a lot of sand out with that seaweed,
26 that could result in a discharge. You're putting it on a different
27 section of the beach. You could be having a discharge of fill
28 material. So, in a sense, it just depends on the extent of the
29 activity and how it's actually being done, but, typically, we have
30 not regulated hand removal of sargassum.

31
32 Is a USACE permit required? So now we have heavy machinery working
33 on a beach. So, with heavy machinery, there is more likely for
34 there to be a discharge. We have this nice tourist, Sandy, here on
35 the beach. She's wondering what animal made these tracks. So, you
36 know, first we go, "Okay, is it in our line of jurisdiction?" And
37 we go, "yep," because we can see the track line goes all the way
38 over here.

39
40 So, that heavy machinery is working within our line of
41 jurisdiction. Then we go, "Okay. Well, it's within our line, but
42 is there a discharge of fill material or is there work that we
43 would actually regulate?" And we go, "Well, I don't know if there's
44 a discharge there. They're removing it. There's probably one." But
45 we were lucky to find evidence on this beach that there is a
46 discharge. So basically, they put all the sargassum in a big pile,
47 partially covering the mangroves, and as the sargassum decomposes,
48 you could see all of the sand that's left. And so, that sand is

1 within our line of jurisdiction. So, there is a discharge when
2 you're using heavy equipment, so we would also regulate that.

3
4 So, types of USACE permits. We have some pretty complex permits,
5 which can take months to, sometimes, years, and these are standard
6 permits or letters or permission. They require NEPA and lots of
7 other types of review that I'll get into quickly. And then we have
8 our general permits. They're more streamlined. We do a lot of that
9 work. It still requires NEPA, but we do it upfront for certain,
10 categories of activities.

11
12 So, right now, for USACE, all sargassum management is done in this
13 area, so the more complex timely. What we're trying to do is
14 develop something in this area, a regional general permit, so that
15 we coordinate with all of the agencies up front and say, "Hey,
16 EFH, what's needed? What are your conservation recommendations?
17 Let's incorporate that into our permit." "ESA. what are your
18 conservation measures that we can incorporate in?" So, we
19 incorporate all the different measures into the permit. Hopefully,
20 we could do the CZM and 401, and then when somebody comes in for
21 a permit, if they meet all the different conditions, it can be
22 issued basically instantaneously.

23
24 For each and every permit, we have to go through a public interest
25 review. There are twenty-one different factors that we touch on,
26 and you could see how sargassum is related, like, the impacts of
27 sargassum touch on so many of these different factors.

28
29 The Army Corps of Engineers is one of the only agencies that has
30 a mitigation rule, maybe the only agency. I know that U.S. Fish
31 and Wildlife Service had one for a very short amount of time. So,
32 we actually are required, on each and every project, to ensure
33 that the applicant has avoided, minimized, and compensated for the
34 impacts. So that is something if we develop an RGP or as I take
35 the individual projects, the sargassum booms through, I ensure
36 that things like seagrass are avoided to the maximum extent
37 possible, coral reefs, hard bottom habitat.

38
39 Here's a quick diagram. I always say that the Corp permit is kind
40 of my palm, and we have all these different fingers that we have
41 to meet. Before I could issue that Corp permit, we have these
42 different fingers, including ESA, 106, 401, Magnuson-Stevens,
43 Coastal Zone Management. Then we have some extra fingers too, like,
44 Fish and Wildlife Coordination Act and NEPA. But those are the
45 primary ones.

46
47 Every time we issue a permit, whether it's a standard permit or a
48 general permit, we have to consider the impacts on endangered

1 species. So, one of the things, as we work as a team, we are just
2 in the infancy, we've had one meeting where we've met with multiple
3 agencies and talked about the possibility of doing an RGP, what
4 that might look like. But one of the big components will be going
5 through the ESA consultation. And, upfront, we want to make sure
6 before we invest a lot of time in developing an RGP that it's going
7 to be practical for us to do the ESA consultation programmatically.
8

9 We just had a great presentation on EFH, so we will also do EFH
10 consultation as we go through either individual consultations or,
11 for a particular project or if we develop an RGP, we'll do it
12 programmatically. So, there's another good opportunity. And, as it
13 was pointed out, we have two EFH leads in the region. We have Jose
14 Rivera, and Dinorah Chacin, who is right here in Saint Croix.
15

16 Section 106, section 401 of the water quality certifications are
17 needed for each and every project, especially if there's a
18 discharge of fill. So, that's another requirement that we have to
19 fulfill. We have director Marlon Hibbert of CZM here who's going
20 to be speaking, and he's in charge of Coastal Zone Management,
21 Federal Consistency. So, we also have to coordinate with them to
22 get a federal consistency determination.
23

24 This resort was kind enough to ask the sargassum to stay off the
25 coral, but really that is what we're trying to do. As multiple
26 agencies work together, we're trying to find ways or tools that we
27 can develop to ensure that the sargassum stays out of the important
28 nearshore resources and that we can streamline the process for the
29 regulated public.
30

31 So, if you ever have any questions, our program is very technical,
32 lots of constant changes, especially, as of late with different
33 Supreme Court decisions, but when in doubt, please, please, please
34 contact us. We are here for you. We are resources, and we are happy
35 to talk.
36

37 **HELENA ANTOUN:** Thank you very much, Karen. We will be taking
38 questions at the end of the presentations, but if you just need to
39 clarify something really quick on the presentation, you may do so.
40

41 **VANCE VICENTE:** Yes. I have a quick question. Oh, I'm sorry. I'm
42 sorry. Yeah. Well, for clarification purposes, real quickly. I
43 mean, in the case of sargassum, it has to be evaluated depending
44 on the intensity, extent, and how the designated functions of that
45 shoreline of water body have. In the case of a very intense
46 situation of sargassum, Cundecor, issue an emergency permit,
47 through a letter of permission, in case of very extreme sargassum
48 situations.

1
2 **HELENA ANTOUN:** So, let's hold that because that's a discussion
3 question, so let's leave that to the end. But that's a really,
4 really good question and one question that a lot of people have
5 been asking. So, thank you for the question. We will get to that.
6 That'll be the first question we will ask.

7
8 Okay. All right. Next up, we have Sydnee Grushack from Newlab.

9
10 **SYDNEE GRUSHACK:** Thank you very much, Helena. I can share my
11 screen, or you can pull my presentation up, whatever is easier.

12
13 **CRISTINA OLÁN MARTÍNEZ:** Hi. I have your presentation, but if you
14 want to pass it, please let us know and I will make you a cohost.

15
16 **Piloting a Sargassum Value Chain in Puerto Rico**

17
18 **SYDNEE GRUSHACK:** That's fine. You can share.

19
20 So, first of all, thank you so much to the Council for having me
21 and thanks especially to Helena for organizing this panel and for
22 being such an amazing partner so far. She's been really great to
23 connect us with, all the necessary agencies and departments. So,
24 really grateful for that.

25
26 So, as I said, I'm Sydnee Grushack. I'm a Program Director at
27 Newlab. At Newlab, we are a center for innovation working to create
28 the conditions for world changing ideas to become real world
29 solutions. So basically, in short, we work to support the
30 commercialization of early-stage companies doing important work in
31 climate tech, and to basically improve the world. This is a photo
32 of our site in Brooklyn, which is one of our hubs where we have
33 startup companies sit and develop their technologies.

34
35 We are a collective of entrepreneurs, engineers, and scientists.
36 What that means is that we really work to support these companies
37 and folks who might not have started out in business, might not
38 have as much experience navigating the business world, but who are
39 really pursuing those solutions that need to be taken to scale and
40 to be put out there in the world. So, we have over 300 member
41 companies, across different areas and we're working to do just
42 that.

43
44 So, to provide that support, Newlab does three main things. We
45 support those 300 companies, in our member community through actual
46 physical resources, prototyping labs, teams and resources and
47 connections. We provide early-stage venture investment to support
48 those companies. And then, we also run challenges with corporate

1 and government partners to actually pilot technology in real world
2 scenarios and make those connections to entities that could
3 actually help them to be put out into the world.

4
5 We do this in three main areas, which are energy, mobility and
6 materials. And so, those are really all centered, again, around
7 climate. We have big, goals around helping to lead the
8 decarbonization future. You can see the logos at the bottom are
9 some of our corporate and government partners in each of those
10 areas.

11
12 Just for a couple of examples. In pilot programs that we've run-
13 in the past, we're currently working with the New York City
14 Department of Transportation to address e-bike battery fires for
15 delivery workers in New York City. We're working with Orsted, one
16 of the largest offshore wind developers, to transport offshore
17 wind back to the mainland. We're working with the Foundation for
18 Food and Agriculture Research to look at the different applications
19 of biochar from agricultural waste. So, a pretty wide variety of
20 work that we do, in these three areas.

21
22 And so, in this case, what I'm here to talk to you about today is
23 the program that we're running in Puerto Rico. So, we're working
24 with InvestPR, on a program whose initial thesis was basically to
25 report the conversion of land or marine based waste into high
26 value-added products. So basically, a circular economy type goal
27 to deploy some technologies that would work on Puerto Rico and
28 look to validate new markets and create new products that could
29 lead to a more sustainable world.

30
31 And just for context, InvestPR, for you who don't know, they are
32 an agency that was created by law, to support the economic
33 development of the island looking to attract basically foreign
34 investment and position Puerto Rico as a business destination. In
35 this case they're really looking to position Puerto Rico as an
36 innovation ecosystem, so that was their main mission here.

37
38 Actually, when we started talking about waste on the island
39 speaking to stakeholders, one thing that kept coming up was the
40 sargassum issue. And so, although we didn't really initially
41 consider this a waste product, and that term is not necessarily
42 applicable, the idea was that it is a material that is currently
43 unmanaged or undermanaged and has a lot of potential to be
44 converted into products that are high value and that can bring
45 benefits to the world, and also has issues with the actual
46 management of it and causes problems for local communities, for
47 entities that have coastal properties, and for habitats as we've
48 discussed.

1
2 However, the way we look at it is that it's really an opportunity.
3 So, we think the only way to have real sustainable management and
4 to address such a problem that occurs at such a large scale is to
5 attach economic value to that material and to be able to
6 incentivize the actual management and collection and conversion of
7 this material. Luckily, sargassum is an amazing material that has
8 many compounds that can be transformed into a wide array of
9 products, that can not only use this material that's being produced
10 in excess, but actually also help to replace synthetic materials,
11 that are currently out on the market.

12
13 And so, when we began to look at this issue, we started this
14 project about a year ago, we looked at the entire basically chain
15 of events in terms of sargassum production all the way through to
16 what would happen, in terms of purchasing products. So that
17 includes collection, conversion, processing, and all the different
18 steps of the value chain. And so, we identified different areas
19 where there was opportunity for innovation.

20
21 Then developed, essentially, a thesis of where there were
22 opportunities for young companies to come in and to make progress,
23 developing some of the necessary technology and processes that
24 could convert sargassum into some of those useful end products.

25
26 And so, a couple of months ago, we selected a cohort of companies
27 to actually pursue this and to pilot their technologies, in Puerto
28 Rico. And so, these four companies represent different stages of
29 the value chain. And so, SOS Carbon, who is here and who you will
30 hear from shortly, are focusing on the collection of sargassum
31 from the near shore environment. Thalasso Ocean is looking at
32 processing sargassum in a micro bio-refinery, to extract those
33 most useful compounds, such as a bio-stimulant, alginate,
34 fucoidans. And then we have Pangaia and Sway and they're looking
35 at the actual end product conversion. So, Pangaia is looking at
36 seaweed yarn and Sway is looking at a sargassum based bioplastic
37 film.

38
39 So, the idea, basically, is over the next few months to do some
40 very early-stage tests and pilots of these technologies to prove
41 out the viability and actual feasibility of this program. And then,
42 to think about how this can actually scale, and what that would
43 look like and lay the groundwork for those activities. So, there's
44 really great potential for sargassum. The seaweed market globally
45 is growing. There's the opportunity to create jobs and all while
46 restoring critical habitats.

47
48 So, this is kind of a picture of what that looks like, with all of

1 the companies, kind of, hooked in together and providing this full
2 picture of a complete value chain. So, from our perspective, this
3 is the first time that these companies would be working in concert
4 to actually prove out, in one place, that this is possible and,
5 actually, a good idea to for the future management of sargassum.

6
7 So, looking to what we're doing next. We're continuing to plan
8 these pilots. We're looking to navigate the [inaudible] process,
9 we've spoken to many of your organizations already, to ensure that
10 it's done responsibly and collect the material while it's still
11 valuable in the near shore environment and to partner with all of
12 you to make this future value chain a reality, studying the impacts
13 and ensuring that we really know, what it is and at what point
14 things are affected so that we can take advantage while keeping
15 the impacts down to a minimum.

16
17 So that's what we're doing. Thank you very much for having us.

18
19 **HELENA ANTOUN:** Thank you very much, Sydnee. We're running a little
20 behind, so I'm just going to go ahead and move on to the next
21 Presenter, Marlon Hibbert.

22 23 **Sargassum Management in the USVI**

24
25 **MARLON HIBBERT:** Good morning, everyone and thank you. Thank you,
26 Helena, for inviting us to this important panel. I have with me--
27 I'd like to apologize, first of all. As soon as I'm done with the
28 presentation, I have to step next door for something else. But I
29 have a very able colleague with me, who is Ms. Zola Roper, who is
30 our marine debris coordinator. So, during the panel discussion,
31 she'll be more than capable of responding to any questions asked.

32
33 So, I'll go ahead, very briefly. I'm going to just give you a very
34 brief-- and forgive me, I have a degree in brevity, so the slides
35 are going to go quickly, and the points are-- because we have
36 people in the room who've talked a lot about sargassum already. I
37 have people behind me who are going to talk a little bit more about
38 it as well. So, we know much of this already.

39
40 Sargassum influxes have increased in the territory every year since
41 2011. Sargassum impacts. Interestingly, I represent the first
42 management organization that has presented, territorially, what we
43 have. We've had science. We've had some regulatory agencies. I'm
44 a regulator, but I'm also management. So, those impacts are
45 multifaceted. We have ecosystem health. We have public health. And
46 of course, we have economic health due to the fact that our economy
47 or the territory's economy is tourism based.

1 But currently, unfortunately, response is limited to one single
2 agency involvement. So, if there's a large influx, the only person
3 that people call is DPNR. Unfortunately, we do not have the
4 resources to respond in the way people think we should be
5 responding.

6
7 So, we also have our private sector partners. So, we are talking
8 our hotels, that are being impacted, I would say, more than many
9 of the other areas. They are in areas that are collecting points
10 or hot spots for sargassum influxes. And so, they have been the
11 persons or the entities who are responding mostly with financial
12 and human resources.

13
14 So, what are DPNR rules? So DPNR/CZM, we do not issue a permit for
15 removals. What we issue is a letter of permission, which is valid
16 for 6 months from the date of it. It can be renewed, of course.
17 But importantly, it is a collaborative effort between us and the
18 Division of Fish and Wildlife because it involves a very special
19 condition related to a guidance prepared by the Division of Fish
20 and Wildlife. And so, the removals cannot be done until there has
21 been consultation with the Division of Fish and Wildlife prior to.

22
23 This is just an excerpt of what the guidance is. It is, and I think
24 DFW did an excellent job. I know Sennai and some members of his
25 team are in here. An excellent job of preparing this guidance
26 document. It's very clear. It's very concise. Why do we have to
27 look carefully at removals in the territory? I won't go through
28 that. But specifically, and more importantly, I wanted to say that
29 once persons who have requested removals have read it, they have
30 to agree to, and have been trained by DFW team members in the safe
31 removal of the sargassum influxes, and they have to sign and agree
32 to it prior to attempting the removals.

33
34 This is a snippet of the guidance document as well. So, you have
35 three different scenarios, a light influx, which is recommended to
36 be left on the beach. Not so light, but certainly can be removed
37 by manual means. And then, of course, a large inundation where
38 it's impractical, from a management perspective, to have people
39 out there removing that material.

40
41 Case in point, was it Maria that mentioned the sargassum influx
42 that caused the state of emergency crisis in the district of Saint
43 Croix. Well, our offices here in Red Hook in Saint Thomas, because
44 of sargassum influxes, have been abandoned because it's untenable
45 for team members to stay in it.

46
47 So, what we have looked at is one of the management implications
48 of having people day to day up to their knees inside of the

1 sulfurous material without proper PPE. And so, we've actually had
2 that situation. Our team has taken themselves out of it, but we
3 have tons of people who are working, earning a living wage, but
4 unfortunately, are exposing themselves to deleterious effects,
5 possible deleterious effects.

6
7 So, from a management perspective, there are all those things that
8 we are talking about. So, is it better to have 20 persons working
9 with rakes rather than have a larger machine to take it up very
10 quickly and not put those people at risk. So, those are the
11 management implications of what we have to deal with.

12
13 So, in response to that, we have met a couple of times. There is
14 an environmental committee, of the Hotel and Tourism Association
15 on which we are a member with the Department of Health, the
16 Department of Public Works. We even have a delegate of Congress on
17 it at times. And we've actually convened at least two meetings
18 with the delegate of Congress to try and address this issue.

19
20 From that our very valuable partners in the National Oceanic
21 Atmospheric Administration, helped us help fund the preparation of
22 a blueprint. So, we know we needed to have a management plan, but
23 we didn't go straight to the management plan. We needed to find
24 out first what was happening, what are we doing, how is it being
25 responded to.

26
27 So, what we have now present, at the moment, and is going to be
28 presented by Ms. Dempsey, who did this work for us is a
29 foundational blueprint. So, a skeleton. How do we move forward?
30 Who needs to be at the table involved? Who needs to be involved to
31 prepare this management plan for its execution? So, I'm going to
32 leave it at that. The last slide is just something fun to say that
33 there are still some beaches that are without impacts. Those two
34 are in Saint John, so please visit when you're ready.

35
36 But just to say that more information is behind, and Ms. Roper
37 will be more than capable. But my apologies, I will have to run.
38 So, thank you very much.

39
40 **HELENA ANTOUN:** Thank you, Marlon. Next up, Amy Dempsey from
41 BioImpact.

42 43 **Impact of Sargassum on the Territory**

44
45 **AMY C. DEMPSEY:** Good morning, everyone again. My name is Amy
46 Dempsey, and I have an environmental consulting firm BioImpact. I
47 have been working in the Caribbean since the mid-eighties. At that
48 point in time, sargassum was something that when you used to go

1 out and find it, you'd be excited when you were offshore because
2 you'd never know what little critters you would find in it. So, it
3 was something wonderful. Now it has become a real problem.

4
5 I think you've seen various angles of this photograph we took with
6 a drone. This is the Ritz Carlton Club Beach. This picture is from
7 2021. Really, this is not as bad as it got. It got a lot worse. It
8 did. Actually, at one time it was almost 60 foot offshore and
9 totally built up. It really, I mean, it devastated. All the
10 tourists left the hotel, and it was really something horrible.

11
12 But we were fortunate enough to be able to work with DPNR, and we
13 prepared the blueprint for Sargassum management, where we can start
14 as a basis what we need to do in order to create a good management
15 plan.

16
17 And one of the things is that, you know, it used to just be a
18 nuisance that happened every once in a while, but it's become a
19 situation where it's not going to stop. It's going to get worse
20 and worse going forward. And so, it's really critical that we
21 create good management plans. In doing that, we can't do this as
22 a knee jerk reaction because so many times, as we all know, you
23 respond to something and we don't know the implications of those
24 things happening, and we can end up in the long-term causing more
25 damage than good.

26
27 You know, as we started looking into all of this and we started
28 finding a lot of anecdotal information about it damaging Seagrass
29 and corals. I myself have seen it, in the near shore. In fact, in
30 this photograph, as you see the sargassum going up and it's over
31 a very near shore shallow shelf. There were both acropora palmata
32 and cervicornis on this small shelf, and it's gone. It was
33 smothered. It was scoured off and is no longer there because of
34 the repeated inundations.

35
36 But what's happening is our hotels are losing guests. Our guest
37 houses are losing guests, and people write about this. And so,
38 people decide not to come to Saint Croix, not to come to Saint
39 Thomas, not to come to Saint John because they don't want to show
40 up and find that they can't go outside. They can't use the beach
41 because that's why people come to the Caribbean.

42
43 Charter boat companies are losing guests. You know, charter
44 fishermen taking people out, they're catching sargassum and not
45 fish. It's getting tangled on the lines. Fishermen who catch fry
46 to use, are not being able to catch fry off the normal docks that
47 they use. I, right now, live on Water Island in Sprat Bay, and we
48 have people come in and catch fry off our dock sometimes because

1 they can't find them anywhere else. So, you know, it's being a
2 real impact on everyone. It's impacting fishermen financially.
3 It's impacting hotels financially, and it's also impacting us
4 Caribbean wide, because it's killing our near shore resources.

5
6 Our corals are already so stressed from temperature impacts, from
7 so Stony Coral Loss, and now suddenly, you know, we have this as
8 well. So, we're having like a triple whammy on the environment. As
9 we all know here, people come to the Caribbean for our beautiful
10 resources, and when we lose those coastal resources, that's going
11 to really damage us further economically.

12
13 Now one of the things that we found, because, you know, as Marlon
14 was saying, they're really trying to limit how people clean up the
15 sargassum to try to reduce impacts. What most people are using,
16 because of the massiveness of the inundation as you'll see here on
17 the bottom slide here. This is what the guys have raked up with a
18 small machine, they're trying to shake out the sand, but we're
19 throwing away so much sand.

20
21 When we were just recently working on a wetland delineation over
22 at the Anguilla landfill in Saint Croix, we were walking in the
23 inside of the mangroves and then suddenly come to these areas where
24 they've been disposing of the sargassum in the landfill, and it
25 was a huge amount of sand. And if you look up on the picture up
26 here on the left, you can see right behind where there's a mangrove
27 there, there's like a large white pile-- like these piles of sand.
28 That is sand that has come off beaches on Saint Croix.

29
30 The hotels are continually having their beaches messed up. They're
31 having their sand taken away, and then they have to turn around
32 and buy sand, which is \$300 a cubic yard spread. So, yeah, let, I
33 mean-- and you can imagine, I mean, some hotels spent almost
34 \$1,000,000 in a year cleaning up sargassum on their beaches. So,
35 when you look at this and then you're looking at having to spend
36 almost another \$1,000,000 putting sand back, you know, you're like--
37 - It's non-sustainable.

38
39 As part of the blueprint. We went out in the territory and tried
40 to find the beaches that were most impacted most frequently. Let's
41 be very clear, these are the ones that are impacted the most
42 frequently because as the winds and everything changes, beaches
43 that sometimes you would not expect to get hit, will suddenly get
44 a huge inundation.

45
46 Marlon showed, there's a few beaches that have never gotten hit,
47 but most beaches get hit one time or another. Offshore keys get
48 hit. And one of the things that as a marine biologist I am super

1 concerned about is that as we move forward with these management
2 plans, we're very concerned about, "Let's protect our hotels. Let's
3 protect these public beaches." But as we move forward with
4 management, we have to protect those areas that are just natural
5 areas that don't belong to anybody. That people don't think about
6 having an economic interest in because, you know--

7
8 And so, as we move forward with coming up with management, I want
9 built into that a way, a mechanism, to be able to help protect
10 those areas which are not considered hotels or tourist areas as
11 well. But like I said, we found, you know, in Saint Croix, the
12 south shore just gets slammed and as you get farther down, we tried
13 to go offshore and look at some of the other beaches, but the
14 problem is, you know, our guess is that there's a lot more impact
15 on some of the western ends we're not seeing because they're not
16 as populated and they're harder to get to.

17
18 One of the things we've done as consultants is actually work on
19 some ideas of trying to protect beaches. I mean, ideally, if we
20 could keep sargassum offshore, it would be the best of all worlds.
21 But one of the things that we really have to look at is it's not
22 fair for me to keep it off my beach and just put it on yours. And
23 that's super important. I mean, it would be, I have to tell you,
24 it would be great if we put huge barriers offshore and just bypass
25 the Virgin Islands, but then Puerto Rico. Yeah, we'll just send it
26 downstream to you and then you can send it downstream to Santo
27 Domingo and then we can send it down-- But we've got to figure out
28 a way to deal with it.

29
30 And so, what we've been trying to do with several of the hotels is
31 actually direct it to one place to make it easier to clean up. And
32 basically, you're sacrificing a small area of your beach. Again,
33 this is Ritz Carlton Club. As you can see in the upper left-hand
34 side, what happened is we found, "Okay, we've got the barriers.
35 It's great. It's stopping the sargassum." But when the waves came,
36 it would throw it around the end. Karen showed a good picture
37 earlier. We literally had to build, basically, a net that went
38 well up past the mean high water to stop it from coming around.
39 Once we did that, it was fairly successful.

40
41 But what we've done here is block off their beach. They can't have
42 people come up in boats and pick up the guest anymore like they
43 used to. And so, we tried, on another property, as you can see
44 here, basically leaving something open. We could actually figure
45 out how to get the sargassum-- It would not be-- You know, we could
46 leave an opening, but then the minute a boat comes through, it
47 pulls to sargassum, and you end up pretty much right back where
48 you were.

1
2 We went out because I think it was very important for us to look
3 at what the general population's perception is and what the
4 community is looking for. And so, we put up on Facebook, and we
5 did a survey and tried to get people to respond. We did have 211
6 people respond. What was really nice is that most of the people
7 knew what sargassum was. They knew it was an algae. You know, most
8 of them had an idea that it was affecting not just us, but everyone
9 else. But most people believed that the sargassum, of course, comes
10 from the Sargassum Sea, and it's just coming down here and
11 affecting us. Some people actually knew about the Great Atlantic
12 Sargassum Belt and knew that it was coming from that area instead.

13
14 But people had very split feelings about whether there was anything
15 beneficial about sargassum or not. We've got some very strange--
16 You know, some people came up with some very strange ideas. My
17 favorite one was that sargassum came from the devil. I thought
18 that was one of the one of the better questions.

19
20 One of the things we found is that nine out of ten of the people
21 who actually responded to the survey said it has negatively
22 affected them. But of course, these are people that are answering
23 a sargassum survey. So, obviously, they probably would be someone
24 who is in a field that would be impacted by sargassum.

25
26 But what really was disturbing is that a quarter of the people
27 believe that their health had been impacted by sargassum. This was
28 something very important that Marlon pointed out. We found that so
29 many of the people cleaning up the beaches, they have these guys
30 out there, they're not wearing masks. They're not even wearing
31 protective clothing, and they're spending all day with the
32 sargassum. I mean, I don't know.

33
34 Your boat's sitting in a marina, and every piece of metal on your
35 boat gets stained. Your boat's getting stained. You're breathing
36 this stuff. People are starting to get asthma from it. It is
37 harmful to humans. I mean, that's one reason the hotels have people
38 leaving because it's a nauseous gas. It can really cause a problem.

39
40 So, we have to look at that and require that hotels, when you have
41 workers out there, require the workers to have PPE. You know, it's
42 not fair for them. Because these are, of course, going to be your
43 manual laborers. They're not going to be executives out there, but
44 we've got to protect the workers in Sargassum.

45
46 One of the things that was disturbing is that most people felt
47 that the government wasn't doing anything. Most people felt that,
48 you know, it was just kind of being left to chance. I think that

1 was something that was one of our biggest recommendations that
2 came out of the blueprint, that we need to get a public information
3 campaign. Put up a website that anybody looking it up would go
4 straight to it and say, "Oh, here. This is what it is. This is
5 what we're trying to do."

6
7 But most people knew that it was a territorial wide program and
8 felt that we needed to create a management body that was a mix of
9 hotels, scientists, and regulators. That way, we could come up
10 with the best plan that would address everyone's concern.

11
12 We also, as part of what we did, is reach out to key stakeholders.
13 And I have to say this was a lot harder than we thought because
14 there were a lot of people that were very nervous talking to us
15 since we were doing a report for DPNR. One of the things we found,
16 and this is something that's very important, I think, for everyone
17 in this room, is that, you know, "Have you had any baby turtles
18 show up in your sargassum?" "Oh, no. Never seen anything. No. No.
19 Not at not at all." And then, talking to a young lady who was just
20 trying to, I don't remember what it was about, but she goes, "Oh,
21 yeah. It was really cool. We were out there, and we were finding
22 these baby turtles and putting them in buckets and then carrying
23 them back out."

24
25 But, of course, no one we interviewed that was raking their beaches
26 or cleaning anything found anything in the sargassum because they
27 were so afraid that if they said, "Oh, yes, this is a problem"
28 that they would be stopped from cleaning it up. So, it really
29 points to why it's so important that we come up with a plan and a
30 management way to go forward with this because it's just very
31 critical.

32
33 One of the things was that we talked a lot with TNC because, of
34 course, they've got their innovative coral lab. And what they're
35 finding is that they could not collect the near shore water at all
36 when the sargassum came in because it was at levels that would
37 harm the corals. So, just like what was said earlier, this is
38 causing problems with the water quality.

39
40 And so, fishermen are telling us telling us that they were catching
41 less. A hotel in Saint Croix was saying, a marina operator, said
42 that they had spent \$200,000 on cleanup. But like I said, there
43 are hotels that spent closer to a \$1,000,000 in a year.

44
45 I don't want to get too long here. Basically, what we concluded
46 with the blueprint is that we really need to formalize and have a
47 comprehensive management plan. And it's got to be developed by a
48 multiagency and stakeholders to make it so that it will address

1 everybody's needs. We need a regional permit for this. We need to
2 develop a permit with the stakeholders, with the agencies. That
3 way, we can say, "Okay, you can put out booms. If you have seagrass,
4 this is how you have to approach it. This is the monitoring you
5 have to do. This is the maintenance you have to do."

6
7 We desperately need that because you have hotels, I'm just going
8 to say it, like Margaritaville, which I don't know if any of you
9 have seen it. They have no beach anymore because they bulldozed it
10 all up trying to pick up their sargassum. But because there's not
11 a structure and they're scared to try to go through and get a
12 permit, they haven't done anything.

13
14 So, one of the things I truly believe and what we've felt from
15 looking at this, we need to try to figure out a way to keep
16 sargassum offshore because it does so much damage when it gets
17 there. Or if we could collect it offshore, but then we've got to
18 worry about the animals in it.

19
20 One of the things that we found in all the research is that it's
21 got heavy metals in it. It's salty. I mean, using it as a
22 fertilizer, you need to look at those things because the last thing
23 you want to do is be salting the earth putting heavy metals into
24 it.

25
26 But what is very important is that we realize this is something we
27 need to start putting in every permit we do, just like we do with
28 climate change of resiliency, we've got to add sargassum because
29 it's not going anywhere. So, thank you.

30
31 **HELENA ANTOUN:** Thank you, Amy. Next up, we have Ricardo Colón
32 from DNER.

33
34 **RICARDO J. COLÓN-RIVERA:** Good morning. Can I share my screen, or
35 do you guys have the presentation?

36
37 **CRISTINA OLÁN MARTÍNEZ:** Ricardo, you can share your screen.

38
39 **Sargassum Management in Puerto Rico**

40
41 **RICARDO J. COLÓN-RIVERA:** Okay. So, good morning, all of you. Thank
42 you, Helena, for the invitation. I tried to make a really brief
43 presentation that will focus on how we, in Puerto Rico,
44 particularly in the Department of Natural and Environmental
45 Resources, are trying to deal with sargassum.

46
47 Basically, the way that we have worked, particularly in this year,
48 is by writing a protocol or a guidance document that is based on

1 an original guidance agreement that was written in 2015,
2 originally. In Puerto Rico, this was a year that extreme inundation
3 events basically started, and the public and the agency really
4 started to get worried.

5
6 So, of course, this document has all of the background, ecological
7 background of sargassum, the legal aspects of what it's entitled
8 for the management aspects. We had also very extreme events in
9 2018 and 2021. And, of course, in between those years, we also had
10 important events.

11
12 But in 2023, we had another very extreme-- or at least we expected
13 to have a very extreme season. So, we basically rewrote the
14 protocol, focusing on management and monetary strategies. So, what
15 can we do? What tools can we develop for ourselves, that can help
16 us deal with sargassum management in the whole island, thinking
17 that we have tourist areas, like, you presented before, like, I've
18 seen on the presentations before, where we have hotels that are
19 being impacted, and marinas but we also have fishermen communities.
20 We also have bio bays. We have, just basically, many types of
21 economic backgrounds and communities that are being impacted by
22 sargassum.

23
24 And also, many types of different ecosystems. It's not just sandy
25 beaches. So, we try to develop a management tool that will help us
26 deal with this very complex scenario for the whole island. We,
27 basically use the same approach that is being using the Caribbean
28 to try and determine, whether it's a light impact, a moderate
29 impact, or an extreme impact. We use that in a protocol that will
30 require, first, a report from the impacted community or the
31 impacted hotel or the fishermen or the marina. The agency will
32 send people that are trained based on this protocol to evaluate
33 the condition based on three criteria.

34
35 The three criteria are quantity, impact of that quantity. Impact,
36 includes-- The protocol is in Spanish. The table, of course, is in
37 Spanish also. But for those of you that cannot read Spanish, we're
38 considering ecological impacts, social impacts, economic impacts,
39 and public health impacts when using that criterion of impact,
40 particularly. And then, the third criterion is geographic
41 extension. So, is it a very limited area? Is it a broad area? If
42 it's a broad area, are there any changes? Sometimes we have shallow
43 base combined with sandy beach. So, we need to basically determine
44 that complexity in order to try and develop a management strategy.

45
46 From this evaluation, we established a condition, which is what I
47 mentioned. The condition will be if it is light, moderate, or
48 extreme. This is the sheet that we use in our evaluations. We use

1 a numeric scale to help us facilitate that evaluation. It is a
2 qualitative evaluation. It is not a quantitative evaluation, but
3 we assign the numeric scales because, like I mentioned, the area
4 of Puerto Rico, it's very large. I mean, for us, it's large in
5 terms of the capacity that we have as an agency.

6
7 We will have multiple, evaluators. We will have people in the west
8 side. We'll have people, basically, South, West, and East, which
9 are the most impacted areas. We want to make sure that, somehow,
10 we acquire concrete results. So, we assign a numeric value to each
11 of the criteria based on very specific qualitative conditions. If
12 the sargassum, as the colleague from Saint Thomas showed, the
13 sargassum is just a little bit, just dispersed, then it will get
14 a low numeric value, and then, so on.

15
16 If it's more accumulated, if it shows mounds, if it's already
17 rotted, the color, if it has a long extension, then we will have
18 a higher numeric value. The numeric value goes from 1 to 3. And,
19 of course, a 3 in each criterion will give you a sub-value of 9,
20 and that will be the most extreme case.

21
22 We have already field tested this approach with very different
23 observers. We go to an area that is already affected and when we
24 go and do the evaluation, the people that we are training, we ask
25 them, does this look like a 2 to you, or like a 3, or like a 1?
26 And it's really impressive how congruent the observations are.

27
28 So, in the case that we have an extreme or near extreme cases,
29 then those places are, of course, given management priority and
30 monitoring priority. Depending on the condition then we have
31 management suggestions or better management approaches. Even if
32 the site has the lowest value, very light impact, but there was a
33 report made, the lowest possible management suggestion that we
34 will have, is, keep monitoring. Because the idea was to create a
35 protocol and a management approach that will be event based. So
36 very important.

37
38 We have, places that we know could be impacted heavily by
39 sargassum. We receive our report. We go and evaluate, and then we
40 go there, and it's not sargassum. It's another alga. It's another,
41 organic material. For example, if we have a sandy dish, that is
42 nearshore sea grass bed, then we usually have piles of thalassia
43 seagrass, of syringodium seagrass, and this is a very important
44 distinction that we need to make. We try to explain to people, it
45 needs to be brown. It cannot be green at any moment. Right?
46 sargassum is a brown alga; it's never green.

47
48 We are only focusing on management of sargassum and only focusing

1 on management of extreme or near extreme sargassum inundation
2 events. Particularly, if they are impacting not only ecological
3 aspects, but also, public health and economic aspects. So, if we
4 have an area that is extremely impacted and it's a hotel, or it's
5 a tourist area, a public beach that is very visited. In the case
6 of the eastern shore or the southwest shores, that we have
7 bioluminescent bays that are basically mangrove lagoon, shallow
8 lagoons that have a restricted tidal access that is associated
9 with another crescent shaped bay, then those places are definitely
10 given priority. There's a monitoring, but also there's some
11 sargassum management approaches.

12
13 In the case that we have an extreme value, for example, as you see
14 in the down left corner of the slide you're seeing, Las Corabas
15 Bay. Las Corabas Bay is in Fajardo, Puerto Rico. This is a crescent
16 shaped bay that is associated with one of our most visited
17 bioluminescent bays, which is basically an economic motor for the
18 town of Fajardo, Puerto Rico. It is highly visited. It's a
19 bioluminescent bay that is world famous. The tidal exchange from
20 the lagoon occurs through this bay.

21
22 So, during an inundation event, for example, you see in the picture
23 the 2021 event, there's a lot of sargassum accumulated and when a
24 tidal exchange occurs, all of that sargassum goes into the bay.
25 Because of the limited tidal entrance at the mangrove area, it is
26 really difficult to get the sargassum out. So, when we have these
27 situations, the protocol also states that we need to develop a
28 specific shorter management approach for that particular area.

29
30 So, we have the protocol ready for Puerto Rico, which is basically
31 based on report, evaluation, and then a management approach, based
32 on that evaluation. But in the case of extreme events that are
33 recurring, that we know that the area is regularly impacted, then
34 we recommend the development of a specific plan. It could be only
35 a couple of pages. It doesn't need to be a whole new document. We
36 already know the basics of sargassum management. We just need to
37 know what is going on in there and how we are going to approach
38 it.

39
40 For this area, we have another specific plan that includes another
41 thing that I've seen in other presentations, the floating barrier
42 to keep the sargassum offshore. But we also have a plan to acquire,
43 and we have already basically started on that, to acquire specific
44 machinery that we think could help in the collection of sargassum
45 before it enters the bio-bay.

46
47 This is definitely something that is a challenge. Right? Most of
48 these machines are usually designed either for freshwater or for

1 very calm seas. I know that a lot of places the Caribbean are
2 learning and have acquired this machinery in the past with mixed
3 results. For us to acquire this kind of machinery, sometimes it
4 takes years, the administrative process. So, while this learning
5 process is occurring, our administrative process is also
6 occurring.

7
8 So, I just wanted to mention that because it is probably a
9 situation that is shared by other places, other colleagues. This
10 is definitely something that we are experiencing in Puerto Rico.
11 For example, these two machines are on their way, specifically to
12 work here in Las Croabas, in the bio-bay entrance. So, when we
13 have more of the learning process, then we can share that with
14 you.

15
16 Of course, we are also learning a lot from our colleagues. In the
17 protocol, even if our evaluations are mainly qualitative because
18 of the agency's capacity and the quickness with which we need to
19 do these evaluations, we have a lot of addendums that are specific
20 methodologies for a quantitative monitoring.

21
22 The "SargAdapt Good Practice Guide Series" is something that we
23 recommend. We have used in the past. That provides specific methods
24 to quantitatively have, for example, a measurement of volume, of
25 weight, specifically for places that can be monitored over time
26 with the same approach. We also already use drones. So, we have
27 also adapted the protocol for drones. So, we can have an approach
28 that can be shared by other places in the Caribbean, so we can
29 share that and learn from each other. Of course, there's--

30
31 **HELENA ANTOUN:** I'm sorry. Apologies, Ricardo, but we're running
32 behind schedule, and we have one more presentation. I really want
33 to make sure people have enough time to ask questions.

34
35 **RICARDO J. COLÓN-RIVERA:** Yeah. So, thank you very much. I'll be
36 here for the discussion.

37
38 **HELENA ANTOUN:** Apologies, Ricardo, but thank you so much for that
39 great presentation. But I know that there are going to be many
40 questions, so I really want to give people time to ask all the
41 questions that they would like to ask.

42
43 Final presentation will be Andrés Bisonó and Christopher Walker,
44 SOS Carbon.

45
46 **ANDRÉS G. BISONÓ LEÓN:** Awesome. Thank you very much. Good morning.
47 Team, do you mind if I share my screen so I can pass the slides
48 faster and hopefully allow us more time for the discussion.

1
2 **CRISTINA OLÁN MARTÍNEZ:** I will make you a cohost so you can share
3 your screen.
4

5 **Transforming Environmental Crises into Value-Chains**

6

7 **ANDRÉS G. BISONÓ LEÓN:** Amazing. Thank you. Well, as we start,
8 thank you the Council, Helena, for having us and putting this
9 important discussion together. We're very privileged and honored,
10 to be here with you this morning. So, as mentioned, my name is
11 Andrés. I lead SOS Carbon. We're a spin out from the mechanical
12 engineering department at MIT. And, again, very pleased be with
13 you all this morning.
14

15 As we have all mentioned and touched on, sargassum is indeed a
16 problem. At least when it starts making, you know, its path to the
17 shoreline and then makes landfall in the beaches. Not only
18 affecting the tourism, the local ecosystem, human health, but it
19 affects us all.
20

21 This is a picture of Dominican Republic. And, again, it speaks to
22 the magnitude of the problem. Also, some of us touched on other
23 issues that it has been causing, like, for example, to energy
24 generation, power generation, or desalination plants. This is not
25 just a case of U.S. territories, but also in the Dominican
26 Republic, for example, at least four other plants see the same
27 problems.
28

29 And also, as many touched on, the topic here is as well, how we
30 can prevent sargassum from making landfall or at least reaching a
31 point that we know it will have consequences. The other problem we
32 must ask ourselves, and again it was brought, is how we can prevent
33 the use of heavy machinery on the beaches that we know cause beach
34 erosion and affect the ecosystem of those areas.
35

36 So how did we start working around sargassum at MIT? One of the
37 first things we took on ourselves was to analyze the local context
38 and one thing we came across, well, apart from sargassum and
39 indeed, how it affects, also, the local coastal communities, but
40 it's also the resources that we have in common. Here is just one
41 spot around Punta Cana in Dominican Republic in which, again, in
42 this one location, we have all these artisanal vessels.
43

44 That's how we got into our littoral collection module system. It
45 is a hardware that we mount onto these local vessels or artisanal
46 vessels, and it allows us to turn these vessels into high-capacity
47 harvesters. Each vessel having a capacity of up to 70 tons per
48 day. The essence here is to skim the waters and collect the seaweed

1 in a constant process. So, once the nets are full, then we will
2 drop them in a specified location which they're retrieved, and
3 then the vessel continues the operation nonstop as required.

4
5 Here you can see kind of a step by step. So, again, as we navigate
6 the boat, the nets get filled. Once filled in a [inaudible] point
7 of transfer, then we utilize some kind of machinery based on that
8 content then you just lift the bags and dump or deposit it in some
9 other form of equipment in just one single area, do not affect the
10 entire coastline.

11
12 Here is what I was referring as a constant process. In this case,
13 we took a time chart of the operation. At the time, it happened
14 that the ground operation was going slower than water collection.
15 And these are the many efficiencies that also we have developed to
16 be able to have an ongoing chain.

17
18 But more importantly, we, through this process, also integrated
19 the coastal communities, the local fishermen many of which have
20 been the most affected not only by sargassum, but climate change
21 in general. So, we integrate them. We have empowered 80 fishermen
22 throughout the Caribbean. We formally employ them, if not for the
23 entire year, at least through the sargassum season. And we have
24 also taught them ways to, for example, building our own equipment
25 that we utilize for the management.

26
27 And now referring to how we make sure we don't have detrimental
28 effects on the coastal ecosystem. Speaking to totals, for example,
29 our team is trained to be on the lookout as we collect sargassum.
30 To be constantly watching that there are no species around so that
31 we can successfully catch only the sargassum and no bycatch. We
32 have also put procedures in which when we go to dry sargassum, we
33 also check everything to make sure, again, there hasn't been any
34 type of bycatch.

35
36 And, Again, we are so honored to be here with you all today because
37 we really like to work together as an ecosystem putting in place
38 the best practices. In the Dominican Republic, we have the only
39 environmental permit to harvest sargassum in the ocean and provide
40 a proper management throughout the cycle. This is what Sydnee from
41 Newlab explained earlier, what we're going through in Puerto Rico
42 at the time to, again, work with the local leaders, agencies to
43 make sure we are together deploying the best method and practice.

44
45 With that said, we are already in three territories. In the
46 Dominican Republic, we started operations in 2020. In Antigua and
47 Barbuda, 2022. This year, we doubled the of the deploy systems. We
48 already have equipment on the way to Mexico, to be deployed early

1 2024. And, again, looking towards now Puerto Rico, we were, last
2 week, meeting with the local leaders to really make this possible
3 early next year.

4
5 And briefly, as was also covered, what's important here is not
6 just how we can properly mitigate sargassum, but also the supply
7 chain that we can establish all the way from the harvesting to the
8 transfer of the sargassum to allow new industries to be developed.
9 Here in the Dominican Republic, we have already chipped sargassum
10 to more than ten countries, including the U.S. and as far as
11 Finland with container size loads. We have chipped six containers
12 so far, and we already have six more, locked and coming.

13
14 And, again, this can be really turned from a crisis into
15 opportunities. Obviously, again, well managed and working together
16 with experts on the different areas. So, we can go from sargassum
17 invasions to management, to then processing. Us internally, we're
18 working on a bio-stimulant and then even all the way to carbon
19 credits. Because another point, as you all know, is that when
20 sargassum makes landfall, it rots and then releases back carbon
21 and methane. And this has been proven to be viable industries. The
22 bio stimulant alone, having an estimated value, by 2030, to be
23 \$1,800,000,000.

24
25 Again, we're very pleased to be here with you all today, and we
26 are grateful for all the support throughout the Caribbean and also
27 our Partners. So far, we work with more than 30 organizations,
28 around ten of which are local academia. And many of us might ask-
29 - I'm wrapping up now, but many of us might ask, what's the support
30 you have received from the local fishermen?

31
32 I will tell you the same thing we tell everyone because it has
33 been also a shocking experience. They are the ones that are the
34 most committed to making this happen and to scale. They really see
35 the benefits they can have, not only because, again, they're
36 mitigating something that affects them, but also because they're
37 in great appetite for formal opportunities. Again, climate change
38 has been affecting them from reduction in species for them to catch
39 and eat from. So, this is something also we must consider.

40
41 In our operations, we have had the support from many international
42 leaders all the way from the UK ambassador to ex-president Figueres
43 from Costa Rica. So very eager to also have you all, either in one
44 of the territories that we already worked in or in Puerto Rico
45 again when we get to deploy.

46
47 Thank you very much. And here I'm leaving my email. Again, looking
48 forward to collaborating further.

1
2 **Questions/Comments**
3

4 **HELENA ANTOUN:** I would like to thank each and every one of our
5 speakers today. Every single presentation was fantastic, very
6 informative, flowed beautifully, and I would like to take the
7 opportunity to now open the floor to questions.

8
9 For those of you that do not have a microphone, we have a few
10 chairs up front. You can go sit there so it's easier for you to
11 speak through the microphones.

12
13 So, I promise Vance. So, Vance had a question. He had a question
14 in the beginning. I promised him he was going to get the first
15 question. So, Vance, thank you.

16
17 **VANCE VICENTE:** She nodded. So, she answered my question that,
18 yes, that there is a way to get a permit under highly emergency
19 situations like highly intense accumulations of sargassum which
20 impair the designated uses of shorelines and the water column. So,
21 I think that's been answered, right? You want to expand on that?

22
23 **KAREN M. URELIUS:** I'll expand a little bit. We do have emergency
24 permitting procedures. We first have to determine that it's a true
25 emergency. A lot of times these are things that people know about.
26 I mean, an example, I still haven't seen an application for the
27 water intake that the emergency was declared for. It's been over
28 a year since that's happened. And so, could be that that comes
29 back and then, you know, is that truly an emergency? Or did they
30 have a couple years to prepare for that?

31
32 But there are a lot of cases where there are emergencies. What
33 we're really trying to do through that regional general permit is
34 to make better decisions. When we work under our emergency
35 procedures, we still reach out to the National Maine Fisheries
36 Service, U.S. Fish and Wildlife Service, and the other agencies
37 that we partner with and we say, "What are your recommendations?
38 What can you add to this? What are your conservation measures?"
39 But instead of having time and resources and being able to reach
40 out to their counterparts, they usually have a very finite time,
41 like maybe 24 hours to respond, and then we issue.

42
43 So, the conservation recommendations aren't going to be as solid
44 or well thought out. So really that's why we're trying to implement
45 something like a regional general permit where all agencies can,
46 under their regulatory authorities, determine what is necessary to
47 move forward with these types of projects, but still to conserve
48 the resources to the best of our ability.

1
2 **VANCE VICENTE:** Yeah. Thank you. And one more, and I will stop
3 speaking. I can go forever. But anyhow, I can see that locally,
4 there has been a lot of well thought alternatives. Short term, in
5 a way, and consultants like BioImpact and like Amy Dempsey and
6 others are well aware about the process of applying for a permit,
7 which is avoiding minimizing and compensating as well as the
8 implementation of U.S. EPA 404b1 guidelines. And I'm very happy
9 with what I have seen in their efforts, but my question is-- maybe
10 I came a little bit late, and it might have been discussed. Has
11 there been any significant effort in the proposed actions of
12 removal, transforming as an alternative to avoid impacts inshore?
13 Like Amy suggested and has included as an alternative, keeping it
14 offshore, therefore, keeping that sargassum performing its
15 ecological functions as habitat for sea turtle hatchlings and
16 pelagic fish and whatnot.

17
18 If there is a situation that the sargassum needs to be removed,
19 has it been evaluated too? How to return all that biomass and
20 nutrients back into the ocean? Because we're removing biomass and
21 nutrients from the ocean. So, from a wide ecosystem perspective,
22 that will be a form of avoidance, and I don't know where there has
23 been any discussion on that alternative. That's my last question.
24

25 **KAREN M. URELIUS:** I'll just answer. In terms of the U.S. Virgin
26 Islands, when director Hibbert talked, you know, one of the big
27 goals is to come up with a territory wide sargassum management
28 plan, and that's one of the steps mentioned extensively in the
29 blueprint.

30
31 I'm going to turn the microphone over to you because you seem like
32 you've done the most coordination in Puerto Rico. So that that is
33 a goal, definitely. That is something that we want to look at here
34 more in the Virgin Islands and to do exactly what you're
35 mentioning, but you can probably speak more to what's happening in
36 Puerto Rico.

37
38 **MARIANA C. LEÓN-PÉREZ:** Yes. We had some meetings, workshops with
39 local and state agencies in Puerto Rico and it was discussed, for
40 example, the option of sargassum disposal on the ocean. I was
41 wondering if that's what you're referring to. I talked with the
42 EPA and what they mentioned was that there's a lot of questions
43 that need to be answered in order for them give a permit for that.
44 So, they suggested that maybe they will be able to provide, like,
45 a scientific Permit. So, they suggested to maybe have a research
46 program to addressing those specific questions, like how will
47 sargassum behave when it sinks, where will it move, what are the
48 impacts on the benthic ecosystems, etcetera? So, a lot of questions

1 and they suggested that that study needs to be conducted in order
2 for them to provide permits for that.

3

4 **VANCE VICENTE:** Thank you.

5

6 **HELENA ANTOUN:** Okay. Miguel, you have a question?

7

8 **MIGUEL A. ROLÓN:** I'm the messenger for a question that was put
9 together by fishers and some people. When do we call sargassum
10 garbage, and when do we call it essential fish habitat? And second
11 is, if I'm interested in removing sargassum, do I have to deal
12 with the federal government or the local government for a permit?
13 For example, one company is interested in looking at the incidental
14 catches of all the species that are important to the ecosystem
15 when I remove sargassum. So, it seems that when we remove
16 sargassum, either we remove sand, or we remove something that is
17 valuable outside.

18

19 They are interested in knowing and this panel probably can discuss
20 it. When is the time that I need that permit? And what is considered
21 essential fish habitat, and what is considered garbage? And the
22 last thing is, garbage for some people is a treasure for others,
23 and this is something that has been discussed throughout the
24 Caribbean through many years.

25

26 The other part that they want is to remind everybody that sargassum
27 can be toxic, so you don't drop it any place that you think. And
28 anyway, those are the questions that they gave to me for the group.
29 Thank you.

30

31 **AMY C. DEMPSEY:** I think the most important thing is we need to
32 find a way to valorize this. To come up with a way that it becomes
33 economically viable to do any of this, because it does not
34 necessarily have to be garbage. And yes, there's bycatch in it
35 when you pick it up, no matter whether it comes ashore and it dies,
36 or whether you take it up offshore. I mean, this is why it has to
37 have everybody involved.

38

39 But we've been able to get, kind of like what you're saying with
40 scientific permits. It is how we've done the work we've done with
41 the hotels. We basically got trial permits, because we're studying
42 it, moving it around, seeing what we have to do with the curtains.
43 But, when it's offshore, it is valuable to creatures. We need to
44 figure out maybe if there's a way we could do that wholesale.

45

46 **HELENA ANTOUN:** Anybody else want to elaborate a little more on
47 that? Okay.

48

1 **SYDNEE GRUSHACK:** I'll just echo Amy's response and say we agree.
2 That transition between being viable habitat and being essentially
3 waste on the beach, is what we're trying to target with, SOS
4 Carbon, collecting from the near shore environment. So doing our
5 best to get that sargassum once it stopped being essential habitat
6 and right before it makes landfall and actually capture that at
7 the point where it hasn't degraded. It's still very valuable to
8 extract, the most useful compounds and create those downstream
9 opportunities to make the collection and the management
10 economically viable and also to prevent some of those environmental
11 and health impacts once the sargassum actually lands. So that's
12 our perspective as well.

13
14 **HELENA ANTOUN:** Thank you, Sydnee. So, we are running out of time,
15 but we have three questions left. I'll go with Roberto, Sennai,
16 Graciela, and Julian. I think with that, unfortunately, we're going
17 to have to wrap it up.

18
19 **ROBERTO SABATER:** What are the uses of this sargassum once it's
20 picked up? Animal feed, fertilizer, I don't know. What other use
21 is there that can be produced to produce money and industries?

22
23 **SYDNEE GRUSHACK:** So, in addition to those that you named, Andrés
24 put up a great chart, that shows many of the other products that
25 are being created. Those include bioplastics, they include
26 textiles, the intermediate compounds, like alginates, can be used
27 to create emulsifiers. Fucoidans and other compounds that can be
28 extracted can be used in the pharmaceutical industry. There have
29 been some studies that they're useful for actually treating things
30 like Alzheimer's and brain cancer. There is the creation of
31 biofuels, which I know the department of energy is exploring.

32
33 So, there's really a very, very wide variety products. This is
34 something that we research, more than 20 different products that
35 can be created all along this spectrum. So, it's just a matter of
36 being able to make those at a scaled production that they're
37 economically viable. So that's our looking at the entire value
38 chain, making that a process that can make sense in terms of cost
39 to produce and be able to compete with the synthetic alternatives
40 that exist today. But happy to send you some research on, all the
41 different products that we identified.

42
43 **HELENA ANTOUN:** Thank you, Sydnee. Sennai?

44
45 **SENNAI HABTES:** Thanks, Helena. So, one quick comment and then a
46 couple of questions that we can use to think about and continue
47 discussions.

48

1 First, while I agree it is wonderful to create value added
2 incentives for doing this, at present, there are no scalable market
3 solutions for using sargassum in a way that would create value
4 added intentions and create economies. Until we are at that point,
5 it is very difficult to implement that in a way that creates
6 revenue from collection activities. We, as a group of management
7 agencies in a room, have a serious problem impacting a region. The
8 biggest issue is when it gets onshore or into nearshore areas.
9 Right? That is when we see harm to native ecosystems and the
10 fisheries that we manage, as well as massive detrimental losses to
11 the economy and problems with tourism.

12
13 What I still have not heard clearly and need help understanding is
14 what are the steps and information that we need to understand from
15 research to create a way to better manage either collection or
16 mitigation that stops that problem from happening currently.
17 Right? We, in my opinion, are still at least five years out from
18 getting to a point where we could create a value-added chain that
19 provides money that would revenue collection of this stuff in the
20 U.S. Caribbean.

21
22 So, in that interim time period, we still have a large problem
23 with it washing up onshore. Is there ways that we can create
24 management and policy that fits in both federal and territorial
25 current existing rules and regulations that would allow
26 collections at the point beyond which it is EFH, meaning near shore
27 enough that it is going to cause, say, a HAB, a harmful algal
28 bloom, or detrimental effects to important fisheries or essential
29 fish habitat where we can allow collections and then get into a
30 standpoint of either putting it back offshore or depositing it
31 somewhere that is not onshore, because we simply do not have
32 capabilities for that in small island areas like the U.S.
33 Caribbean.

34
35 So, what I think would be useful with all of us in the room is
36 identifying what information we need to get. What research needs
37 to be done for us to get the information that would allow us to do
38 those things.

39
40 **HELENA ANTOUN:** You have just articulated one of the top questions
41 that I have had, and the reason why we put this whole panel
42 discussion together. Thank you very much for that. I don't know if
43 there is a one answer to that. I will let the panel weigh in on
44 that question, so we'll give them a few minutes.

45
46 **KAREN M. URELIUS:** It seems like Ricardo from DNER might be the
47 best person to speak to this if he's still on the phone? Since
48 through their plan, they investigated things.

1
2 **RICARDO J. COLÓN-RIVERA:** I'm here. Can you please repeat the
3 question?
4

5 **HELENA ANTOUN:** Sennai, can you repeat the question, please.
6

7 **SENNAI HABTES:** Sure. So, Ricardo, what I'm trying to get a better
8 handle on is what management strategies you guys are currently
9 using for, say, nearshore and water collection and disposal. And
10 what is the process that DNER is using, that connects all federal
11 and territorial management needs to protect that from happening.
12 Either stopping it from getting onshore and causing detrimental
13 harm to the ecosystems, or removal in a nearshore habitat before
14 it becomes costly and detrimental?
15

16 **RICARDO J. COLÓN-RIVERA:** Yes. All of them. It it's going to depend
17 on the site. Going back to an example that I mentioned in my
18 presentation in Las Croabas, for example. We have a lot of crescent
19 shaped bays that are the most affected because they're the ones
20 that accumulate the sargassum the most.
21

22 And, of course, a very viable, solution in there will be to
23 maintain the sargassum offshore by using floating barriers. But
24 then we have the situation where these floating barriers, we really
25 need to think about where we put them because if we put them in--
26 we could be risking accumulating the sargassum right on top of a
27 reef or right on top of a seagrass bed, which are essential fish
28 habitats and critical habitats.
29

30 And that will really create a situation where we need to think,
31 which is exactly what happened to us in Las Croabas, where a
32 floating barrier will really help. So, fortunately, we have a lot
33 of tools. We have a lot of really fantastic benthic habitats maps
34 created by NOAA at least for the northeast, which is where our
35 work is concentrated, and we have all of the bathymetric
36 information.
37

38 So, using all of that, I mentioned that in these cases, we need to
39 prepare a specific plan for the site because each place is
40 different. So, in that specific plan, we chose an area where we
41 know, based on our desktop exercise, where we know that floating
42 barrier could be located, and the sargassum will be accumulated
43 over a mud flap, for example-- a bottom is what I meant, for
44 example, where the impact will be less than on a seagrass bed, for
45 example.
46

47 And then collection is the second phase, right, because these
48 floating barriers have a limit, or it will redirect the sargassum

1 to another place. So, collection is the same. It's very important.
2 So, we focus first on acquiring the means to perform, inward
3 collection, by our own capacity, by the agency capacity, not
4 depending on a third party. And then, we can think about the
5 floating barriers. And, again, this is very specific for each site.

6
7 Of course, there are many places that can benefit from stopping
8 the sargassum from reaching shore. But our experience, my
9 experience with just working on this one side is that it's
10 expensive. It does not guarantee a success. And at this point for
11 us, it's almost experimental. It's experimental with a positive
12 hope of the outcomes because we know that in other places, this
13 has occurred.

14
15 And in the case of specifically Las Croabas, the situation, like
16 I mentioned, is a bio-bay, and there's a lot of economic activity
17 in there. So, of course, our agency is slow. Sometimes, processes
18 take many months or even years. So, people have already put
19 floating barriers of their own. They have acquired, oil management
20 barriers, and they have put this and have seen this, and I know it
21 works really well. At least in protecting the bio-bay. Protecting
22 the sargassum of reaching the inner lagoon.

23
24 The benthic habitat below that barrier hasn't been evaluated, but
25 there could be an impact. So, it's a complex issue.

26
27 **HELENA ANTOUN:** Okay. Thank you, Ricardo. Graciela?

28
29 **GRACIELA GARCÍA-MOLINER:** So, I think I heard that there is a way
30 of predicting when the sargassum will come, is there a way of
31 predicting how much we will get in any one time? And the reason
32 why I'm asking this is because if it's coming in and it's picking
33 up the spawn from the spawning aggregation of fish in Eastern
34 Africa, for example, it will eventually come here.

35
36 So, we will be getting species that are not local, but that will
37 find, most likely, a very nice habitat here to settle. And we do
38 have, thanks to the commercial fisheries of La Parguera, evidence
39 of an eastern Atlantic boxfish that was eaten by a grouper of La
40 Parguera a couple of years ago. So, we know that they are here,
41 and we know that they can find a very good habitat. So, if we can
42 predict when they come, the entrainment of that spawn might also
43 give us some insight into what can we expect in terms of the
44 movement of these fish?

45
46 **FRANCISCO E. WERNER:** Yeah, thanks for the question and really an
47 important one. I think presently we're showing that it is possible
48 to think several months out. I think that the kind of questions

1 that you're asking are exactly the next level questions in terms
2 of the kind of sophistication and detail that you would bring in
3 data simulative capabilities and so on that might allow us to track
4 some of these features and some of the trajectories a little bit
5 more carefully and ask the questions that you're asking.

6
7 So, I think the fact that we've been able to show that it is
8 possible to think ahead with the level of information we have does
9 give us hope that that we could do more. So, I would say it's
10 something to put on the list as an action item to consider. Good
11 Question.

12
13 **HELENA ANTOUN:** Thank you, Dr. Werner. Julian?

14
15 **JULIAN MAGRAS:** What I'm not hearing here today is how are we
16 educating the public about how toxic this sargassum is. And the
17 reason I say so, I'll use a very small example. In my town, my
18 fishing town, which is very small, we get some big blooms that
19 come in and in order for the fishers to leave with their small
20 boats, they have to remove it. I had three of my fishers that got
21 very sick with rashes. Actually, one of them up to this day, five
22 months later, his legs are still sick with the rash.

23
24 I think the public needs to understand how toxic this is and in
25 order to be dealing with it or to work on it, they need to have
26 the proper PPEs, personal protective equipment on. Even the
27 tourists coming in and going to our beaches, and if there's large
28 blooms in the beaches, they need to also understand that they can
29 be impacted from this the sargassum.

30
31 So, I haven't heard much about that today, and I think that's you
32 know, I understand the removal and what we're going to do with it
33 and the effects and the ecosystem and all of that. But from the
34 health side of it, I'm not hearing much about that today. Thank
35 you.

36
37 **ANDRÉS G. BISONÓ LEÓN:** Helena, if you don't mind me taking part
38 of that answer. SOS Carbon here.

39
40 **HELENA ANTOUN:** Sure. Go ahead.

41
42 **ANDRÉS G. BISONÓ LEÓN:** Thank you. So, on our end, obviously, bias,
43 but our proposal is to-- The reason why we insist so much in ocean
44 harvesting is to also address the same point that was just brought
45 up, which is the detrimental effects that it has on the coastal
46 communities once it makes landfall. Once it rots on the beaches.
47 And thus, we have also seen that handling the sargassum while fresh
48 not only, again, allows us to transform it later and obtain some

1 value from it for whatever is left over. Right? If we know for
2 sure it will make landfall. But also, again, to prevent issues of
3 the personnel, the fishermen handling the seaweed. You know,
4 looking forward to connecting and help, you know, with a more
5 concrete plan and terms on what we have been doing throughout the
6 Caribbean.

7
8 **HELENA ANTOUN:** Thank you, Andrés. We had one question in the chat.
9 Ernesto? If you still want to ask your question.

10
11 **ERNESTO OTERO MORALES:** Yes. I've been having technical
12 difficulties. Yes. I was just thinking about the issue that Vance
13 brought to the table, which is what are the benefits or inputs of
14 nutrients that could be critical for certain types of organisms,
15 marine organisms.

16
17 That's apart from the from the fact that, obviously, there is huge
18 interest for commercialization of sargassum and also, apart from
19 the fact that there are potential health impacts for humans.
20 However, thinking about Ricardo's intervention, my point of view,
21 as a scientist, would be to allow or to think about intercepting
22 sargassum only into certain areas which are of imminent priorities.

23
24 Interception of sargassum at a large scale, I would still see it
25 as a possibility, but we further need to have certain knowledge or
26 develop certain knowledge about the function of sargassum towards
27 the general ecosystems. For example, we know that sargassum may
28 impact seagrasses, but the disappearance of seagrasses at certain
29 spots might not be so damaging in terms of habitats. We know
30 seagrasses might have spatial variability in certain areas.

31
32 Now the same with mangroves. In Puerto Rico, at least in the area
33 that I study, we haven't seen, for example, effects on mangroves
34 related to sargassum impacts. So maybe perhaps some of those brown
35 waters that are derived from sargassum decomposition in certain
36 areas may provide some nutrients to certain areas far away from
37 the sargassum. I just think that there is plenty of research to
38 do. Plenty of space to do research, and there are certain questions
39 that still need to be answered. And that's about it. Thank you.

40
41 **HELENA ANTOUN:** Alright. Thank you. So, yeah, we only have five
42 more minutes. I just want to take a moment to see if there's
43 anybody else who has not yet asked a question. If they have a
44 question, anybody online? If anybody online would like to ask a
45 question. If not, go ahead.

46
47 **KAREN M. URELIUS:** I just want to do a little clarification, and
48 this might have to do with what Sennai was asking and then kind of

1 related to what Ricardo was saying. So, in Puerto Rico, I know you
2 mentioned that there are some difficulties with some of the boats
3 that harvest offshore. Have you actually used them there or are
4 you just actually studying it in other locations?
5

6 **RICARDO J. COLÓN-RIVERA:** Yes. Just what we have learned from other
7 locations. Our boats are on their way, basically, still. Like I
8 mentioned, it's not only management capacity that we're dealing
9 with, but also administrative capacity. Sometimes, these types of
10 purchases can take a long time. During this time, we have learned
11 from other places that have a lot more flexibility in acquiring
12 this equipment and are actually using them.
13

14 We have learned, for example, that one of the boats that we
15 acquired is really not suitable for offshore. Which is fine for
16 us, because I'm not actually, right now, doing, like I mentioned,
17 I keep going back to the specific site of Las Croabas and Laguna
18 Grande, which is the bio-bay. This is not an offshore site by any
19 means. This is a highly, very calm area, protected by an offshore
20 reef. It's seawater. It's not an estuary site, but it's very
21 protected in terms of the waves. Right? So, we are still hopeful
22 that this, will work very well.
23

24 I think I saw Mariana raise her hand.
25

26 **HELENA ANTOUN:** Mariana.
27

28 **MARIANA C. LEÓN-PÉREZ:** Yeah. I would like to add that, what I
29 have seen, at least from my research in Puerto Rico, now that I
30 learned a little bit more about what is happening in the U.S.
31 Virgin Islands, I see that there's a lot of things in common.
32

33 It looks like in order for these management actions to take place,
34 and to get the permits to get those management actions in place,
35 the agencies need data to then give the permit. So I see that this
36 is just a back and forth, that is not mainly-- What I'm want to
37 say, basically, is that-- maybe we can keep the conversation later
38 in the lunch or something, but --to figure out the following steps
39 in order to clarify exactly what data we need, in terms of what
40 the agencies are requesting, and then to look also at the needs of
41 the stakeholders and people that want to implement those actions
42 because not everything comes from the government. It's not only
43 the actions that come from the Department of Natural and
44 Environmental Resources. There are other entities that also want
45 to implement this. Maybe we can use that to maybe make partnerships
46 to get help getting the data that we need at the same time that we
47 clarify the permits and all the regulatory process that is needed.
48

1 So, yeah, I think we need to keep the conversation going, and maybe
2 we can do it later during lunch.

3

4 **HELENA ANTOUN:** Absolutely agree. Thank you for that, Mariana.
5 That's a great segue to my final question. Unfortunately, we have
6 to wrap it up. I would like to close by asking if there are any
7 final recommendations for the Council. And I think, Miguel, you
8 have some.

9

10 **MIGUEL A. ROLÓN:** Yeah. Not a final recommendation, but if you can
11 prepare a proposal in four days and submit it to us, we can submit
12 it to the IRA, the Inflation Reduction Act. They have a lot of
13 money, and I talked to Mariana a little bit about it. I talked to
14 Sennai and Ricardo. And we're waiting for this panel, by the way.
15 Thank you to all participants. A lot of good information.

16

17 I would like to congratulate Ricardo. Countries around the
18 Caribbean are copying Puerto Rico's management plan for managing
19 sargassum. And the CARICOM is really working on this very, very,
20 very hard. They're trying to monetize, industrialize, the
21 sargassum, and they have all kind of problems. They have people
22 from New Zealand coming in to tell you how difficult it is, but it
23 is doable.

24

25 But anyway, it's just that the IRA, Dr. Martha Prada is in charge,
26 you can contact her. If you can think about a three-year proposal
27 that would address the issues of data collection, for example,
28 something that Sennai Habtes mentioned here that addresses the
29 connection between the social economy and the fishers and the
30 industry and the people that deals with tourism, that will be
31 something that could be considered under this proposal.

32

33 Also, you can touch on EEJ. I keep saying EEJ, I forget the whole
34 acronym, but it's environmental justice. Graciela is always
35 telling me, "Oh, this is a good one for environmental justice."
36 So, if you can combine all that, please contact Dr. Martha Prada
37 or Graciela who's right here. Graciela is easier because she right
38 here, but Martha is participating virtually.

39

40 This money has to be submitted to National Marine Fisheries
41 Services by the end of this month. The main proposal has to be
42 fully prepared by the Council. It will be Graciela, Angie and I.
43 But we need to have, let's say, three or five pages of proposals
44 that could say, "This is what I want to address, following the
45 priorities listed under IRA, and this is the cost for three years."

46

47 And then, you need to submit the full proposal no later than the
48 end of January 31, 2024. The time frame is January 1, 2024 through

1 the end of 2026, 31st of 2026.

2
3 So, we can address issues related to the data. We always need data.
4 But I learned yesterday with Dr. Warner that either you have data
5 or you have an opinion. Then he sent me a paper. Sometimes you
6 have to have an opinion, and then you go with the data. Here we
7 have the need for everything. A good proposal could be a joint
8 effort, something that Mariana mentioned. A joint effort between
9 the U.S. Virgin Islands and Puerto Rico, putting together for the
10 U.S. Caribbean. The government can have their own proposal. You
11 can make it.

12
13 And also, the other thing that they mentioned is that the private
14 industry is also invited to participate. Because many of these
15 things here cannot be done by one single agency, not one single
16 industry. Anyway, enough said because otherwise the chairman is
17 going to hit me in the head for the time.

18
19 But please contact Dr. Martha Prada. If you can think of something
20 you can prepare. I tell you, Dr. Habtes is working on a proposal
21 for the U.S. Virgin Islands related to things that can be funded
22 by the IRA.

23
24 Thank you, Helena. I need to thank Helena because she is the one
25 who came up with this idea, and then Jennifer Schull gracefully
26 accepted to send it over here. And if you work for NOAA, you know
27 that to travel from point A to point B, you need to have a lot of
28 permits. Yeah. But she thought that it was a good opportunity, and
29 it was a need to discuss, so we are gracious for that. Thank you,
30 Helena.

31
32 **HELENA ANTOUN:** No. Thank you, Miguel. And once again, thank you,
33 everyone. I'm sorry we're going to have to cut it, but as Mariana
34 said, let's keep the conversation going maybe during lunchtime,
35 and I am really grateful for that idea of the proposal. There's a
36 lot of questions regarding data gaps and bycatch studies. So,
37 definitely something that we will hopefully be following up on.
38 So, once again, thank you, and I will not take any more time of
39 the Council. I'm so sorry.

40
41 **CARLOS FARCHETTE:** Thank you, Helena, and thank you to the
42 presenters. Very good work, very good presentations and great
43 discussions.

44
45 So, we're going to take, like a 5- or 10-minute break, but I'm
46 going to cut it real quick, because we have some pending agenda
47 items to catch up on. Thanks. So, break.

48

1 (Whereupon, a brief recess was taken.)
2

3 **CARLOS FARCHETTE:** Okay. We are going to get going again. I'm
4 really sorry, but I have to push back the Tropical Seaweed
5 presentation to a little later again. So right now, we're going to
6 go with María López with the Draft Options Paper on Modification
7 to the Red Hind seasonal Closure in Saint Croix to Address Pelagic
8 Fishing.
9

10 **Draft Options Paper on Modification to the Red Hind Seasonal**
11 **Closure in St. Croix to Address Pelagic Fish Fishing-NOAA**
12 **Fisheries**
13

14 **MARÍA LÓPEZ-MERCER:** Good afternoon, everybody. Well, good
15 morning. I'm going to be giving this presentation. This is, Sarah's
16 presentation, but I'm going to be giving it for her, so bear with
17 me if there's anything that it's not super clear, but we got this.
18

19 Okay. So, this is a proposed modification to the red hind seasonal
20 closure in Saint Croix to address fishing for pelagic species. So,
21 this presentation is based on a draft options paper that it's in
22 your briefing book.
23

24 So, everything that is included in presentation comes with for the
25 briefing book for additional reference. Please, go to that
26 document.
27

28 So, these are the sections that are included in the options paper,
29 in this presentation we're not going to go through everything,
30 only the things that are marked with an asterisk. So that will be
31 the management history of the red hind group spawning aggregation
32 area, East of Saint Croix. We're going to talk a little bit about
33 vertical zoning, and also potential options for modifying the red
34 hind seasonal closure of Lang Bank. So, the idea here is, like I
35 said, if you want a little bit more detail, I encourage you to go
36 to the options paper.
37

38 So, the next slide will summarize aspects of some of these topics
39 that are included there. Some background information. The red hind
40 spawning aggregation area closure, East of Saint Croix was
41 established in 1993 under the final rule for Amendment 2 to the
42 Reef Fish FMP of Puerto Rico and the U.S. Virgin Islands, which
43 was effective, November 15, 1993.
44

45 The area was located at the extreme end of Lang Bank, just the
46 figure that you can see there, which is 16 kilometers East of Saint
47 Croix on a 30- to 35-meter-deep spur and groove reef located
48 several kilometers from the shelf edge. The spawning aggregation

1 site is located at the tip of coral spur that projects into a deep-
2 water basin around 50 to 60 meters deep, which separates the inner
3 and the outer coral ridges.

4
5 So, in this figure, the boundary points and the connecting lines
6 of the red hind spawning aggregation of Saint Croix, is going to
7 be the marked area there shaded in orange. The 100 fathoms, that
8 boundary line is that purple line. And the state federal boundary
9 line is the blue line that you can see there. So, let's go to the
10 next slide, please.

11
12 So, continuing on the management history of this amendment.
13 Amendment 2 to the Reef Fish FMP, the Council recommended needs to
14 implement total ban on fishing in the area from December 1st to the
15 last day of February each year. This was to protect the spawning
16 aggregation of the red hind grouper that were occurring in that in
17 that area.

18
19 So the original area, back then, proposed for the closure extended
20 to the 100 fathom (600 feet/183 meters) contour, but based on
21 comments that were received at that time from members of the Saint
22 Croix Fisher's Advisory Committee, the area for the closure was
23 reduced to waters less than 50 fathoms in-depth to reduce impacts
24 of fisheries for large pelagics such as tuna, dolphin, wahoo and
25 marlin and deep-water snapper.

26
27 Okay. So that means that back during when that amendment was
28 implemented, there were some considerations that were taken when
29 setting those boundaries to account for that fishing for this
30 pelagic that was already occurring in the area. So that is
31 important because that's what we're talking about today.

32
33 Okay. So, in 2005, Amendment 3 to the Reef Fish FMP, specified
34 additional management measures for red hind spawning aggregations
35 areas, in addition to other seasonally closed areas, -- That was
36 not specific to just this one. --with the objective of minimizing
37 adverse effects or fishing on essential fish habitat in federal
38 waters. And this became effective on November 28, 2005.

39
40 And specifically, the amendment in its final rule prohibited
41 fishing with pots, traps, bottom longlines, gillnets or trammel
42 net year-round in those closed areas which include the red hind
43 spawning aggregation area of San Croix.

44
45 Also, in 2017, the National Marine Fisheries Service implemented
46 management measures for Atlantic Highly Migratory Species that
47 were consistent with Amendment 3, to the Reef Fish FMP. So with
48 that one, prohibited vessels issued HMS permits with bottom

1 longline gear onboard from fishing for six distinct areas in the
2 U.S.V.I. and Puerto Rico, including the red hind spawning
3 aggregation area of Lang Bank during that seasonal closure period.
4

5 So, when fisher's management in the U.S. Caribbean EEZ transitioned
6 from the specific species plan to the Island-Base FMPs, or what we
7 used to call U.S. Caribbean Wide FMPs to the Island-Base FMPs,
8 which happened in 2022, those management measures that concern the
9 red hind spawning aggregation area closure of Lang Bank, remain
10 unchanged. And these are the measures that were described in
11 Amendment 2 and Amendment 3 which remain unchanged, so that means
12 that they were brought into the new management plan.
13

14 So, one thing that is important here is that pelagic species, which
15 were not managed before, were added to the Saint Croix FMP and
16 these two species were dolphin and wahoo. So, the current
17 regulations that apply to the red hind spawning aggregation area,
18 East of Saint Croix, is that from December 1st through the last day
19 of February each year, fishing is prohibited in that area. Also,
20 fishing with pots, traps, bottom longline, gillnets or trammel
21 nets is prohibited year-round in the red hind spawning aggregation
22 area. So, these are the current regulations that apply to that
23 area. Just for, kind of, like a refresher of what's going on.
24

25 Now, let's talk about what is addressed in this options paper. So,
26 the Council is interested in modifying the seasonal closure,
27 evaluating and modifying the seasonal closure for the red hind
28 spawning aggregation, East of Saint Croix to allow fishers to catch
29 pelagic species, for example, dolphin and wahoo during the seasonal
30 closure. Something that is currently prohibited.
31

32 And this comes from discussions at Council meetings from April
33 2022, April 2023 and during the Council meetings in August 2023.
34 So, the motion that was passed at that Council meeting, at the
35 April '22 meeting was to request the staff to develop a scoping
36 white paper to amend the Saint Croix FMP to determine if it is
37 feasible to allow persons to fish for and possess certain highly
38 migratory and pelagic species from the red hind spawning
39 aggregation seasonally closed area. And the closed area is defined
40 in the current regulations of 50 CFR 622.435(a)(2)(ii)(A). This
41 area includes portions of Lang Bank.
42

43 Okay. So, the items to discuss are, identifying species that can
44 be harvested during the seasonal closure, for example, what would
45 be the exceptions? Either going to be managed or just for managed
46 species, also for non-managed species. Identifying gear types or
47 methods that could be used within the seasonally closed. As I
48 mentioned earlier, there are some methods that are prohibited to

1 be used. Adjusting the boundaries of the closed area.

2
3 And remember, these are just ideas or options that can be
4 presented, but that doesn't mean anything that, you know, it's
5 going to be implemented. This is simply an options paper where
6 Council can evaluate things and decide how they would want to move
7 forward and with what or if there are other options that they want
8 to explore.

9
10 Also, they can consider making other adjustments such as the timing
11 of seasonal closures. So, these were the items that were flagged
12 for potential discussion and then the during the conversation as
13 the paper develops, the Council would like to take that to the SSC
14 and others, for review and continue evaluation.

15
16 So, many of the things come from a paper from Nemeth and others,
17 which is Nemeth et al. 2006, which stated that several factors may
18 be preventing, at that time, the recovery of the Lang Bank spawning
19 aggregation and contributing to a continual decline in average
20 length of red hind in Saint Croix.

21
22 But there were also some items that were flagged out. For example,
23 enforcement difficult difficulties. For example, difficulties
24 determining if a vessel is inside or outside the closure area. The
25 western boundary of the closure area follows a southeastern bearing
26 instead of a north-south line of longitude. And I want to point
27 out that this is something that has been mentioned by the fishers
28 as well in some other meetings.

29
30 Also, because Lang Bank is remote. Then, of course, enforcing the
31 boundary line, because of its orientation, becomes a little bit
32 difficult. There are also issues with bycatch, based on the
33 location of boundaries. For example, the red hind spawning
34 aggregation is less than 600 meters away from the western boundary
35 line. If fishing activity concentrated on the edges of the closure
36 area, any fish that is moving, any spawning fish that is moving in
37 and out, will increase the likelihood that a portion of the
38 population, that spawning population of red hind can be caught
39 during the spawning peaks. So those are some of the issues that
40 could be associated or have been flagged for being associated to
41 bycatch due to the boundaries. And then, you know, if any, there
42 may be some potential bycatch for trolling activities.

43
44 And I said some of this is based on that paper by Dr. Nemeth and
45 others. So, in addition to that, there are some other things, that
46 we can point out and can be evaluated. For example, vertical zoning
47 in marine protected areas. When there's vertical zoning that is
48 something that would allow for certain human uses, within a

1 specific depth zone of the water column in a marine protected area.
2 That's basically what we have been talking about, because the
3 fishers requested the Council to evaluate if there can be other
4 uses, fishing uses of that water column, such as, fishing for the
5 top water species, the pelagic species.

6
7 So, in terms of that, there will be a need to determine if some
8 fishing could occur that will not impact the reason why that marine
9 protected area was established, which in this case will be, of
10 course, to protect the red hind that were spawning in that
11 location. For this also you could evaluate, or you can, or should
12 want to evaluate what is the vertical structure of the fish
13 communities in the area, which could be affected by opening the
14 water column; the rugosity of the area and the probability of
15 impacts to the habitat from gear use; and impacts of pelagic
16 fishing to spawning activities.

17
18 Another thing that the Council may want to consider, is also that
19 there is a lack of reporting of recreational landings for the area
20 and, as has been mentioned, the recreational activity in the area
21 is noteworthy however, it's not monitored. So, some of the things
22 that the Council may want to evaluate is if there is any bycatch
23 from trolling activities. They have also mentioned, you know, that
24 these are fairly deep waters. So, based on testimony from the
25 fishers, at different meetings, they have indicated that this may
26 not be a possibility because of deep water, so that's something
27 that could be taken into consideration and explore.

28
29 Also, because of the rugosity of this area, if there's any kind of
30 weight that are using or something like that, how may this impact
31 the habitat, right? So, these are like what ifs, right? But these
32 are things that the Council may want to consider when they're
33 evaluating these things.

34
35 So, this is a map, that's showing the grid map that is used by the
36 commercial fishermen of Saint Croix when they report the location,
37 where they fish. This is where they report the location in their
38 logbooks. So, the area that we are talking about is going to be,
39 that AP and AQ areas that are marked there, I know you cannot see
40 it from this distance, but those are the areas that will be of
41 interest.

42
43 So, the next slide, summarizes some of the testimony that we heard
44 during the April 19, 2022, meeting. This is the 179th Council
45 meeting. The deep-water area at around 25 to 75 fathoms is heavily
46 used for trolling and fishing for HMS and pelagic species during
47 the seasonal closure by commercial charter for hire in the
48 recreational sector. The shelf edge is used as a natural FAD for

1 fishing and trolling. Top-water species such as wahoo, yellowfin
2 tuna, big eyes, skipjack, albacore, mahi, kingfish, and swordfish
3 are active during the December and February closure. Billfish,
4 such as white marlin, blue marlin, sailfish, fish and longbill
5 spearfish are also pursued in the area.

6
7 Approximately 40 to 50 vessels from all sectors are impacted by
8 prohibiting fishing in the top of Lang Bank. There is also concern
9 from fishers that while fighting fish or drifting, they may
10 inadvertently drift into the edge of the closed area, during the
11 closed season.

12
13 Also, fishers do not think trolling activities in the area at such
14 depths would affect managed reef fish species. So, this is a
15 summary of what the testimony that was given during this Council
16 meeting.

17
18 So, this is a map, that is available from García-Sais and others
19 from 2014. The first one shows the bathymetry map of Lang Bank,
20 Saint Croix, U.S. Virgin Islands. The blue dash line represents
21 the boundary of the red hind spawning aggregation area that is
22 managed by the Council. And then, the other figure is the benthic
23 map of Lang Bank.

24
25 So, I don't know if you can see it very well, but the blue dash
26 line represents the boundary of the red hind and then it's showing
27 the different-- like, I need to make this bigger because I cannot
28 see. --the different habitats. For example, the red is the bank
29 coral reef, the light blue colonized pavement, the yellow is
30 colonized rhodolith reef, the pink is a patch reef, the green areas
31 in there are the spur and groove reef, the blue area in the middle
32 is sand. Then other areas that are in white are not surveyed.

33
34 If you want to see this in more detail you can go to the options
35 paper or go directly to the author so you can see this reef in
36 there, and the bathymetry and the benthic habitats that are
37 mentioned in here.

38
39 Okay. So, as mentioned earlier in the presentation, let's talk
40 about fishing activities that occur in the Lang Bank, and the
41 support of some of the testimony that was given by fishers at the
42 previous Council meeting. So, as we know there are not recreational
43 landings available at this time and this is important because many
44 of the activity that occurs in that area is recreational.

45
46 So, from an evaluation of the commercial landings, the list of
47 reported commercial landings from various hook and line gears for
48 years 2012 through 2022 by fishermen from those rows in the grid

1 lines the AP and AQ and their columns, as I mentioned and showed
2 to you a couple of previous slides ago. That's where they mark
3 where they fish. Then for those areas, wahoo and dolphinfish were
4 the top five land species, by weight, during all those years.

5
6 Other pelagic species that are not managed by the Council or by
7 HMS that appear in the commercial landings include the rainbow
8 runner, the barracuda, little tunny, and the key mackerel. So as
9 a reminder, you know, those species are managed under the Puerto
10 Rico FMP, but they are not managed under the San Croix FMP. The
11 only two species that the San Croix FMP includes of this pelagic
12 species are dolphin and wahoo. However, these are others that
13 appear in the landings.

14
15 So, from 2012 through 2022, 96% of dolphinfish reported by
16 commercial fishermen in Saint Croix were with handline gear
17 followed by rod and reel gear. And during that same period, 91% of
18 wahoo were reported with handline gear, followed by road and real.

19
20 So, this basically is a table that shows what I just synthesized
21 in the previous slide. So, these are the approximate total
22 commercial landings from the Lang Bank red hind spawning
23 aggregation area reported using hook and line gear from the years
24 2012 through 2022 and these are all preliminary. That's kind of
25 like a disclaimer too.

26
27 So, as you can see from those two years, and this is the total,
28 it's not divided by year, but that information can be prepared.
29 Yellowtail snapper-- and this is not, you know, I want to make
30 sure that you guys understand that this is not during the seasonal
31 closure. This is throughout the year, but it's in that area.
32 Yellowtail snapper is the top species and then followed by wahoo,
33 schoolmaster, dolphin, blackfin snapper, silk snapper, red hind
34 grouper, rainbow runner, barracuda, queen snapper, the coney, the
35 mutton snapper, bar jack, little tunny, horse-eye jack, queen
36 triggerfish, and king mackerel.

37
38 Okay, so that was the background. Now, to answer the question or
39 to comply with the request that the Council asked staff. These are
40 some potential options to modify the red hind spawning aggregation
41 area. This doesn't mean that these are alternatives, that is what
42 the Council is going to evaluate, that the Council needs to decide
43 on any of this. This is just some options based on the
44 conversations and the discussions on the Council meeting.

45
46 Please know that, at this time, these options would not modify the
47 gear provisions that already occurred in the area that were
48 established in 2005. This is related to effects to the bottom

1 habitat. For example, the fishing with pots and traps and the use
2 of bottom longlines and also, gillnets and trammel nets will
3 continue to be prohibited year-round, so we're not looking at
4 changing any of that.

5
6 All right. So, these are some of the options that the Council can
7 explore. For example, they can decide to not do anything, just
8 maintaining the current regulations in the seasonal area closure,
9 which go from December 1st through the last day of February each
10 year. So, this basically means that fishing will continue, all
11 fishing will continue to be prohibited in the red hind spawning
12 aggregation area. So, what this would mean is that, perhaps, the
13 Council may want to go ahead and evaluate how effective that
14 seasonal area closure has been for the red hind grouper within the
15 context of making any changes.

16
17 Another option could be allowing fishermen, that can be commercial
18 and/or recreational, to catch or possess Council managed pelagic
19 species. So, for example, the Council managed pelagic are going to
20 be dolphin and wahoo during the seasonal closure.

21
22 Another option could be to allow fishermen, again, commercial
23 and/or recreational, to catch or possess Council manage and non-
24 manage pelagic fish during the seasonal closure. So based on the
25 commercial landings and testimony during the Council meetings,
26 non-managed pelagic species may include king mackerel, little
27 tunny, rainbow runner, and barracuda.

28
29 Another option could be allowing fishermen, either commercial
30 and/or recreational to catch or possess any species of fish,
31 managed and non-managed, except for Council managed reef fish
32 during the seasonal closure. And this is the type of management
33 that the Council has set up, for example, in Bajo de Sico in Puerto
34 Rico.

35
36 Let's go to the next slide, please. Other options allowing
37 fishermen, commercial and/or recreational to use only certain gear
38 types and/or methods, for example, trolling, drift fishing, and
39 this is versus anchoring, of course, to fish for certain species.
40 That could be Council managed, that could be non-managed, or could
41 be both.

42
43 Right? So, with regards to these options and also for others, this
44 would benefit greatly from obtaining input from the Saint Croix
45 DAP. For this and previous options would be important to analyze
46 information on bycatch, right? For example, what other species
47 have been harvested while fishing for pelagic species by trolling,
48 hook and line, and any other? And what is the potential to bring

1 up reef fish from deeper waters? So, these are evaluations that
2 that the Council may want to consider when they are selecting
3 options to include in a potential amendment, if that's the way
4 that they want to go.

5
6 Another option could be adjusting the boundaries of the seasonal
7 area closure to exclude zones that have been historically used for
8 pelagic fishing and other fishing, for example, for highly
9 migratory species. And this should be based on spatial analysis of
10 the area, including but not limited to the bathymetry, the
11 rugosity, the habitat areas where spawning activities occur, areas
12 where the presence of, for example, the nassau grouper, which is
13 an endangered species under the ESA has been documented. What is
14 the use of the water column, like we mentioned before, you know,
15 the vertical zoning and also the vertical structure of the fish
16 community present in the area. And, of course, any other options
17 that the Council will want to, evaluate if they want to pursue
18 this.

19
20 So, now I want to talk about something that was mentioned before
21 in the Council meeting, and this is regarding Atlantic Highly
22 Migratory Species. Okay? So, the Council does not manage Atlantic
23 Highly Migratory Species, but NOAA Fisheries does. So, this is
24 just a summary in of the management of HMS species. This is, of
25 course, informational for the Council because they wanted to
26 evaluate, of course, if those species that are also harvested in
27 that area, could be also open for that fishing. However, to make
28 changes to the management of Highly Migratory Species, the Council
29 could formally request NOAA Fisheries to evaluate modifying
30 regulations for Atlantic Highly Migratory Species in the Lang Bank
31 seasonal closed area as needed.

32
33 Okay? So, what this means, this has been done in the past. For
34 example, when the Council was requesting or evaluating
35 modifications to the Abrir la Sierra, Bajo de Sico and Tourmaline
36 areas, which was an amendment that later on was tabled, it was
37 basically a joint amendment with HMS because they also were
38 interested in making changes to the regulations that were allowed
39 for HMS or prohibited for HMS species in the area. But that will
40 have to be a formal request to NOAA Fisheries to modify the
41 regulations.

42
43 So, the regulations for highly migratory species are going to be
44 found on 50 CFR, section 635. Highly migratory species, for your
45 information, means bluefin, bigeye, yellowfin, albacore, and
46 skipjack tunas; swordfish; sharks, these are all listed in table
47 1 of appendix A to part 635, if you're interested in looking at
48 the regulations. Also, white marlin; blue marlin; sailfish;

1 longbill spearfish; and roundscale spearfish.
2
3 So, there are species that inhabit the top of the water column and
4 are typically fish in the Lang Bank area. Many of these species
5 are active during the December through end of February closure.
6 This is, you know, obviously based on testimony that we have
7 received from previous Council meetings. For example, they harvest
8 tuna, such as yellowfish, big eyes, skipjack and albacore. Also,
9 swordfish and certain billfish, such just white marlin, blue
10 marlin, sailfish, and the longbill spearfish.
11
12 So, to conclude the portion of the HMS, just wanted to let you
13 know that NMFS Atlantic HMS is currently developing an amendment,
14 which is Amendment 15 to the 2006 Consolidated HMS FMP, to deal
15 with spatial management and electronic monitoring. So, some of the
16 changes that they are proposing could have impacts to the
17 management of HMS fishing activities in the U.S. Caribbean.
18
19 So, this is something that if you would like to have more
20 information you can visit the NMFS Highly Migratory Species to see
21 what the amendment is proposing. However, we also have Delisse
22 Ortiz from HMS, whom many of you know. She is on the phone if there
23 are any specific questions regarding HMS species.
24
25 Okay, last slide. So, these are the action items and the next
26 steps. So, in this meeting, in December, the Council has reviewed
27 the options paper, which some of it was synthesized in this
28 presentation, and can decide on options to develop, right? They
29 can decide if they want to look at many of these things that we
30 have in there or if there are other things that they want to do.
31
32 And then after this meeting, the Council can task the creation of
33 an interdisciplinary planning team, which are the ones that are in
34 charge. They have different, specialties, right? Like Sarah
35 mentioned yesterday. And they are in charge of developing an
36 amendment.
37
38 In April, the Council could, if the IPT, depending on how the
39 process of the creation of the amendment, of that draft Amendment
40 goes, right, the Council could review a document in April. And if
41 that amendment is robust enough for the Council to be able to
42 select preferred alternatives, they can do that or they can also
43 continue the discussion of this topic.
44
45 So, this is how we see, the actions item and next steps, but of
46 course, this can change based on what the Council would prefer to
47 do.
48

1 Okay. I think that's the last slide. I don't know if there's
2 anything else. Can you check? No, that was the one that was before.
3 Okay. So, I think that's it. We can open for questions, but I do
4 know that Dr. Nemeth is here, and he probably has more answers
5 than we do, for any of your questions. I would like to see what
6 the Council-- I don't know what the Council would like to do and
7 discuss.

8 9 **Questions/Comments**

10
11 **CARLOS FARCHETTE:** Miguel.

12
13 **MIGUEL A. ROLÓN:** I propose to allow Dr. Nemeth to give his
14 presentation. He may also have information about Saint Croix that
15 we can add to the discussion and answer the question that María
16 has. Is that possible?

17
18 **CARLOS FARCHETTE:** Okay. So, that would be the next agenda item.

19 20 **Discussion on Hind Bank Marine Conservation District/Grammanik 21 Bank in St. Thomas--NOAA Fisheries/CFMC**

22
23 **RICHARD S. NEMETH:** Going to make a comment on the Saint Croix. So
24 recently, we had an acoustic receiver out at the tip of Lang Bank
25 where there historically was Nassau grouper. And so, when the
26 national park went out to service that receiver, they saw maybe a
27 dozen nassau grouper in that location. So, previously, we've seen
28 only a few, so that was actually very encouraging.

29
30 We also had some background information. We did a fish tracking
31 study looking at the movement of fish in the East End Reserve on
32 Saint Croix and we tagged one nassau grouper that we caught in,
33 Teague Bay, and it actually went out to Lang Bank. Even more recent
34 than that-- That was several years ago. Even more recent than that,
35 we heard that there were lots of juvenile nassau grouper in some
36 of the seagrass beds on Saint Croix, which is really encouraging
37 that there was a recruitment pulse, possibly last year.

38
39 And so, I'll show some evidence of that for the Saint Thomas/Saint
40 John region where we saw an increase in the number of nassau
41 grouper about three to five years after we saw the baby Nassau
42 grouper in the seagrass bed. So, I anticipate that we are going to
43 be seeing these fish moving offshore in a couple of years during
44 spawning season.

45
46 Okay. Thank you for inviting me here. This presentation was given
47 several times before. It's a modified version. It was first given
48 at the International Core Reef Symposium in July of 2022, and then

1 was most recently presented at Gulf and Caribbean Fisheries
2 Institute, just last November.

3
4 So, this is kind of I want to give a little background to, most of
5 you probably already know this, but, you know, the sixties, the
6 nassau grouper were very abundant. In the seventies, the fishers
7 discovered and started targeting aggregations. In the eighties,
8 the population started to collapse, and they are essentially
9 commercially extinct, not only in the Virgin Islands, but in most
10 of the Caribbean. And you could see that graph on the bottom
11 showing the catch in metric tons declining from the sixties into
12 the early 2000s. This is from work in Cuba. There's essentially no
13 more catch of nassau grouper there.

14
15 Here is kind of a history of some of the regional status. You can
16 see that in 1996, it went from threatened, the IUCN red listed it,
17 and it was just recently listed as critically endangered in 2018.
18 And then, the U. S. Endangered Species Act in 2016 listed it as
19 threatened as well. So, some of the regulations that have been put
20 into place, red hind seasonal closure, federal protection in '93,
21 and then the MCD was established in '99 to protect some of that
22 spawning habitat.

23
24 The most exciting thing for me was, finding a small aggregation of
25 Nassau grouper at the Grammanik Bank, which is about 5 kilometers
26 East of the historic Nassau Grouper Bank. And, since that time,
27 the Grammanik Bank seasonal closure, and also U.S.V.I., followed
28 federal protections and protected nassau grouper in territorial
29 waters.

30
31 Okay. So, this is the places I'm talking about. The Marine
32 Conservation District. The large area with the red dot representing
33 the historic Grouper Bank, and then the smaller one and a half
34 square kilometer, Grammanik Bank.

35
36 So, the presentation is going to cover several things. First, I'm
37 going to start research and monitoring, focused on some of the
38 data from our territorial coral reef monitoring program. Then the
39 Grammanik Bank Grouper or Fish spawning aggregation monitoring
40 program, and then some of the acoustic telemetry research that
41 we've been doing for quite a few years. And then talk a little bit
42 about the outreach and citizen science.

43
44 So, here's the territorial coral reef monitoring program. In the
45 upper right, you could see a lot of the Saint Thomas/Saint John
46 sites, and they've been monitored since the early 2000s. This is
47 data for nassau grouper at these sites. These are fixed sites, so
48 the transects are in the same locations. You can see that the

1 numbers started to increase.
2
3 We had these two settlement pulses, one in 2006, and another large
4 pulse in 2015. You could see that the abundance of fish in terms
5 of number per site started to increase after the 2015 pulse.
6
7 For our Grammanik Bank fish spawning, which was started in about
8 2002, we were initially focused on yellowfin grouper, so we divided
9 the Bank into these different sections. They're about 150 meters.
10 We used underwater scooters to survey these areas and try to see
11 where the fish are aggregating. We started to narrow down our
12 search, and then focused on a smaller area with belt transects.
13 And then, during this time is when we found the nassau grouper in
14 2005.
15
16 And then currently, we are using these swim surveys, which is kind
17 of a standardized survey that Michelle Schärer and others use at
18 their spawning sites. It gives us a way to measure the abundance
19 over time. Essentially, this is sort of a 3D image of the Grammanik
20 Bank looking East. And so, we have these large groups of nassau
21 grouper that we have been seeing in these areas. And then that
22 little spot is where they tend to aggregate at sunset. So, we do
23 these surveys every year, January through April, after the full
24 moon, if weather permits.
25
26 And so, early on in our surveys, when we were doing yellowfin
27 grouper, you could see that there is-- this is a yellowfin grouper
28 on the Grammatic Bank. But if you take a close look, in 2008, the
29 nassau grouper are mixed in with the yellowfin. And so, I think
30 that the nassau grouper were using yellowfin as kind of a surrogate
31 species, because their historic site was fished out, and sort of
32 their traditional memory was lost when the fish were caught.
33
34 So, people think that the older fish tend to lead the younger fish
35 to their spawning sites, and when those fish get fished out, they
36 lose their historical memory of where they used to go. So, they
37 started to re-aggregate at the Grammanik Bank, and apparently,
38 there was always some fish there, along with the yellowfin.
39
40 So, what's interesting, over the years, we've been seeing that
41 there's a change in abundance. You can see that, on the bottom
42 left-- the nassau is the black diamond, and the yellowfin is a
43 yellow square. You can see that there's a shift in around 2015,
44 2016 when the nassau started becoming more abundant. And this is
45 fairly clear here as well, showing max abundance on any one day
46 during a spawning season. Nassau on the Bottom axis and yellowfin
47 on the side axis. And you can see that there's a relationship.
48

1 I don't think yellowfin grouper are declining. I think what's
2 happening is that the nassau grouper are actually shifting their
3 timing. And so, the bottom left shows the maximum group size. So,
4 this is not the maximum number, but as we did our standard swim,
5 we'd encounter these groups. Early on, it was less than 50 for a
6 decade. And then, that group size started to increase. So, there
7 was a change in the behavior of the nassau grouper once they
8 reached about more than 100 fish.

9
10 And so, you can see that there's this trend where the nassau
11 grouper are shifting from the historical-- from not historical,
12 but the early 2000s from when the yellowfin grouper was, their
13 timing was more similar to yellowfin grouper early in those years.
14 And then most recently, when their numbers have increased, they've
15 just shifted to their more historical times, which is December,
16 January, February. So, I think what we're seeing is not a declining
17 yellowfin grouper, but simply they're just coming little bit later
18 than the nassau grouper, and we just don't see them on our dives
19 as much.

20
21 So, again, now looking at the increase in nassau grouper. Here are
22 those two settlement pulses that I mentioned with the coral reef
23 monitoring data. And you can see this, sort of, delay of about
24 three years where we see this bump in the number of nassau grouper.
25 And when we saw this slight jump in numbers and abundance at the
26 spawning site, they tend to be very small nassau groupers.

27
28 So, we are fairly sure they are either, at just early adulthood or
29 even sub-adults that are migrating with these older, more mature
30 fish and going up to the spawning site. And that's after 2015 is
31 when we really start seeing larger increases in nassau grouper.
32 And last year, 2023, we saw up to 900.

33
34 So, to put this into context, sort of historical context, I never
35 thought I'd see the day when I'd count 900 nassau grouper at the
36 Grammanik Bank. So, it's pretty exciting. But to put this into
37 context, in 1975, or Olsen and LaPlace published a paper, and their
38 last estimated number of nassau grouper was about 5,000 fish. And
39 there had been pretty heavy fishing in the decade previous, so it
40 may have been 10,000-15,000. We don't really know for sure. But I
41 am using this as a sort of a target. And this is kind of an armchair
42 experiment here.

43
44 A couple papers were published looking at recovery times of nassau
45 grouper, and I kind of picked the middle of this as 40 years. And
46 so, you can see as my start point was when federal protection
47 happened in 1993. And so, you can see we're 30 years into that
48 time period. To reach that 40-year target of 5,000 fish, we have

1 quite a way to go.

2
3 So, there's a lot of great regulations that have been put into
4 place to protect nassau grouper. It didn't seem to have much change
5 in the abundance at the Grammanik Bank or for spawning fish. But
6 what I think had the large changes were these settlement pulses,
7 one in 2006 and the next in 2015. They were 9 years apart. It's
8 been 8 years since that last settlement pulse. So, these pulses
9 come very few and far between.

10
11 So, to achieve our goal of 5,000 fish in 40 years, we need a lot
12 more of these settlement pulses to happen, I think, to reach that
13 goal. How do we do that? There are some things we can do in terms
14 of adjusting some of the current regulations. Right now, the
15 Grammanik Bank is closed February, March and April, which is
16 really, as I showed you before, was yellowfin grouper spawning
17 times.

18
19 Our acoustic stem, which we have shown that nassau grouper actually
20 aggregate January through May, so they are vulnerable to bycatch.
21 Even though they are protected, they still do go into traps very
22 easily. Take hook and line. So, if this Grammanik Bank timing is
23 expanded, it might help reduce that bycatch mortality.

24
25 Some of the spatial patterns of movement. You can see the red,
26 orange, yellow, and green. This is based on acoustic telemetry.
27 So, 65% of the fish- only 65% of the nassau grouper are protected
28 during the spawning season. So, the red represents that 95% of the
29 fish are in that red area during spawning season, but you can see
30 that the Grammanik Bank only covers about half of that. The orange
31 area is where 75 to 95 percent of the fish are found. And the
32 yellow represents really their migration pathway as they come and
33 go to the Grammanik Bank.

34
35 And so, if we enclose the primary areas that they use and the
36 migration pathway and increase the Grammanik seasonal closure to
37 6 ½ kilometers, we can get 96% protection during the spawning
38 season. And if you want to be super conservative, you could
39 increase that 99%. And some of this work is published in the Rowell
40 and Nemeth papers.

41
42 So, some of the greatest risks to nassau grouper right now, I
43 think, are bycatch. Because, as people know, they go, they take
44 bait, they go into traps. They swim up to spearfishermen very
45 easily.

46
47 So, fishing mortality by uninformed recreational fishers, I think,
48 is a big issue in near shore waters, especially if you have these

1 recruitment pulses, and there's a lot of small fish around, and
2 fishermen just aren't aware that they're protected. And some
3 deliberate poaching by commercial and recreational fishers, can
4 also be Problematic.

5
6 So, some of the priorities to reevaluate for management, some of
7 the spatial and temporal boundaries. Expand outreach to
8 recreational fishers, such as signage at all the boat ramps and
9 public beaches. So, when fishermen go there with their fishing
10 gear, spear guns, they can actually look at the regulations and
11 understand before they get in the water. Improve enforcement, and
12 I'll touch more on this a little bit later.

13
14 Support annual monitoring of the spawning aggregations. I've been
15 kind of patching this together with lots of NOAA funding and other
16 funding, but I think something similar to Coral Monitoring Program,
17 with consistent annual funding would be really valuable for the
18 Virgin Islands and Puerto Rico as well. And identifying potential
19 life history bottlenecks. I had a graduate student in 2015, who
20 looked at the sort of, growth rates of nassau grouper in the
21 halophila, which is an invasive seagrass compared to native
22 seagrasses. So, they tend to settle out in seagrass beds, where
23 there's some structure.

24
25 He found some evidence that they were actually growing slower and
26 had a lower condition factor, which means that they were thinner
27 for the length of their body than fish and native seagrasses. But
28 that was not significant, but there was a trend in that direction.
29 So, more work needs to be done to see how that's affecting juvenile
30 nassau grouper.

31
32 Regionally, there's been some action with The Western Central
33 Atlantic Fisheries Commission, where they recommended protection
34 of all nassau grouper spawning aggregations as well as no exports.
35 So, to really achieve our goal in this 40-year time period, you
36 really need to have a regional protection of nassau grouper as
37 well.

38
39 This one's kind of fun, because it's, in addition to all the great
40 financial and field support and fisher support-- This is a video,
41 taken in 2022, and this is on the Grammanik Bank. This is very
42 exciting, because it was the first spawning that has been seen in
43 about 40 years, in the Virgin Islands. Maybe other people have
44 seen nassau grouper spawning, but I highly doubt it. You could see
45 a female sitting there.

46
47 So, this is extremely exciting to actually witness this after
48 working on these fish for almost 20 years. And we've seen several

1 spawning events since then, this last year and previous year.

2
3 So, I'm going to shift gears here a little bit. Graciela shared
4 with me some questions from the Saint Thomas Fisheries Advisory
5 Committee, regarding nassau grouper management and some of the
6 data that would be helpful before any more management is done or
7 in tandem with the management. And so, I can address some of the
8 information I have, these four points here, and I'll go on through
9 those each.

10
11 So how are traps recorded in the alleyway? So that's about a 3-
12 kilometer area between the western, between the Grammanik Bank and
13 the eastern part of the Marine Conservation District. And so this
14 last year we encountered fish traps, and boats and the MCD, and we
15 dove some of those traps. This is just some of the data. You can
16 see traps and vessels in Marine Conservation District, in March
17 and also in September. One of the boats was from, the larger one
18 on the right was Puerto Rico, and the other one in the middle was
19 apparently from Saint Croix. We reported this all to Alex Terrero,
20 who is a NOAA Fisheries person in Saint Thomas.

21
22 So, these are the data points from the traps and boats in the MCD,
23 but what I want to focus on is the ones in that area, in the
24 alleyway. For the people online, I can show you the yellow. The
25 yellow points are the ones in the alleyway. And so, this is some
26 of the information, some of the fish that we dove on some traps,
27 took some video, and here's a list of fish. There are Nassau
28 grouper and Yellowfin Grouper in here.

29
30 And so, average fish per trap was about five to six fish per trap
31 in these areas. And so, there is fishing in the alleyway, and they
32 are catching fish, and they are catching, like I said, bycatch of
33 nassau grouper and Yellowfin during the closed season. I'll present
34 a little bit more of that later, in a moment.

35
36 And so, what data is there to substantiate that nassau grouper
37 travel between the closed areas during the spawning season? There
38 are a couple of papers that were published that show that 65% of
39 the fish that we tagged traveled between the Grammanik Bank and
40 the MCD. And 76% of the Yellowfin Group are used this alleyway as
41 well. And both papers show that their spawning in January is fairly
42 consistent, and they also spawn in May. So, that kind of represents
43 that expanding from a three-month to a five-month seasonal closure.

44
45 And here's same figure I just showed you. I think there is some
46 confusion I wanted to bring up, because if you go in the NOAA
47 charts, I think the NOAA charts actually end where that dotted
48 line is, and then the next NOAA chart continues, and the right

1 side of the MCD is actually a dash line, not a solid line. And
2 then, where that dotted line is, is where it says fishery protected
3 area, but it doesn't say fishery protected area in the eastern
4 part of that. So, I think, I don't know, if there's any
5 recommendations, if you can look at NOAA charts and try to get
6 that corrected, or maybe Garmin, or whomever publishes that, I
7 think that would really be helpful. So, I just wanted to throw
8 that out there, because I've seen that for a decade or more, and
9 it is very confusing.

10
11 So, anyway, going back to the alleyway. So, these traps here,
12 during the-- This was in March. This is a paper that we published
13 with Tim Rowell, and it shows what I just repeated, you know, the
14 migration pathways of yellowfin and nassau grouper, and the
15 percentages of tagged fish that go from the Grammanik Bank to the
16 Hind Bank. So, there's a pretty large percentage of fish that use
17 that alleyway.

18
19 This is where we saw the traps, which is on the very edge of the
20 shelf. Some fish do use that area, not a lot. But we did see
21 several yellowfins, and nassau grouper in those traps, when we
22 dove down on those.

23
24 So, increasing, funding and outreach and supplies. So, we did an
25 outreach campaign in 2006 to recreational fishers with pamphlets,
26 to 2010. Then in 2010, we also worked with fishermen and David
27 Olsen with the local Fish and Wildlife, and we distributed these
28 Fisher Science Kits, which included a notebook, pencil, tape
29 measure, a large hypodermic needle to vent the air bladder, and a
30 barbless hook and weight for sending the fish back to the bottom.

31
32 These are some of the posters that we put out. And we did this in
33 response to the Virgin Islands declaring that nassau grouper were
34 protected in the territorial waters. We wanted to make sure that
35 we were working with Fish and Wildlife to get this word out,
36 because that was really important that there was this important
37 change in the regulations.

38
39 Some of the Fisher Science Kits we included, and I think the
40 fishermen really appreciated getting these kits, because it helped
41 them. And we did some training sessions on how to vent the fish,
42 where to put the needle to vent the air bladder. This is just a
43 diagram of a barbless weighted hook that you could put on the fish,
44 and even without venting air bladder, you could send the fish
45 straight down to the bottom with a weighted hook and then pull it
46 up the fish would be safe. And you wouldn't risk, you know, doing
47 an infection with the needle.

48

1 I think this is the last one. Information on whether there's been
2 any new spawning aggregations discovered. None that we're aware
3 of, but we've monitored the historic site almost every year, and
4 we haven't seen more than a dozen fish showing up there, so they
5 may have completely stopped using that site. There is some
6 anecdotal information that there's maybe an active aggregation in
7 the North Bank, North of Saint Thomas, but we haven't had the
8 chance to go check that out yet.

9
10 There is a high probability that nassau grouper may be establishing
11 new sites. This is from the NCRMP, National Core Reef Monitoring
12 Program, and the Deep Coral Reef Monitoring Program from 2017 to
13 2021, and you can see the nassau grouper densities there, sort of
14 these hot spots. They're found all over the deep shelf areas, but
15 also around the Virgin Islands National Park, around Saint John,
16 and also in the Saint Thomas East End Reserve, on the East end of
17 Saint Thomas.

18
19 So, I think they estimated, population was estimated at about a
20 134,000 based on these dives in this area. So, that's a huge
21 number, but that does include juvenile fish as well. So, there's
22 a huge number of nassau grouper, again, these are estimates, but
23 if they are maturing, the Grammanik Bank will see accelerated
24 abundances or they may be establishing new areas, maybe in
25 historical spots.

26
27 So, I think there's a lot of potential. I think we can't let our
28 guard down right now, because 900 fish at the Grammanik Bank seems
29 exciting, but it still-- I think, back in the day when fishermen
30 were fishing there, catching for 300 to 400 a day out of the
31 spawning aggregation. So that's like 3 days of fishing, and now
32 all those fish are gone.

33
34 So, anyway, this is my last slide, I believe. So I can take any
35 questions if there's time. Thank you very much.

36

37

Questions/Comments

38

39 **CARLOS FARCHETTE:** Thank you, Rick. Vance?

40

41 **VANCE VICENTE:** Yeah, I'll make it a quick question, so I can let
42 Julian make up his points.

43

44 Rick, nice seeing you again. My question relates to habitat changes
45 in the last decades. I have one question regarding the shallow
46 habitats, seagrass habitats and so on. And the other one has to do
47 with the deeper habitat where the nassau spawns.

48

1 Did you mention that you have seen differences in the length/weight
2 relationships in those juveniles nassau groupers that are found
3 within the exotic, paddle grass, halophila stipulacea versus their
4 natural habitat. Did I get that correct?

5

6 **RICHARD S. NEMETH:** Correct. Yes.

7

8 **VANCE VICENTE:** Okay. Then my next question is regarding the deep-
9 water habitats. From what you have observed, have you seen any
10 significant changes in the macro-epibenthic community structure?
11 Because I have seen in other presentations that the dominant
12 components are not corals, they are sponges. Correct me if I'm
13 wrong.

14

15 And, specifically, the xestospongia muta, the basket sponge is the
16 one that creates the greater heterogeneity in the substrate. In
17 your visual surveys, have you observed any significant changes in
18 the sponge population?

19

20 **RICHARD S. NEMETH:** We have that information in the Territory Coral
21 Reef Monitoring Program, where we have that data. We do see, like,
22 the shallow-- Not shallow, but down to about a 130, 140 feet,
23 there's abundant coral, then it becomes dominated by the larger
24 sponges. And then at about 180 to 220 we have this, lettuce coral,
25 the agaricia fringe that's deep down. And so, the nassau groupers
26 use that quite a bit in the late afternoon, evening. So, they used
27 the agaricia, and then they move between the orbicella dominated
28 reefs on the top of the reef down to the agaricia and a little bit
29 in between.

30

31 But, in terms of we have seen disease of the xestospongia, for
32 sure, where some of them have just sort of died, turned white, and
33 fell apart. Right now, they seem very healthy. We haven't seen any
34 disease for maybe five years or more. So, I think that's still
35 fairly intact.

36

37 **VANCE VICENTE:** Thank you, Rick.

38

39 **CARLOS FARCHETTE:** Julian.

40

41 **JULIAN MAGRAS:** Dr. Nemeth, I like your presentation, but, you
42 know, I have a lot of issues with this alleyway. Those traps that
43 was up there, those are my traps. Those are my traps with two or
44 three other fishermen traps that were shown up there. I know as a
45 fisherman, that's not the only way that the fish travel to the
46 Bank.

47

48 The nassau grouper, 2005 is when the emergency closure went in for

1 the Grammanik Bank. When it came before the SFA, the Sustainable
2 Fisheries Act, it was a way large area that was up for protection.
3 And it was pinpointed, these smaller areas, from the fishers,
4 including myself, who were used to fishing the yellowfin grouper.

5
6 Now we are seeing the nassau grouper are spawning in that same
7 area. Fishers strongly believe the reason why you're seeing that
8 is because inside the 14 square mile closure, there's so many
9 nassau groupers and they're spawning that they're doing exactly
10 what he says. They're spilling out and they're finding different
11 areas to spawn.

12
13 Now we have to go with the numbers that were produced here to us
14 today, but we don't have a true number on how many nassau groupers
15 are out there. We, the fishers, know that in our lifetime we will
16 never be able to harvest the nassau grouper again. That will never
17 be lifted. To try to extend a closure that's been there all along
18 to stop the fishers once again from trying to make their
19 livelihood, we have a problem with that.

20
21 The time period, like we mentioned in the letter that was presented
22 at the last Council meeting, the time period of the spawning
23 happens. And if you really go in and you do an investigation on
24 it, you will see this happens once every seven to ten years where
25 the fish will fall outside of their regular spawning period.

26
27 As far as bycatch, this is not the only place you have bycatch.
28 Every place on the shelf, both territorial and federal waters, you
29 will have bycatch because the numbers are increasing. But the
30 education of training the fishers, which a lot of us has been
31 trained to deflate the fish with those same needles has been
32 working.

33
34 So, quit singling out one area because we have seen them and we
35 think they're traveling back and forth so we need a longer period
36 of closure or we need to close that for trap fishing, we do have
37 a problem with that.

38
39 Number one, we request that the Grammanik Bank and the Hind Bank
40 be added to the catch report form. So, when the fishers are
41 reporting, you would see exactly where they are fishing, similar
42 to what Dr. Nemeth presented.

43
44 I'm asking this Council; I know you have a job to do. But here,
45 once again, the fisherman who was involved in this entire process-
46 - don't put any more hardships on us. Because if you was to look
47 at the nassau grouper passing through this area, they're coming
48 from every angle, not just going from east to west. They're coming

1 north to south, south to north. Every direction you can think
2 about. Every place you see a nassau grouper you are going to want
3 to close the fishery down? If you find another spawning aggregation
4 two miles east of that, are you going to want to close that down?
5

6 You're going to see more and more of this happening, just like
7 what happened with the red hind. The red hind we did a 14 square
8 mile closure. What are you seeing from that red hind in abundance
9 every place. But we can still harvest the red hind, but we will
10 never be able to harvest the nassau grouper.

11
12 So, I'm going to save some more of my comments and listen to the
13 discussion that's going to go around the table. But the fishers
14 here are asking, don't put any more hardships on us. Let's do some
15 more research, and the key goes back.

16
17 Again, I saw the educational and outreach posters and stuff was up
18 there. When were those given out in the public? Because I haven't
19 seen anything given out recently about nassau grouper, and we need
20 to educate everyone about what's going on. I agree with him with
21 putting posters up in all the different locations.

22
23 And then something was mentioned about the spearfishing. The
24 spearfishing doesn't take place, for sure, out in the Bank because
25 the water is too deep. But educating our recreational fishery and
26 educating the public of what's going on, would help with the
27 protection of the nassau grouper. So, I'll save the rest of my
28 comments for now.

29
30 **CARLOS FARCHETTE:** Graciela?

31
32 **GRACIELA GARCÍA-MOLINER:** So, I do have a number of questions. One
33 has to do-- I don't know if you mentioned it or not because I was
34 dealing with the noise over here. But do you have any information
35 on the ratio between yellowfin and nassau grouper, both within the
36 Grammanik and in the MCD? Because, I mean, you've sampled
37 throughout the MCD, so, you know, what's the ratio? Are they really
38 confined to one of these areas? Are they mixing only in the
39 Grammatic Bank? Are they mixing in the MCD?

40
41 **RICHARD S. NEMETH:** So, these data here are non-spawning season
42 data. So, that would be Tyler Smith has a lot of that 15-20 years
43 of data of just abundance during non-spawning time periods and
44 whether they're co-occurring in these areas. I think in the MCD,
45 they are. We do see them in higher is there. You can see just the
46 nassau grouper, there's the larger circles, you know, right here
47 in the MCD. And this is close to the Hind Bank, where a lot of
48 work was done, and the historic nassau as well. So again, this is

1 non spawning time periods. In the Grammanik Bank, obviously, they
2 come together during the same time of year, so there's a lot of
3 mixing and overlap.

4
5 But I think as the nassau grouper are getting larger, the numbers
6 are increasing, they're separating in time and space slightly, so
7 they don't-- We see that with other species in the groupers in the
8 Pacific, they'll, separate out along the reef when they can occur.

9
10 **GRACIELA GARCÍA-MOLINER:** So, the other question has to do with,
11 you mentioned seeing the, I don't know if the spawning or the
12 actual aggregation after sunrise but are you doing any diving after
13 sunset. Which one did you mention?

14
15 **RICHARD S. NEMETH:** At sunset is when we see the large aggregations
16 and the spawning.

17
18 **GRACIELA GARCÍA-MOLINER:** Are you doing any diving right before
19 sunrise? And the reason why I'm asking is because in La Parguera,
20 Mr. Thomas Padilla, a commercial fisherman insisted that the
21 spawning really took place right at or before sunrise.

22
23 **RICHARD S. NEMETH:** Our acoustic telemetry shows that the fish
24 leave about 2:00 or 3:00 in the morning, and then swim, you know,
25 several miles away from the Grammanik Bank into the Hind bank, and
26 then back again in late morning, early afternoon, they come
27 swimming back. So, we're not exactly sure where they're ending up,
28 but our last acoustic telemetry study was maybe 2016, 2017. So
29 right after that, the numbers started to get much larger, so it's
30 possible that they've-- We see a lot of changes in behavior, so
31 it's possible that they are changing their behavior to morning
32 spawning. But the videos that we showed, we did see spawning at
33 sunset. Yeah.

34
35 **CARLOS FARCHETTE:** Okay. Vance?

36
37 **VANCE VICENTE:** Just to answer, Julian, regarding the effectiveness
38 or the effects of closed area, just to remind him that that's one
39 of the Scientific and Statistical Committee research priority
40 recommendations. It is also one of the priorities of the EBFM TAP,
41 which is assessing regulatory impacts to evaluate the
42 effectiveness and impacts of closed areas. And if I recall
43 correctly, it's one of the Council's priority research topics too.
44 So, you know, we have been giving emphasis to this in order to
45 make a balance of the effectiveness of this closed area, both, of
46 the fishery's resources as well as to the fisheries. Thank you.

47
48 **CARLOS FARCHETTE:** Graciela?

1
2 **GRACIELA GARCÍA-MOLINER:** So, a couple of things. In Addition to
3 what Rick has presented, there were other questions asked by the
4 Saint Thomas Fisherman Association.

5
6 One was regarding the landings recorded from that alleyway. So, I
7 cannot tell you that yet because I'm dealing with the
8 confidentiality issues of how many fishers and how many were
9 reporting, etcetera.

10
11 But Nassau grouper, is in the database for and around that area.
12 The thing is that it's not in the report forms, so people are
13 taking the time to actually write it in. And what we don't know is
14 if those discards are alive when they are returned to the water or
15 not. So, we know that nassau, is in the traps, and is reported by
16 hook and line. I will deal with this. Okay. So, Kevin.

17
18 **CARLOS FARCHETTE:** Kevin.

19
20 **KEVIN MCCARTHY:** Thank you. So, you're right, Graciela, that it's
21 not on the form, so you're relying on people to write in, right?
22 So, you can never be, certain about what percentage of people are
23 actually taking the time to do that. And recall that we use that
24 as justification for better reporting once names of species do go
25 on the form. So, you know, you have got to keep that in mind.
26 Right? So, we don't hold the ACLs to a certain level that was based
27 on write ins.

28
29 And then, once the form is changed, I think everybody knows what
30 I'm getting at here. So, you've got to understand that that's going
31 to be well underreported. Since 2016, I think, the reporting forms
32 from the Virgin Islands have had discards by species, and I think
33 they can report dead or alive. But that's only been since 2016. I
34 think that's correct. But again, you're relying on a write in.
35 Right? Because it's not on the form. So, just Keep that in mind
36 that the data will be incomplete.

37
38 **CARLOS FARCHETTE:** Graciela.

39
40 **GRACIELA GARCÍA-MOLINER:** So perhaps, you know, one opportunity
41 here would be to somehow get a mortality study going on with the
42 fishers that are allowed to fish in that alleyway and things like
43 that so that we know a combination with, for example, satellite
44 tagging or, you know, something that can be external to the fish
45 in association or collaboration with the fishers, so that we are
46 all getting the most out of the of the study. If the fish are
47 returned alive, you know, we need to know that, because it's a
48 contribution from the fishers to their own fishery.

1
2 So, outreach and education and actual cooperative research where
3 they are involved in this kind of work could be potential research
4 that could come out of this. And it would help everyone because it
5 would go into the data forms, it would be accounted for. We would
6 know whether it's dead or alive. We could get additional
7 information for their movements, etcetera. So, you know, maybe
8 some cooperative research would be worthwhile.

9
10 **CARLOS FARCHETTE:** I have Sennai and Julian.

11
12 **SENNAI HABTES:** So, if I can ask Graciela, I'm confused as to what
13 management need, we are trying to fill with this currently. Like,
14 we were talking about red hind and then Rick gave a presentation,
15 but I still have not heard is what we are trying to a better
16 understanding of, with this data. From the data that is currently
17 collected and what we know from fisheries abundance information,
18 is the only current monitoring that happens is at the Grammanik
19 site. Based on that, the numbers that we have for total nassau
20 grouper in the U.S.V.I. is what Rick presented. That is it.

21
22 They've done other studies that people have looked for eggs and
23 evidence of them and elsewhere to show other identifiable spawning
24 sites, it has turned up nothing. Right? And so, what management
25 gap and what research information specifically are we trying to
26 fill with this additional work and how does it address specific
27 management needs? I would like for us to move along, you know,
28 that type of process when we are generally talking about the
29 research that we want to implement for this region. Otherwise, I
30 find we talk about it, and it doesn't really get done because it
31 isn't filling a specific gap. So, I think that that would help me
32 quite a bit. And if we could then put it back into the prioritized
33 research alignments that we've decided on, either through the SSC
34 or by the Council and then designate someone to do it, I think
35 that will help us.

36
37 **CARLOS FARCHETTE:** Follow-up, Graciela?

38
39 **GRACIELA GARCÍA-MOLINER:** So, you know, if the Council is
40 considering closing off another area and continuing the Grammanik
41 into the MCD, I think that is additional information on the
42 mortality of the nassau grouper when they return, because if they
43 are alive and they're well and you're not impacting anything else,
44 then, you know, why close that area just in relation to the nassau
45 Grouper?

46
47 That's one of the points that I think they've made, the Saint
48 Thomas Fisherman Association and what I'm making in terms of that

1 management, because you're closing an area to a whole bunch of
2 other species that are caught in that area. So, I don't have that
3 information right now. We're working on the information from the
4 grid that they feel in. It's just that they are not really fitting
5 into, you know, the MCD and the Grammanik, because they are all
6 covering a couple of areas. But we're working on that to see what
7 other species would be not available anymore to the commercial and
8 recreational fishers.

9
10 And also, because we're speaking of the pelagics. So, what pelagics
11 are being cut in that area that would be closed off if the Council
12 so decides to do? So, these are all questions that are directly
13 related to management when you're thinking about closing an area
14 to all fishing.

15
16 **CARLOS FARCHETTE:** You got a follow up, Julian?

17
18 **JULIAN MAGRAS:** So, to go along with what Graciela said and what
19 Sennai said, but then exactly what Vance Vicente said was that
20 it's in the priorities. We've been requesting it.

21
22 What is going on in these closures? What information has been
23 collected for the last 18 years and all of the seasonal closures
24 that have been put in place? We don't need to move forward with
25 any more regulations, until we have answered these questions. We
26 continue to put regulations in place, and then we can't get no
27 results from the regulations that are put in place.

28
29 And the fishers, the Association asked at the last meeting and
30 conversations have been had, let's put the MCD, let's take the
31 Grammanik Bank, let's take the Coral Reef Monument and add them to
32 the catch report form. It's not a hard job to do.

33
34 Miguel, I think he stepped out of the room, they always say we
35 have money to do small projects. Alexa Sabine was the last one
36 that created the catch report form for DFW.

37
38 **SENNAI HABTES:** She did not create it.

39
40 **JULIAN MAGRAS:** Well, she put it together.

41
42 **SENNAI HABTES:** NMFS created it.

43
44 **JULIAN MAGRAS:** Well, NMFS but she did the work with creating it.
45 She worked with them in getting it done. Why can't DFW get some
46 money from the Council and ask her to plug those areas in. I
47 guarantee you, within 1 month, it will be done.

48

1 Then we can start to collect the information. You see the problem
2 with the little squares that we have right now? P21, P22, Q. The
3 struggle that Graciela is having is that same struggle. When you
4 put that by those areas, they're not lining up, because the fishers
5 are trying to use their best knowledge by picking those, alphabet
6 with a number.

7
8 Let's correct those. Let's see what's going on in these banks.
9 Collect some data. Look at the moon phases. Is the moon phase this
10 year going to show that the Grammanik are going to spawn after the
11 closed season, they did last year. Well, this year, February,
12 March. Well, in May, they spawned. We know that. The fishers know
13 that because we know it happens every so many years.

14
15 So, we need to gather the kind of information we should be
16 gathering before we move forward with any kind of management. Thank
17 you.

18
19 **CARLOS FARCHETTE:** Graciela.

20
21 **GRACIELA GARCÍA-MOLINER:** However, data has been collected over
22 these past number of years. There has been an indication that the
23 nassau grouper are increasing in numbers. There is the information
24 that they are traveling from one site to the other and the
25 percentage that has been calculated, not from acoustic, but from
26 actual visual censuses that have been done. So, on that other hand,
27 you know, there is that data. So, this is what the Council needs
28 to consider when we're thinking about, you know, closing another
29 area.

30
31 Now, in addition to the biological information, you have to
32 consider the economics for the other fisheries. Nassau it's
33 completely closed, but for the other species that are harvested,
34 what percentage of the total landings comes from that specific
35 area, for example. What's going to be the decrease in the income
36 of the fisheries that are depending on these fisheries?

37
38 So that, I don't have that information, but that's something that
39 the amendments would have to consider. In addition to that, what
40 would be the social implications and the changes in the effort,
41 where will all the traps be moved to, etcetera.

42
43 So, it's not only, you know, the information that we've seen, but
44 also all these other aspects of the fishery.

45
46 **CARLOS FARCHETTE:** Sennai and then Julian.

47
48 **SENNAI HABTES:** So, I feel like what is happening now is we're

1 putting the cart well before the horse. Okay? What we were talking
2 about was the Hind bank and request to change management to allow
3 trolling in that area. Right? That was it.

4

5 We had another presentation where Rick--

6

7 **VANCE VICENTE:** I think it was trolling these--

8

9 (Part of Dr. Vicente's comment is inaudible on the audio
10 recording.)

11

12

13 **SENNAI HABTES:** No. No. It was trolling for highly migratory
14 species. That was what we were looking at. Okay?

15

16 Beyond that, there was another presentation from Rick, which had
17 information for us to evaluate, to think about some other
18 management action associated with the Grammanik and the MCD. Have
19 we even drafted anything? No.

20

21 So, where we are now is initial stages in which we have to compile
22 all of the information that would allow us to understand what an
23 appropriate management strategy would be. We haven't even self-
24 addressed the statement of the problem.

25

26 So, I think having these conversations is leading us away from the
27 management action that we have before us and is creating a lot of
28 misinformation and confusion about what is currently happening. I
29 think it would be more beneficial to create a statement about what
30 we would like to do, meaning what information we would like to
31 collect, who we would like to work on it and then move towards
32 developing a more comprehensive presentation to evaluate it at the
33 next meetings and table conversations of this, until we have all
34 of that information compiled. That would be my recommendation.

35

36 **GRACIELA GARCÍA-MOLINER:** So, in response to that, this is
37 responding to the Saint Thomas Fisherman Association letter that
38 was provided to the Council, and the discussion was to begin that
39 connection between the MCD and the Grammanik Bank.

40

41 So, this is what this one is specifically about. And that's why
42 it's important to know that it's not only, you know, what species
43 are involved. And in this case, it had to do with the nassau
44 grouper because it's a protected species, and it had to do with
45 the yellowfin because that's where they are aggregating.

46

47 So, this was just, as it states, discussion on Hind Bank Marine
48 Conservation District, Grammanik Bank in Saint Thomas. This is the

1 beginning of that discussion.

2
3 **CARLOS FARCHETTE:** So, before we go any further with this, I want
4 to-- Sennai made a good point. Go back to my island of Saint Croix
5 and my issues with Lang Bank. I want-- Well, I guess a Council.
6 But I want to be able to have the District Advisory Panel for Saint
7 Croix give some testimony on this modification to the seasonal
8 area closure of Lang Bank with the red hind to allow for fishing
9 for non-managed and managed pelagic species.

10
11 So that's one of my recommendations, to have the DAP involved.

12
13 **MARÍA LÓPEZ-MERCER:** Okay. So, so yeah. So, the first topic that
14 we were talking about, you know, has to do with Lang Bank in Saint
15 Croix. That's completely different in terms of also the stage of
16 what the Council was asking from us, right? As Graciela mentioned
17 the other topic that had to do with the Hind Bank and the Grammanik,
18 is a starting of a conversation. So, there shouldn't be any
19 conversation or any discussions about any amendments or anything
20 like that, because we I've never gone there. The Council hasn't
21 requested anything like that.

22
23 And my suggestion would be, if the Council would want to evaluate
24 the information that is available, with the purpose of evaluating
25 the information that is available, evaluating the effectiveness of
26 the reserve, evaluating nassau grouper as an endangered species,
27 other species, then they can certainly do that.

28
29 They can task their SSC to look into it. They can have committees
30 to look into it, but that will have to be something that comes
31 from the Council as a task to start looking into these things.
32 Okay? But there's a lot of things going on, we cannot be all over
33 the place.

34
35 Right? This is a start of a conversation. That doesn't mean that's
36 going to end up in a closure or it's going to end up in anything.
37 At this point, it's the starting of a conversation. I just wanted
38 to clarify that.

39
40 And I agree with Carlos that perhaps it will be important to go
41 back to the first presentation of the Lang Bank, because that one,
42 as I mentioned, is in a process of Council determining what they
43 want to do. This is something that has been discussed in many
44 meetings, and there was an interest to look into this options for
45 allowing certain kinds of in the Lang Bank area.

46
47 So that will be my recommendation and I'm saying it as a Council
48 member, right now, I'm changing hats a little bit.

1
2 **CARLOS FARCHETTE:** Okay. So, next step for, going back to Saint
3 Croix, my Lang Bank. Fishermen are hot on this topic, especially
4 the charter guys, and I'd like to get some information from the
5 Council. Miguel?
6
7 **MIGUEL A. ROLÓN:** So, what is it that you want to do? Do you want
8 to have the DAP of Saint Croix take a look at it before the Council
9 will make a decision on Lang Bank?
10
11 **CARLOS FARCHETTE:** Yeah. I think the DAP and the SSC.
12
13 **MIGUEL A. ROLÓN:** So, if that's the case, then-- Is that a process,
14 María, that will go hand in hand with what you were discussing at
15 this time.
16
17 **MARÍA LÓPEZ-MERCER:** Okay. So, changing hats here as a presenter.
18 I would suggest doing whatever the Council wants to do. Like, if
19 they think that this is not a good time to select options as to
20 what they want to see and they will want to explore other things
21 based on the DAP-- We do need, input from the Saint Croix District
22 Advisory Panel, and maybe Saint Croix District Advisory Panel,
23 their members, can obtain information from people that fish in
24 this area to be able to populate each one of these options that
25 was presented today, to see how we can gather information about
26 what are the potential effects.
27
28 And when I talk about effects that doesn't mean that it's something
29 negative. An effect can be something positive, it can be something
30 neutral, it can be something negative. So, those effects in there.
31 If there's options presented in this options paper, we will be
32 available to discuss this with the DAP. And then, the DAP will
33 make recommendations, if they're ready to do that, to the Council.
34 And then, the Council decides, you know, if they want to take the
35 recommendations or not. After that, if the Council understands
36 that this is something that the SSC can evaluate, then they can
37 Certainly do that.
38
39 So that's where we are right now. So, Mr. Chair, if you think that
40 the Council is not ready to look into these options because they
41 would like to have input from the DAPs or other people. You can
42 also decide if you want to have scoping meetings on these draft
43 options, and we can call it scoping paper, they can do that as
44 well.
45
46 **MIGUEL A. ROLÓN:** Yeah. Because people forget about the scoping
47 meetings. The advantage of going to a scoping meeting, they have
48 more people than just the DAPs discussing the issues. So, you have

1 the members that belongs to the DAP, plus other fishers that might
2 be interested in the same issue.

3
4 If we are ready to go to scoping meeting, with the documents that
5 we have, we can go to scoping meeting. Probably we can do it
6 parallel. For the first half of 2024, we can have this issue
7 presented to the DAP and also to have a couple of scoping meetings,
8 before April, before our spring meeting. And that way you will
9 have all the elements of judgment by that time or what is it that
10 you want to do.

11
12 You will be able to ensure your topic. You want to ensure the
13 participation of the fishers of Saint Croix, whether they belong
14 to the DAP or not. And by the way, I would prefer to have an in-
15 person meeting, maybe hybrid, but an in-person meeting if we are
16 going to discuss it with the Saint Croix DAP. And of course, the
17 scoping meeting has to be in person or hybrid. We can do both.

18
19 And that way, Mr. Chairman, that will take care of the DAP and the
20 fishers. But also, Graciela can coordinate with the SSC and the
21 Chair of the SSC to address this in the 2024, and before the spring
22 meeting.

23
24 **CARLOS FARCHETTE:** That that'll work. I mean, if you leave it to
25 me, I can make an option for Saint Croix, but, you know, I have
26 got to give the member's an opportunity. Sennai and Graciela have
27 a comment.

28
29 **SENNAI HABTES:** Yeah. I would just ask, before we move on to doing
30 that, if we at least decide on, specifically, what it is we are
31 trying to address with this, today, here. Right? Like, so what is
32 the specific impact and issue that we are trying to address with
33 this management proposal. Is it, what are the species? What is the
34 time limit? And what approximate number of people is it impacting?
35 Right? Because I still don't have a clear idea of that, and I
36 think, before we move on, it would be beneficial for us, as Council
37 members, to clarify that before we move into things like sending
38 it down to the DAP, the SSC and doing scoping meetings.

39
40 **MIGUEL A. ROLÓN:** Chime in Mr. Chairman.

41
42 What we need to present to the DAP is exactly the presentation
43 that was prepared by the Southeast Fisheries Science Center,
44 Regional Office. What María presented to you.

45
46 So, you will go and ask this group of people and also the scoping
47 group, what is it that you want? With an open mind. You don't go,
48 "So, this is my preferred way of going." And that way, and this is

1 I believe what Dr. Habtes is following, here, we are all on the
2 same page. This is what we are going to ask the DAP, which is
3 following the presentation brought by María, and then Graciela can
4 pick the topics that are germane to the SSC. And then, between Dr.
5 Vicente and Graciela, they'll address that at the at the SSC.

6
7 Then, the scoping meetings, of course, once you have a scoping
8 meeting, you cannot go to a scoping meeting with a big thick
9 document. You have to go to with all the specific, "These are the
10 options that the Council is considering. Please note that the
11 Council has not taken any action whatsoever. On the contrary, we
12 are scoping this issue to see if we need to take action."

13
14 If by the spring meeting, you still need to get more information,
15 so be it. So, you move a decision or whatever you want to do.
16 Because you always, remember, you have the no action decision. And
17 then you can do it in August. But this way, Mr. Chairman, you can
18 have a motion or just tell the staff, "This is the way we're going
19 to do it." And we will follow-up. But I prefer a motion, a one-
20 line motion so we will know what we're going to do. So, we don't
21 discuss the same thing again the next time we're meeting in April.

22
23 **CARLOS FARCHETTE:** María.

24
25 **MARÍA LÓPEZ-MERCER:** Thank you, Miguel. Okay. So, alright. So,
26 there's a purpose, right? There's a purpose and there's a need
27 that I think the Council already decided on. And that is that they
28 want to allow for the harvest of pelagic species-- and remember
29 pelagic species can have different meanings, right? For purview of
30 the Council, these are the species that are managed by the Council.
31 Purview of HMS, these are the species that the HMS manages.

32
33 So, we're dealing here with Council species, right? The species
34 that are not HMS, because there are other species that are not
35 managed by the by the Council, but they are not managed by HMS as
36 well, and that's another story.

37
38 So, it seems to me that the request from the Council is very
39 specific. They want them to be allowed to fish for something
40 specific, right? So, I think that's it.

41
42 Now, at this point, there's not just one option, there's different
43 options that can be explored. So, I think that keeping those
44 options open based on the purpose and the need that Council members
45 have expressed would be the way to go at this stage. Because
46 there's information that would need to be collected to answer each
47 one of these questions, right?

48

1 But the Council can look at these things that can be done and they
2 can say, "You know what, we're not interested in changing," this
3 is an example, "the timing of seasonal, because that's not what we
4 want. However, that's something that can be explored because what
5 if that is an option that may work." You know?

6
7 So, there are certain things that can be done, and I think based
8 on the input that can be provided by the people that use the area,
9 which are going to be in the DAP, that can provide a lot of context
10 of what can be done. So, we're clear on what we want to do, but
11 there are several options to get there. Right? That's the way I
12 see it.

13
14 You want to add something?

15
16 **MIGUEL A. ROLÓN:** Yeah. But to follow-up. That's exactly where we
17 need to go with the options, have the open mind, not go with the
18 option that you have. And still do not leave out the highly
19 migratory species, because if after all this exercise, we think
20 that some of the species are high migratory species and need to be
21 included, then the communication will be established with the high
22 migratory people.

23
24 But what María is suggesting, I agree with her. If we do this,
25 then we know what we are going to be asking the public. These are
26 the options. This is what the Council decided, based on the
27 discussion that you had before. And that way when we come back you
28 have better elements of judgment to discuss it.

29
30 And again, you may end up saying, "Well, okay. We don't need to do
31 anything." But I don't think that that's the way you have discussed
32 it before. So, the important part is-- And remember, the management
33 plans are for each area now. So, whatever you do in Saint Croix,
34 you do not have to do it in Saint Thomas/Saint John, or to Puerto
35 Rico.

36
37 So, we are going to be addressing this from the point of view of
38 the fishery management plan of Saint Croix following the discussion
39 that you have today.

40
41 **CARLOS FARCHETTE:** And definitely, eventually, in the discussion,
42 HMS has to come on board because there is yellowfin tuna off the
43 drop off out there at Lang Bank. So, they have to eventually be
44 involved.

45
46 **MIGUEL A. ROLÓN:** Exactly. But that would be for the group to
47 decide, and also, suggestions can be made for all the species that
48 we are not dreaming about at this time. But the fishers and the

1 groups that you discussed will be able to provide information to
2 you. Also, the SSC needs to address this from the point of view of
3 science, of course, and tell us, "Okay, you have information for
4 this species. You don't have any information from this other. But
5 in order to make a decision, you have to collect the data first."
6

7 **CARLOS FARCHETTE:** Graciela.
8

9 **GRACIELA GARCÍA-MOLINER:** So, again, I mean, the other side of all
10 of this is that during the seasonal closure, we don't have a lot
11 of information on other species because there is no fishing
12 allowed, and things like that. So, you have to remember the
13 regulations that are in place, and, you know, how is that going to
14 affect the seasonal closure that you have in place for one species?
15

16 So, for example, the incidental catch of the species that you're
17 trying to protect, red hind in this case, would that be high enough
18 that you shouldn't really open up the water column. Because, you
19 know, they do come up to the surface, you can chum them and bring
20 them up, and you can catch them by the tons if they're there.
21

22 So, these are all the other questions. We don't have a lot of
23 information from the time that the closure is in place. The few
24 studies that we have in place, just basically look at very specific
25 years. So, incidental catch, mortality of that bycatch, the take
26 of red hind during the spawning season, etcetera, are the things
27 that you have to consider.
28

29 And trolling and catching pelagics, if you run from the deeper
30 into the shallow water, you most likely won't but you could catch.
31 And if you don't have a lot of experience, you could catch any of
32 the species that you are trying to manage.
33

34 If you open up the area for the non-managed species, you also will
35 be faced by the incidental catch and the high mortality of the
36 species that we're trying to protect. So, you know, just to remind
37 you of what things could happen if you're thinking about opening
38 up the area.
39

40 **MIGUEL A. ROLÓN:** Yeah. But that discussion will take place after
41 the consultation with the DAPs and the other groups.
42

43 And the other thing is that the scoping meeting is not something
44 that you do just like that. You need to prepare a document that
45 will conform with the regulation and the requirement for a scoping
46 meeting. So, probably, Graciela, myself, and the Regional Office,
47 will need to look at this.
48

1 But I believe, from the Council point of view, we would like to
2 know if you all agree with what Carlos suggested. To get this
3 information, and then Graciela and I will make sure that the
4 questions that we ask to the group or the discussion that we are
5 going to have with the group incorporates the items that you have
6 seen today and the item that you have been discussing in other
7 meetings.

8
9 And I believe that that goes with Dr. Habtes intervention before.
10 And then, yeah. Because the thing is, we all want to do the same
11 thing. We want the best for the fisher. We want the best for the
12 resources, it's just a matter of how we approach it and how we
13 follow the regulation.

14
15 So, if I can summarize then we will call for a meeting of the DAP.
16 Graciela will make sure that we coordinate with the Regional
17 Office, make sure that we have the items that they are going to
18 address. And she will do the same for the, SSC. And then the
19 scoping meeting, if we do that, and we still require the scoping
20 meeting, then there is a different document, but we can do it.

21
22 But at least with the first meeting with the DAP, and the first
23 meeting with the SSC, we might be able to have "Okay. Identify
24 these are the gaps. These are the ways that we can go." And we can
25 incorporate all the discussion that you have had here. So, you
26 have a better position for discussing this at the next meeting or
27 the following meetings.

28
29 If you all agree, say yes, and then we don't need a motion for
30 that.

31
32 **CARLOS FARCHETTE:** Sounds good.

33
34 **MIGUEL A. ROLÓN:** Kate, do we need a motion, or we don't need a
35 motion?

36
37 **KATHERINE M. ZAMBONI:** Sorry about that noise. I think a motion
38 would be helpful just because the order of what is being suggested
39 is unclear to me, and I think a motion would help clarify what the
40 Council's expectation is.

41
42 You're talking about scoping. I'm not sure if that comes before a
43 paper that flushes out what some of these options might really do,
44 what those might look like, or whether the expectation is, you
45 want staff to flush out the options a little bit further, come
46 back in April, then maybe proceed with scoping.

47
48 I don't know when you want the input from the DAP. Where is that?

1
2 So, I think a motion clarifying the order that you all anticipate
3 would be very helpful.

4
5 **MIGUEL A. ROLÓN:** Yeah. And before the motion, the first step will
6 be to meet with the DAP and the SSC. And in order to meet with
7 them, you had to clarify what is it that you're going to address
8 at those meeting. I don't want to say the same thing, to ask them
9 because then I got problems with the questionnaire and the thing
10 that we have to jump through.

11
12 So, if we are all clear that the first step will be this one, then
13 at the April meeting, you will have the input from those two
14 groups, the SSC and the DAPs. If you still need a scoping meeting,
15 and as I said, the scoping meetings, you have to follow another
16 route, and you have to prepare an option paper that you take to
17 public hearings or whatever document is appropriate, then you can
18 instruct the staff to prepare that, after the April meeting, if
19 that's all you want.

20
21 If you want to do the whole thing at the same time, that's
22 different. But from previous experience, before María and before
23 all this, we used to do a scoping meeting first, for everything
24 that we have, but we've scoped the hell out of everything. And
25 now, at this time, we know what we want. You had the document as
26 María's presentation. Her Presentation is based on all the previous
27 discussion.

28
29 So, the question is if the Council agrees with that, then that
30 document can be used to obtain information from the DAP and the
31 SSC. If that is clear? Then, we can have a motion just for that.

32
33 **SENNAI HABTES:** So, I think that the document that was proposed
34 here is a white paper that provides all of the information
35 necessary actually to make a decision on this.

36
37 The question is, is do we want to provide a preferred management
38 or a subset of options for management that we would send to the
39 SSC and the DAPs for evaluation or are we trying to get more
40 specific information to use in the Council's determination for
41 presenting management selections.

42
43 And if we are sending it to the SSC and DAPs, we need to be clear
44 on what information that we do not have in this white paper that
45 we are asking from them. Right? That is what I do not see currently
46 in this process, and I get concerned when that is happening because
47 it's been a year and will keep spinning without going towards what
48 we need. Right?

1
2 So, if the question is, there is a subset of recreational and for
3 hire fishing that would like to use this area for trolling between
4 the months of December and February when it is currently closed,
5 because of an economic impact, we need to determine if there is a
6 large enough impact to the particular protected species during
7 that seasonal closure. That's it.

8
9 That is all we need to determine. Right? Because that is the only
10 reason for the seasonal closure is to protect the two species that
11 are spawning there. Alright? So, do we have enough information to
12 make that decision? That is the first question we should be asking.
13 In my opinion, I believe we do, based on the white paper.

14
15 So, if that decision has been made, the next step is, what are the
16 preferred management solutions to this that we would like to
17 propose? Do we have enough information to provide those at this
18 current juncture? That, I do not know the answer to.

19
20 And so, if that is what we want to send back to the SSCs and DAPs
21 to get specific recommendations from either the DAPs and the SSCs
22 or to have staff from NOAA develop it, then we should say that.
23 Right? That's all I'm trying to get us to.

24
25 **CARLOS FARCHETTE:** Well, the DAPs have not even seen this white
26 paper, so they don't even really know what we're talking about. I
27 know I did mention it in our FAC because most of the members in
28 the DAP are in FAC. And one of the DAP members is who brought this
29 up to me from the charter guys wanting to fish for pelagics during
30 the seasonal closure of red hind. Because they would not be
31 interfering with the water column of the reef fish compared to the
32 surface pelagics.

33
34 **SENNAI HABTES:** I get that. Right? But there, you know, there are
35 ample even after we create a proposed rule for public input in
36 which it can be changed, or DAP input in which it can be changed.
37 Right? What we have to determine is their information from these
38 particular aspects that we need engaged in this particular decision
39 that needs to be made. Right? Otherwise, we kick things around for
40 years and years and there's no management action. Right?

41
42 What information specifically are we looking to get from the DAPs
43 to inform the two decisions I just presented? Like, that's what
44 I'm asking. If we cannot answer that, then we have more of a
45 problem associated with this, that requires more discussion and
46 clarity before moving on to anything else.

47
48 **MIGUEL A. ROLÓN:** Listen, guys. Personally, I believe we have all

1 the information that we need to make a decision, period. Okay? But
2 I'm the executive director. I don't take any decisions here. But
3 what Carlos is presenting we probably won't waste that much time
4 by going to the DAP of Saint Croix and presenting this to them.
5 They might say, "Meh. Okay. Go ahead and do it." Or they might
6 say, "No, we object to everything that you're talking about here."

7
8 So, in essence, what you're losing is about three months between
9 here and April. But at least you will have in consideration the
10 fishers and the group of fishers that you appointed to give their
11 input to the decisions that you make at Council.

12
13 It's almost a PR, but at the same time, you are able, at this time,
14 to pay a deference to the DAPs, and be able to get the input from
15 the fishers. Probably, at the meeting they will say, "We don't
16 know about all that, do it." Or they can say, "Well, we need more
17 information, or we need this, or we need that." But you don't know
18 it until you talk to them.

19
20 The SSC, on the other hand, if the SSC has all the information
21 that they need, you don't need to meet with the SSC. That's
22 something that Graciela and Vance can take. The SSC can then be--
23 We can wait for the SSC, when you have a concrete question about
24 data or methodology that they are supposed to filter through us.
25 Because remember, the role of the SSC is to tell you that the
26 Center has given you the best available information and this is
27 the best way you can use it for the management plant. So, they
28 have a specific role under the Act.

29
30 But, Mr. Chairman, that's what I say. You know, if you want to do
31 it this way, then you go to the DAP of San Croix, present the whole
32 thing, and then you promised yourself that you make a decision in
33 April, so we move forward with this.

34
35 But if you find some significant changes that have to be made, to
36 make the significant issues that you have not any idea about it,
37 and you need a scope of meeting, you can do it. But we need to
38 know what it is that you would like to do before lunch.

39
40 **CARLOS FARCHETTE:** I can decide for Saint Croix right now.

41
42 **MIGUEL A. ROLÓN:** Go ahead.

43
44 **CARLOS FARCHETTE:** Can you flip over to option five of what-- okay.
45 Hold it right there. That's it, number 5.

46
47 **MIGUEL A. ROLÓN:** The number 5 says, this option will benefit from
48 the input from the Saint Croix DAP.

1
2 **KATHERINE M. ZAMBONI:** I think some of us didn't quite hear what
3 the Chair said. Did you say eliminate number 5?
4
5 **MIGUEL A. ROLÓN:** No. No. No. He is just reading it.
6
7 **CARLOS FARCHETTE:** To use number 5.
8
9 **KATHERINE M. ZAMBONI:** The opposite. Use Number 5. Thank you.
10
11 **CARLOS FARCHETTE:** But I can't make that motion because I am the
12 Chair.
13
14 **JAMES R. KREGLO:** Can we just take a quick look at 4? Because I
15 had put an asterisk next to both of those when we were discussing
16 it.
17
18 **CARLOS FARCHETTE:** María.
19
20 **MARÍA LÓPEZ-MERCER:** Okay. Because we put together these options,
21 I just want to clarify how this is working.
22
23 Right now, what we were trying to get from the Council is to, like
24 Sennai said, just review the options paper, decide on options to
25 develop. At this point we don't even have an IPT formed, but it
26 can be done, right?
27
28 As soon as we get, you know, a little bit more-- because if we
29 have a giant scope of options to look at, then things a little
30 complicated and the IPD will need some guidance, right? Okay.
31
32 So those first 1, 2, 3, 4 options, if you look at them, they all
33 have something in common, right? They're all about what species
34 are going to be the exceptions to what we currently have. Okay?
35 Those are those 4. The difference between 2 and 3 is that one only
36 deals with Council managed species, and the other one deals with
37 Council managed and non-managed. All of them, if the Council wants--
38 - I know that in 5 it says this will benefit from, the DAP input
39 but in reality, that was meant to be for everything, like, and
40 whatever.
41
42 Right? So, these 4 are only dealing with the species that could be
43 caught and are based on, mostly, the testimony that you guys gave,
44 "This is what we want to do; we want to be able to catch species."
45
46 Now can you go to the next, slide please? The next slide is talking
47 specifically about gears, right? Is there a need to adjust gears?
48 Like, remember this may be something that perhaps you don't think

1 you need or perhaps you think, "okay, it's something that we may
2 want to explore". Are those gears tied to the species that you
3 would allow to use?

4
5 So, what I'm trying to say is not that you need to evaluate one
6 and then not the other, some of them are going to be tied. Like
7 for example if you allowed opening the water column for pelagic
8 species, so what are the methods and what are the gears that are
9 used to catch the species? And what are the methods or gears that
10 are used to catch the species that maybe you're interested in not
11 including it as part of the exception, because they may have the
12 potential of perhaps bringing fish up from the aggregation or
13 affecting the habitat, depends on what you want to do.

14
15 The number 6 is talking about adjusting boundaries of the seasonal
16 closure to exclude certain areas. And where is this coming from?
17 Because in the beginning of the creation under one of the
18 amendments, I think Amendment 2, that was establishing the
19 boundaries of the of the area, based on a request, the area was
20 adjusted because of where the location of the spawning aggregation
21 was, the depth of the water, etcetera. So, the location of the
22 boundaries was moved.

23
24 Does the Council have the information that is needed to evaluate
25 that? Do they know what the right is? Do they know where they are
26 fishing?

27
28 One of the issues that was mentioned before, was while drifting
29 for fishing or trolling, sometimes they will go into the reserve.
30 Right? So those are things that need to be taken in consideration.
31 So, I know I'm complicating things a little bit, but I just wanted
32 to let you know that the first four options are just species, and
33 this other one is dealing with either gear or boundaries. Right?
34 Okay.

35
36 **MIGUEL A. ROLÓN:** My suggestion is that we should take the certain
37 things to the DAP and explain to them what is it that each one of
38 them entitles. And even ask them whether they have any other option
39 because what María said, goes exactly with what we need to do, is
40 to get this information, so when you ask the staff and the IPT you
41 say, "This is what I want. This is the information that I need.
42 This is the way that we want to move it."

43
44 So, you would take this, because you're right, the DAP hasn't seen
45 this, put all of them in an official meeting, and then we come
46 back. If that's what you decide to do.

47
48 **CARLOS FARCHETTE:** I wanted to clarify something about drift

1 fishing. The issue with the fishermen was that while they're
2 fighting a fish, especially using live bait, the boat is in
3 neutral, and they're just fighting the fish, and they may,
4 depending on the wind and the current, they may drift into that
5 closed area while fighting the fish. That's when they didn't want
6 to get in trouble.

7
8 Because if they're boarded and says, "Well, you were fishing in a
9 closed area." "No. I really wasn't. I was fighting the fish, and
10 I drifted in here." It's not like they trolled through the close
11 area because that's-- they don't want the fish that are there.
12 They're out for pelagics. But Sennai.

13
14 **SENNAI HABTES:** Yeah. I would just say, so if that is where we are
15 ending up, I think we can make a motion to send both the white
16 paper as well as all seven options for management to the DAPs and
17 SSCs for recommendations.

18
19 Okay. But, I mean, like that, we could have done that an hour ago.
20 Right? So, like, that is what I mean about having a clear
21 understanding of what we want to get out of this. Because I can
22 also give you a lot of information on those particular ones, and
23 we can limit it down to three, if that's what we want to get out
24 of it.

25
26 Honestly, the seasonal closed area encompasses, like, red hind.
27 It's not that near the boundaries when people drift in unless they
28 are actively chumming and live baiting, you're really not going to
29 have that large of an impact on red hind.

30
31 It's an area I fish. People generally go after mahi, wahoo, and
32 tunas, and occasionally swordfish. You will catch barracudas and
33 sometimes kingfish, but that's not what they're targeting. It is
34 probably, in that time period, less than 500 trips. But you have
35 an impact, possibly, of divers going into the area, so you want to
36 make sure that that's limited.

37
38 There are blue water spear fishers that would like to occupy it.
39 Do we want to limit it to gears where we have trolling only and
40 don't include any spears and no tanks on the boat? Or do we want
41 to limit it by species by putting a limit to only particularly
42 harvested species that we can use?

43
44 HMS does have a required permit. If you are getting swordfish,
45 yellowfin, albacore, or any of the other BAYS-- yellowfin, you
46 have to have either an angling, a for hire, or charter permit. All
47 of those create restrictions on which people can be using and going
48 in there. There is no reason to have as many of these broad, we

1 can limit it down to specific things. We just have to have those
2 conversations and make those decisions but know what we're doing
3 when we go out to set it.

4
5 In my opinion, I think you should reduce it only to particular
6 species, trolling only, limit the gear, and have those
7 recommendations sent down the DAPs and SSCs. But that's mine.

8
9 **MIGUEL A. ROLÓN:** Can you say, "so I move" to that? Yeah. I'm
10 serious if Dr. Habtes can't put that in a language, then we can
11 move forward with it.

12
13 **SENNAI HABTES:** I would move that we remove any of the options
14 that include adjusting the--

15
16 **MIGUEL A. ROLÓN:** Wait. Wait. Okay. Slowly, please.

17
18 **SENNAI HABTES:** Oh, yeah. *I would move that we remove any other*
19 *options that adjusts boundaries, limit to gear and species*
20 *requirements. To allow fishing by trolling in the closed area. So,*
21 *the Hine Bank seasonal closed area.*

22
23 **MIGUEL A. ROLÓN:** It's the Lang Bank.

24
25 **SENNAI HABTES:** Oh, Sorry Lang Bank. And to send-- Is it just the
26 Saint Croix DAP, Carlos, or are we sending it to both DAPs? To the
27 same Croix DAP And SSC along with the white paper for review. The
28 white paper. Instead of "a paper," do the "white paper." Does that
29 address what you guys are looking for, Kate and María?

30
31 **MIGUEL A. ROLÓN:** Liajay, "the white paper" instead of "paper
32 paper." "The white paper." Right.

33
34 **JAMES R. KREGLO:** Second.

35
36 **KATHERINE M. ZAMBONI:** To answer your question, yes. And, you know,
37 I know these can be hard to think on your feet and do it, but, you
38 know, read it again, make sure it reflects what you want. And that,
39 I think, is very helpful for our record in terms of what direction
40 we're all taking and then to know that everyone's in agreement.
41 Because sometimes these discussions happen, not everyone's
42 engaged. I'm left wondering, is that really the will of the board?
43 I don't know. But once you vote on it, then, you know, we know
44 that this is what the Council has asked for. I appreciate it.

45
46 **CARLOS FARCHETTE:** We need a second for it.

47
48 **SENNAI HABTES:** Oh, hold on one second. Before we go there, there

1 is still have some wording to change. After "adjust boundaries,"
2 maybe do a semicolon, and then do instead of "limited," "limit."
3
4 **MIGUEL A. ROLÓN:** Is that acceptable, Sennai?
5
6 **SENNAI HABTES:** I would say for instead of "review," let's have
7 them make recommendations on preferred alternatives. So, delete
8 "review" at the end, and then say "recommend." So, leave "for."
9 So, "for recommendations on preferred alternatives."
10
11 **MIGUEL A. ROLÓN:** Second by Roberto.
12
13 **CARLOS FARCHETTE:** Seconded by? Sabater, go ahead.
14
15 **ROBERTO SABATER:** Second by Roberto Sabater.
16
17 **SENNAI HABTES:** Discussions? I have someone for discussion, Vance?
18
19 **VANCE VICENTE:** I'm just looking at it from a different side, but
20 when you say, "any other," I think between parenthesis, you know,
21 should be "e.g." or "i.e.," id est or for example as. Because when
22 you say "other," you know, other whatever.
23
24 **MIGUEL A. ROLÓN:** Yeah. But we want any other. Keep it open.
25
26 **MARÍA LÓPEZ-MERCER:** Carlos, if I may. What we can do is just say
27 remove option five because that's the only one that is talking
28 about boundaries.
29
30 **VANCE VICENTE:** Okay. So, that that should be specific.
31
32 **MARÍA LÓPEZ-MERCER:** Six. Option 6.
33
34 **VANCE VICENTE:** That should be specific.
35
36 **MIGUEL A. ROLÓN:** Anyway, I like the idiot proof kind of language.
37 So, in the record we have clear.
38
39 **CARLOS FARCHETTE:** We're still in discussion here, right? Okay.
40
41 **MIGUEL A. ROLÓN:** Si.
42
43 **CARLOS FARCHETTE:** I have an issue with just fishing by trolling.
44 Because trolling, you're constantly moving in the water when you
45 can actually go with live bait and be throwing live bait out and
46 fishing. So, I don't know. Do you want to put drift fishing in
47 there? Well, it's up to the motion maker.
48

1 **SENNAI HABTES:** I mean, I was saying my recommendation. Right? If
2 that's not the will of the Council-- I think it should just leave
3 it to "trolling." Right? Because when you are including live
4 baiting and drifting into the areas, then that does have an impact
5 towards possibly catching red hind, particularly drifting below
6 100 feet. Right? And now the question becomes, how much of an
7 impact does that have?

8
9 If you are, you know, limiting it to that, is it going to have a
10 huge economic impact on the fishers? Or are they going to be just
11 as easy to just troll? And are you making a slight imposition that
12 won't cause as many problems?

13
14 **MIGUEL A. ROLÓN:** Mr. Chairman, it is a Robert's Rule kind of
15 thing. You need to decide on the language, final language that you
16 have. You have two.

17
18 **CARLOS FARCHETTE:** Yeah. I'm sure the DAP is going to bring up
19 that language part with the trolling.

20
21 **MIGUEL A. ROLÓN:** No. No. No. I'm talking about right now; you
22 have the language. You have to make sure that when you said,
23 "remove option 6," make sure that you follow with the language as
24 appropriate. Just for the motion, then the second can say--

25
26 So, Kate, can you help us with this. Is that language, correct?

27
28 **KATHERINE M. ZAMBONI:** I'm not the mover so, you know, does it
29 reflect the intention? You know, basically, it's clear that the
30 motion is to eliminate option six. And I like it that we're going
31 to still reference that with "adjust boundaries" just in case
32 anyone's wondering what was option 6.

33
34 **MIGUEL A. ROLÓN:** Yeah, exactly.

35
36 **KATHERINE M. ZAMBONI:** Okay. And then, "limit to gear." I mean, I
37 would like another word after "limit." Like, "limit options for
38 discussion" or "future options to." "Limit future options to ones
39 that would address gears and species requirements". That's good.
40 Okay.

41
42 **MARÍA LÓPEZ-MERCER:** For Sennai--

43
44 **MIGUEL A. ROLÓN:** Wait. Wait. Wait. The owner of the motion. Do
45 you agree with that adjustment?

46
47 **MARÍA LÓPEZ-MERCER:** Well, I need to make an adjustment to the--
48 A suggestion for Sennai that put the motion.

1
2 So, just to clarify, the options that talk about gear also talk
3 about methods. So, it says gear and/or methods, right? So, that
4 means that the trolling is a method of fishing. So, maybe that
5 will be too prescriptive. However, because it's included in an
6 option, it would be evaluated. So that's part of the evaluation of
7 what you just said about economics, socioeconomic, impacts to--
8 whatever it is. But that should be included because it's already
9 included in there.

10
11 So, my recommendation, as a suggestion, will be just to remove the
12 trolling from this one, and then it would address, gear, methods,
13 and species because that's what the options that we have right
14 now. Thank you.

15
16 **MIGUEL A. ROLÓN:** Just another point. I just highlight points
17 before lunch. You're the RA delegate. You can say whatever you
18 want to the option.

19
20 **CARLOS FARCHETTE:** Well, it's up to the motion maker now.

21
22 **SENNAI HABTES:** Yeah. I think you can take it out. So why don't we
23 just do "would address gear, method, and species requirements for
24 fishing in the Lang Bank." Yep. And then, after "requirements,"
25 "for fishing in the Lang Bank seasonal closed areas." Yep.

26
27 **CARLOS FARCHETTE:** So, does the secondary agree with that, Sabater?

28
29 **ROBERTO SABATER:** Yes. I agree.

30
31 **SENNAI HABTES:** And so, I would say, I think that's fine. I just,
32 I do feel it is important for us, when we are sending things down,
33 to be a bit more prescriptive, right? Because these, I feel, are
34 simple decisions that we are taking far too long to make and not
35 necessarily getting the information necessary to make these
36 decisions. Right? We're talking about it, but we're not doing it.
37 So, I want us to think about that a little bit going forward.
38 That's all.

39
40 **CARLOS FARCHETTE:** Any further discussion? Hearing none, all in
41 favor, say "aye."

42
43 **GROUP:** Aye.

44
45 **CARLOS FARCHETTE:** Any nay? Any abstentions? *Hearing none, motion*
46 *carries.*

47
48 Break for lunch? or María?

1
2 **MARÍA LÓPEZ-MERCER:** I have one more thing, related to this and
3 now I'm putting my staff hat. So, we don't have an IPT created, so
4 requesting the Council, it doesn't have to be a motion just to
5 acknowledge that we're going to be creating an IPT for this action.
6

7 **CARLOS FARCHETTE:** Agree.
8

9 **MARÍA LÓPEZ-MERCER:** Do you agree with that? Yes. Okay. That's it.
10 Thank you.
11

12 **CARLOS FARCHETTE:** So, we'll break for lunch. Well, you got 15
13 minutes. No. So, 1 hour, from 1:15 to 2:15.
14

15 **VANCE VICENTE:** Well, I have a question. I'm kidding.
16

17 (Whereupon, the meeting recessed for lunch on December 6, 2023.)
18

19 - - -
20

21 DECEMBER 6, 2023
22

23 WEDNESDAY AFTERNOON SESSION
24 - - -
25

26 **CARLOS FARCHETTE:** So, everybody, welcome back to the 183rd Council
27 meeting. Next agenda item is the Farming Of Tropical Seaweed In
28 Puerto Rico By Gretchen Grebe.
29

30 **LORETTA ROBERSON:** That's Grebe, and I'm 'm taking her place.
31 Loretta Roberson. Just let me know when to start.
32

33 **CARLOS FARCHETTE:** Okay. So, you can go ahead with your
34 presentation.
35

36 **Farming of tropical seaweed in Puerto Rico - Loretta Roverson**
37

38 **LORETTA ROBERSON:** Okay. Great. Great. Well, thank you so much. I
39 appreciate the time and the opportunity today. And I'm mindful of
40 the schedule, so I'll try and go through this quickly.
41

42 I know you had a discussion earlier about sargassum and why do we
43 want more sargassum. so, let me just say that the species that
44 we're thinking of growing are already used in food and for other
45 products. So, on this slide, you can see the number of
46 applications. It's fresh food, processed foods, give it to
47 livestock, use it as a soil amendment. It's used in nutraceuticals,
48 cosmetics, soap, shampoo, etcetera. And then, also biofuels.

1
2 We're also interested in the really valuable ecosystem services
3 that these farms can provide. And so, that includes removing excess
4 nutrients from the water, providing habitat to important species,
5 taking up carbon and also even helping to dampen waves as they
6 come to shore.

7
8 So, what I'm talking to you today about is our seaweed farm that
9 we have in Puerto Rico currently, and this is our project team. We
10 have over 18 different institutions that are involved in this
11 project, since this is really the first time we've had a seaweed
12 farm of this kind in Puerto Rico and the region. And I want to say
13 first a big thank you to The Nature Conservancy, Caricoos, and
14 [CiMa?], who helped support this project and make these network
15 and its interactions.

16
17 So, we actually have 3 different study areas. One in Florida, just
18 outside of Tampa Bay. Also, in Belize through a partnership with
19 The Nature Conservancy. But our main pilot test site is in La
20 Parguera in Puerto Rico.

21
22 Some of the species that we have been testing for cultivation are
23 shown here on this slide. We're focusing mostly on the tropical
24 red species, so gracilarias, halymenia, and some others. We're
25 also interested in, caulerpa racemosa, which is also known as,
26 vegan caviar or sea grapes, as human food consumption. But the
27 other species were selected mainly because of their potential for
28 entering the carrageenan or agar industry, because they have very
29 high contents of those compounds.

30
31 What does our farm look like? Well, we 1st started with a small
32 farm, shown here. This mini farm, it has five grow lines for
33 growing the seaweed. Those are about, 200 feet long, and the system
34 is about six feet wide. We did that initially as a proof of concept
35 and safety, etcetera and understanding the seaweed, before we move
36 to our larger scale catenary design shown here.

37
38 And so now, this one is also 200 feet long, but now it is 100 feet
39 wide, and we can have up to 66 grow lines on the system at one
40 time. You can see, pictured there, one of the buoys for scale. On
41 each corner we have this variable displacement spar buoy. We
42 designed that-- oh, actually, I should say that that's 20 feet
43 tall. We designed those such that, under normal conditions, it's
44 floating at the surface with a small portion above the surface,
45 but if there is a storm, we and then sink the whole entire system
46 to the bottom and still maintain all those grow lines under
47 tension, which is really important to avoid any negative
48 interactions with protected species.

1
2 And so now this is a view of our farm site in La Parguers. We had
3 several test sites around, for those of you who don't know, this
4 red triangle is Isla Magueyes, and Our farm currently is right
5 here at this blue diamond, which is at Cayo Media Luna. We're just
6 off of medialuna. And this is a view of the farm from the surface.

7
8 And you can see that we have lots of organisms associated with the
9 farm. We're also growing, not purposefully, but the habitat showed
10 lots of species of oysters as well as lobsters and king crab. And
11 then as you'll see in a minute, lots of fish. So, we're very
12 interested in that, sort of, habitat provisioning side and the
13 possibility of using these farms to connect habitats.
14 Particularly, nursery habitats with coral reef areas.

15
16 As I mentioned, since this is really the first time, we've had a
17 farm like this in the water, we really wanted to understand all
18 the physical, chemical, biological, and ecological, impacts that
19 these farms might have. So, part of that big team is around
20 monitoring these different parameters. So, we regularly, measure
21 currents and waves.

22
23 We have an acoustic sensor as well that helps us monitor,
24 particularly, dolphins and manatees visiting the site. We do
25 regular water sampling for nutrients, temperature, salinity,
26 etcetera. And then we have some innovative partners who do
27 imaginings with drones, using hyperspectral cameras, as well as
28 autonomous underwater vehicles that help us monitor those,
29 particularly, fish, mobile organisms that are associated with the
30 farm.

31
32 And this is just a short video that helps give you a literal bird's
33 eye view of what it is like in terms of deploying the farm and
34 maintenance, etcetera. So, we have a special vessel, The Damisela,
35 that was designed especially for deploying the farm as well as
36 regular maintenance. This is the Isla Magueyes Lab of UPR Mayaguez
37 and some of the assistance that we had there.

38
39 It involved lots of splicing, but we were able to deploy the entire
40 farm using the Damisela. You'll see right here deploying one of
41 the corner buoys. Conditions are not always that calm. We, mostly
42 dive to service the system. And there, we have these special
43 tensioners that help us maintain everything under tension.

44
45 We're doing regular monitoring of what organisms are there. What
46 particular species have visited. We have also done a test of
47 sinking those buoys to the bottom, and you'll see, we had last
48 year, hurricane Fiona passed over the top of the farm. We didn't

1 sink the farm at that time, and we had no damage or no anything
2 happen to the farm at all. But we did do a successful sinking and
3 raising of the farm.

4
5 So, there you can see them sinking down to the bottom. The farm
6 site is in about 60 feet depth. So, we have divers that go and add
7 air back to the buoy to bring it back up to the surface that you
8 see there.

9
10 And so, what I'm really hoping to get out of this meeting today is
11 feedback, from this group in particular, in terms of, you know,
12 how we can leverage the site and information that we're gathering.
13 As you can see, there's a lot of fish associated with the farm and
14 the seaweed. It would be great to get some ideas on, maybe,
15 protocols that we can use that would match more what types that
16 you're using or any species indicator or target species that we
17 should look for.

18
19 So, I'll just summarize quickly so we have some time for questions.
20 The project goals is, we hope to develop some local markets for
21 the seaweed as food, feed, or fertilizer or others. We want to
22 develop local and large-scale cultivation harvesting of tropical
23 seaweeds in Puerto Rico and the Caribbean as a whole. And we're
24 using local species that have rapid vegetative growth. And then
25 we're assessing environmental impacts on ecosystem services of
26 these farms. And then also, very importantly, we're doing economic
27 modeling and life cycle analysis of the seaweed production to
28 understand what it cost to actually run the farm and is it
29 profitable for those farmers to have this farm.

30
31 And so, I just listed a few initial questions there. If there's
32 any collaborators or any of you are interested in collaborating
33 with us, we'd be very interested in that. What other groups should
34 we be speaking to to engage? How do we involve others, potential
35 stakeholder for this farming exercise? And then, again, how can we
36 best use this site as we're gathering lots of environmental and
37 biological data?

38
39 So, I'll end there. Thank you.

40 41 **Questions/Comments**

42
43 **CARLOS FARCHETTE:** Okay. Questions, Graciela? Vance?

44
45 **GRACIELA GARCÍA-MOLINER:** So, thank you for the presentation. All
46 the species that you're using, the seed is local or are you
47 bringing them from somewhere else?

48

1 **LORETTA ROBERSON:** Well, we try to find some right in La Parguera,
2 but, as of late, most of the seed that we're growing is from Ponce.
3
4 **GRACIELA GARCÍA-MOLINER:** Okay. But local for Puerto Rico.
5
6 **LORETTA ROBERSON:** Yes. Yes.
7
8 **GRACIELA GARCÍA-MOLINER:** So, the other thing is that when you--
9 Well, I was concerned about the habitat. And when you bring them
10 down, you know, especially with storms passing by, is the habitat
11 mostly sand, or is it, rubble?
12
13 **LORETTA ROBERSON:** Yes. That was one of the requirements that we
14 had for our permit was doing the site survey on the bottom and not
15 having it over any essential habitat or seagrass. So, it's just a
16 sandy bottom. There are some soft corals, some sponges, and some
17 individual a manicina, but it's really pretty much sand.
18
19 **GRACIELA GARCÍA-MOLINER:** And one more thing. So you Keep track of
20 the fouling, s, when you're you clean up the lines, etcetera, you
21 keep track of the lobster juveniles, or anything like that?
22
23 **LORETTA ROBERSON:** Yes. Yes. Definitely. And I should say too, we
24 decided that for the farm, we're really only maintaining the grow
25 lines, and I should say maintaining, keeping trying to keep those
26 clean, but the rest of the framing lines and the anchor lines and
27 the buoys themselves, we just let whatever attaches there grow,
28 and that becomes this habitat. The lobsters, especially the
29 juvenile lobsters, really seem to like that a lot and have of
30 places for them to hide and things to eat.
31
32 **CARLOS FARCHETTE:** Vance?
33
34 **VANCE VICENTE:** Yes. Thank you for your presentation. I mean, some
35 of the problems that you may encounter are based on the how
36 ephemeral algae are. Many of these species that I saw there, once
37 they start producing cystocarp or reproductive body, they die.
38
39 **LORETTA ROBERSON:** Yeah.
40
41 **VANCE VICENTE:** They don't have a rhizome system like seagrasses,
42 you know, which can continue propagating for decades or even
43 centuries. That would be one of my concerns.
44
45 And second, the water column that you're growing, trying to grow
46 these algae are very low in nutrients. They're very low in nitrates
47 and phosphates that maybe they could do better in a nutrient rich,
48 area. That will be my other concern. And, also, the other organisms

1 that I saw from your pictures are not necessarily associated with
2 the algae. They're associated with the substrate, you know, with
3 the ropes and the lines and things like that.

4
5 The other projects I have seen where algae are being grown, they're
6 growing them in enclosed systems in order to prevent wave action,
7 which will rip out, practically, all of the fleshy algae species
8 that I saw there. And based on my decades of monitoring, you know,
9 macroalgae, both the, phaeophytes, rhodophytes, chlorophytes
10 they're very subject to being torn apart. I mean, very rarely you
11 see a constant algal patch as part of the benthic ecosystem.

12
13 So, my recommendation is to really reconsider the locations where
14 you're trying to grow these things and having them grow in a more
15 enclosed environment to prevent wave action from ripping them off,
16 and that's my suggestion, but anyhow.

17
18 **LORETTA ROBERSON:** Yeah. No. Thank you. For the attachments, I
19 think since we're physically attaching them, we haven't had
20 problems with them ripping out, from where they're attached. And
21 we chose those sites too so we could be a little bit further
22 offshore and not compete with more inshore uses, and also the
23 habitat. We don't want to interfere with, seagrasses, etcetera.
24 And so far, we've found that we're able to maintain relatively
25 high growth rates.

26
27 And it may be that, because we're vegetative propagating, we
28 haven't seen any reproductive stages yet, and that may change as
29 we go through the seasons, but so far in the year, we haven't seen
30 that. But we do maintain them in the tanks at Magueyes before we
31 move them to the farm, and that water is local water and has a lot
32 more nutrients. And so, they may be absorbing enough nutrients
33 during that time so that when we do move them offshore, they are
34 able to grow at least through that first harvest.

35
36 **VANCE VICENTE:** Okay. One more question. How do you monitor these
37 transplant units? And what indexes do you use to know whether the
38 transplantation process is effective or not? In other words, do
39 you have certain individual transplant units that you can
40 temporarily pull them out and calculate how much volume, the
41 increase in volume, and maybe wet biomass and things like that.
42 Are you doing that?

43
44 **LORETTA ROBERSON:** Yes. Exactly. So, we have individual bags that
45 also help, you know, keep the seaweed together. And then as you
46 saw, some that are just tied to the grow line, but that we can
47 remove, we weigh, and then replant.

48

1 **VANCE VICENTE:** That's good. Thank you. Thank you.
2
3 **LORETTA ROBERSON:** Thank you.
4
5 **CARLOS FARCHETTE:** Graciela?
6
7 **GRACIELA GARCÍA-MOLINER:** So, regarding-- I mean, they appear to
8 be functioning as fish aggregating devices. Is anyone keeping track
9 of what species are coming in and out of that area? And second,
10 you ask for groups that might be of interest. Can you eat them
11 like that? I mean, just pick them up and eat them or--
12
13 **LORETTA ROBERSON:** Yes. Yeah. You can. Several are very.
14
15 **GRACIELA GARCÍA-MOLINER:** Okay. So, Pan American Grains or things
16 like that, that make meals for dog food feed and things like that,
17 that might be--
18
19 **LORETTA ROBERSON:** Yeah. Definitely. So, Yeah. We've been speaking
20 with Purina, actually, they're very interested for some
21 supplements for their food and, kind of, you know, more markets
22 for health products for pets, not necessarily just regular dog
23 food. But and Yep.
24
25 **GRACIELA GARCÍA-MOLINER:** If you can provide us, you know, when
26 you're surveying for the lobsters and things like that, we would
27 be very much interested in knowing if you get pulses of recruitment
28 in that area. So, thank you.
29
30 **LORETTA ROBERSON:** Yeah. Thank you. Yeah. And if you have any
31 particular species of fish, we could keep an eye out for. Because
32 how we do the roving diver surveys is, you know, we don't note all
33 the fish that we see, but we do have a list of a particular species
34 that we know whether they were present or absent during that
35 survey.
36
37 **CARLOS FARCHETTE:** So how long does it take from transplant to
38 cultivation?
39
40 **LORETTA ROBERSON:** It depends on the species, but for the fast-
41 growing ones like the Gracilarias, is between 30 and 60 days.
42
43 **CARLOS FARCHETTE:** So here in the Virgin Islands, we have a drink
44 that they call sea moss. I think you've heard of that. Are you
45 also growing that particular algae for that?
46
47 **LORETTA ROBERSON:** Yes. Uh-huh. Yeah. Both the Gracilaria and
48 there's another species, euchuma, that is, I think the original

1 sea moss was that particular species. There's another solieria, I
2 think, that can be used in the same way. But that would be great.
3 I think that's an easy one to do, to start making the shakes from
4 those species. That's what they do in Belize.

5

6 **CARLOS FARCHETTE:** Yeah. That is good stuff. Vance?

7

8 **VANCE VICENTE:** Yes. There's an old article, like, back in the
9 sixties, which was published by Dr. Diaz P. Ferrer, which is a
10 phycologist. He did some significant amount of work with all of
11 the algae, shallow water algae and midwater algae, and he published
12 the results of all the nutritive mineral contents, you know,
13 proteins and all of the nutrie--

14

15 **LORETTA ROBERSON:** Uh-huh. From Puerto Rico?

16

17 **VANCE VICENTE:** Yeah. Dias P. Ferrer. It was published in the
18 Journal of Agriculture.

19

20 **LORETTA ROBERSON:** Do you have that reference, Vance? [crosstalk]

21

22 **VANCE VICENTE:** Maybe I have it in one of my old boxes. But yes,
23 it has all the species, concentration of the all the nutritive
24 minerals, you know, magnesium, calcium, potassium, etcetera,
25 protein, and the chemistry was done at the Department of Chemistry
26 of the United States Federal Experimental Station in Rio Piedras.
27 And I know the journal, it was the Journal of Agriculture, but
28 it's an old paper. But anyhow, I just wanted--

29

30 **LORETTA ROBERSON:** Like from the seventies or something?

31

32 **VANCE VICENTE:** Well, maybe a little before that. Maybe between
33 sixties and seventies. That's when I was doing the chemical study
34 of the nutritive value, actually, of turtle grass, which was one
35 of the studies on the nutritive values of thalassia testudinum, so
36 I was doing the research, literature research, and I saw this
37 paper, and I was surprised that that had been done. But anyhow.
38 Thank you.

39

40 **LORETTA ROBERSON:** No, that's great. Yeah. And I should ask you,
41 you might know too, I heard from from Miguel Canals that there was
42 a seaweed farm in Fajardo, in Las Croabas in like the seventies.
43 Do you know anything about that?

44

45 **VANCE VICENTE:** No. No. I don't. But another good piece of
46 information. There was an analysis that was done by the Atomic
47 Energy Commission, the atom for the peace program back in the
48 seventies and eighties, and they did not only analyze everything,

1 you know, the whole chemical composition of algae, but also of
2 seagrasses and of crabs and of fish. And like a big green book.
3
4 I don't know how available it is, but it should be available at
5 the Puerto Rico Nuclear Center Library, which now its name has
6 changed. Before, it was Atomic Energy Commission, then it was The
7 Puerto Rico Nuclear--, then it was a Department of Energy. No. The
8 ERDA, Energy Resource Development Administration and then
9 Department of Energy. But is in one of those federal documents.
10
11 **LORETTA ROBERSON:** Okay. Yeah. I'll see what I can do to find out.
12 That's great.
13
14 **VANCE VICENTE:** Okay. Thank you.
15
16 **CARLOS FARCHETTE:** So, we have something on chat.
17
18 **CRISTINA OLÁN MARTÍNEZ:** Question in the chat from Refik Orhun. "I
19 think harvesting rates could answer some Vance's questions. How
20 about Ulva?
21
22 **LORETTA ROBERSON:** Yeah. Ulva, I know it's a little bit more
23 difficult because it is a very fragile seaweed, but there has been
24 advances in Europe in growing that in the open ocean and long
25 lines. And so, growing that actually from seed material, that one
26 is sexually produced. So, we can certainly consider that in the
27 future. And it's also a good food material, very good at absorbing
28 extra nutrients. But we selected these first, again, because they
29 already have uses in a regular market. And, certainly, all any
30 seed weeds that can provide any of those services would be useful.
31
32 **VANCE VICENTE:** Yeah. Ulva also will be a good addition. It's
33 really fast growing. One of the fastest growing, since it only has
34 one or two cell membrane layers, and it can grow in very stagnant
35 conditions. The only problem is as green algae, once they reproduce
36 sexually or if you let them reproduce sexually, they just die. But
37 they do have a high rapid vegetative growth.
38
39 **LORETTA ROBERSON:** Yeah. I know Stacy would be very happy to have
40 a lot of feed for her urchins too.
41
42 **REFIK ORHUN:** Actually, I have another comment. This is Refik, for
43 the record. My chemist friend we used to produce creams in his
44 warehouse. So that's not very difficult to produce a cream.
45
46 **LORETTA ROBERSON:** Yeah.
47
48 **REFIK ORHUN:** And I wonder how difficult would be shampoo, and

1 that's products that people use every day.
2

3 **LORETTA ROBERSON:** Yep. Exactly.
4

5 **REFIK ORHUN:** And it doesn't spoil as quickly once you-- I wonder
6 what a business plan for that, producing those products, would
7 look like.
8

9 **LORETTA ROBERSON:** Yeah. No. Definitely. In Belize, they are doing
10 exactly that. They have face creams, body creams, different soaps
11 and shampoo, hair treatments, and they're marking that and selling
12 that now. And so, I think that would be a great model for Puerto
13 Rico because it's made from local ingredients that are sustainable,
14 and it's a local product that you can use. Like, everyone uses it
15 every day.
16

17 And then also for tourists who want some, you know, local product
18 that's from the sea because you're there surrounded by the sea.
19 We're definitely, including that in our market analysis. Or should
20 I say, is part of our market analysis. Thank you for that.
21

22 **CARLOS FARCHETTE:** Vanessa.
23

24 **VANESSA RAMÍREZ:** Addressing the initial questions about
25 collaborators that I could recommend, of course. Have you kept in
26 touch with the Associations of Fishermen that are around the west
27 side?
28

29 **LORETTA ROBERSON:** Yes. Yes. We've been trying to plan multiple
30 visits, and we have been able to speak with some of them. I'm
31 actually traveling to Puerto Rico next week, and we'll meet with
32 the groups from Cabo Rojo and La Parguera. We're trying to reach
33 out to other associations around the island as well, but really
34 focusing on that southwest area first.
35

36 **VANESSA RAMÍREZ:** Okay. That's, perfect. If you're going to be in
37 Cabo Rojo, I'm from the Fisherman Association in Puerto Real. And
38 of course, we're always engaged to work with all these kinds of
39 projects. So, I will have the staff, give you my information so
40 you can contact me, and I can receive you in Puerto Real and we
41 can also visit the other Fishermen Associations in Cabo Rojo. Also,
42 in La Parguera, I have great contact with them. Thanks.
43

44 **LORETTA ROBERSON:** Oh, wonderful. I would appreciate that. Thank
45 you.
46

47 **CARLOS FARCHETTE:** Any more questions on the seaweed farming? Okay.
48 Hearing none, thank you very much for the presentation. It's very

1 interesting.

2
3 **LORETTA ROBERSON:** Thank you. Thank you so much again for the
4 opportunity. I appreciate it. Good to see you.

5
6 **CARLOS FARCHETTE:** Okay. Before we continue with the agenda, I
7 want to make sure that we've kind of resolve what we need for
8 Grammanik Bank. I don't think we've completed that. Graciela, can
9 you give me a little a little help here?

10
11 **GRACIELA GARCÍA-MOLINER:** So basically, you've began the
12 discussion answering part of the letter that you received from the
13 Saint Thomas Fisherman Association. So, Rick Nemeth has presented
14 to you the information that he has on that alleyway. We need to
15 request from the Science Center, the information on the alleyway
16 and the landings because we don't want to break confidentiality,
17 which is extremely important. And so, you know, we'll come back to
18 you with the answers to the questions that were raised, and we
19 didn't cover today. And then you can decide if you want to move
20 that into an action and do something about it or if you don't.
21 Fair.

22
23 **CARLOS FARCHETTE:** Okay. Thank you. Good. Alright. So, we'll
24 continue with the agenda. Next up is Outreach and Education
25 Advisory Panel, Alida Ortiz.

26 27 **Outreach and Education**

28 **Outreach and Education Advisory Panel- Alida Ortiz**

29
30 **ALIDA ORTIZ SOTOMAYOR:** Good afternoon, everyone. I'm glad to be
31 here. I'll make a very short presentation. I will take two
32 questions.

33
34 Some of the material that I will be mentioning will be also
35 discussed or presented by the liaisons, so I'll wait until they
36 finish and that will be our report from Outreach and Education
37 Advisory Panel.

38
39 As you remember from other presentation that I have made, we have
40 made the compromise of having all of our outreach and education
41 materials, projects, objectives to be in common with the five-year
42 strategic plan communication objectives that the Council has. And
43 it was all based, basically, on Ecosystem-Based Management, the
44 Island-Based Fishery Management Plans, Sustainable fish and
45 seafood consumption, and marine protected areas in Puerto Rico.

46
47 Every material that we are developing is related in one way or
48 another with this communication objective, so that we have a

1 continuation of what we hear in the field and what we give the
2 fishers and the community.

3

4 At this moment, what we're working closely is the outreach and
5 education participation in equity and environmental justice and
6 for that, the liaisons will also have more information because
7 they went to all the meetings that the EEJ group, Brent, had in
8 Puerto Rico, in Saint Thomas, and in Saint in Saint Croix. I did
9 go to the one celebrated in Ceiba, and the relationship and the
10 communication with the participants was excellent. And many of the
11 of the issues that the participants brought as equity and
12 environmental justice is something that they have brought up many
13 times, especially to have better communication, better facilities
14 between the Department of Natural Resources and the fishing groups.
15 So that's something that Brent took a note of that very, very good.

16

17 The other project that, in general, we are working as, outreach
18 and education is the Marine Resources Education Program. They are
19 holding workshops every year, and much of the information that
20 they discuss in each one of the meetings, we have been working
21 with that in outreach and education. So, we see how the information
22 is put into reality when they go to the laboratory and when they
23 talk about the facilities and the conditions of the places where
24 they fish.

25

26 Also, I think it's a very important tool for getting young people
27 from the university, and the last one was from the UPR of Humacao,
28 to develop that Interest in fisheries biology. We need that type
29 of people present, and we also need that the research done in the
30 field can go to the laboratory, to the classroom, to the university
31 and, if possible, even to pre-university education. So, I am
32 participating very intensely in these two areas. Equity and
33 Environmental Justice and also the MREP program.

34

35 I will just mention the products that we have already nearly
36 finished, especially we have been working on the illustrated
37 catalog of the fish and invertebrate species that are included in
38 the Island-Based FMPs. This was a request from all the DAPs that
39 they wanted to have accessible illustrations on the species that
40 are managed. So, we had our first draft completed this past
41 November. It's about 21 pages.

42

43 We will send it to collaborators from the DAPs in Puerto Rico, in
44 Saint Thomas, And in Saint Croix, they will give us more
45 information. They will check out the names, especially the common
46 names for each one of the species because even in Puerto Rico, we
47 have one fish with a name in the east, the same species with a
48 different, more than one name in the west and all over the place.

1 When we use only one, we really don't know what they are talking
2 about. So, after that, this will be available for fishers and the
3 general public.

4
5 Next, we'll show how it's being developed. This is the first part,
6 on the left. This is the book. This is the first page. And then in
7 each page, on the one we will have the introduction. But then after
8 that, we will have very good illustrations of each one of the
9 species with the information, very simple information as to what
10 do they look like, the color, the size, if there is management
11 regulations that apply to the species.

12
13 The catalog will have around 21 pages. We will send this to people
14 that suggested it. We met with them about six of months ago in the
15 DAPs meeting. They will collaborate by checking this, checking the
16 names, checking if there's more information that they would like
17 to have. Checking if there is some information that doesn't mean
18 anything to them, because my references are from what we have
19 already in the local, in the common references of Randall, Reef
20 Fishes, and all that. That's what we have used. But probably, they
21 have different names, they have more information.

22
23 But by the end of December, we expect to have had it reviewed by
24 the stakeholders, especially the DAPs in each one of the islands,
25 and then by the technical, people that can do all those things.
26 And as soon as possible, have it in for printing for next year.

27
28 The other thing that we worked on, and I think I heard that you
29 already have it today, is the CFMC calendar of 2024 and the
30 recommendation was that it was it should be dedicated to
31 information based on the Island-Based Fishery Management for each
32 one of the islands.

33
34 What we did is that we took species of each island and illustrated
35 them for each month. So, we had Puerto Rico for January, February,
36 March, April. May, June, July, August, that was for Saint
37 Thomas/Saint John. And September, October, November, and December,
38 that was from Saint Croix. And this is the information that they
39 have in each one of the islands based. Information that has to do
40 with the name and with a very little description and where are
41 they in the island base? Do they have a closed season? Are they
42 managed by size different parts of the year? So, that information,
43 if they want to have more information with what we have in the
44 calendar, they should go to each one of the island-based documents.

45
46 This will be given to the fishers. It will be given to the people
47 in the fishing communities, to the restaurants and the fish
48 markets, and to all and any stakeholder. Because even in the

1 kitchen, we have to know what we're cooking, and where did they
2 get it. Was it illegally caught, or is it something that is off
3 season, and they are selling it? So, this calendar you will see it
4 everywhere in all of our islands.

5
6 The other book that we're finishing now for December is the
7 illustrated booklet on climate change and marine fishes in the
8 U.S. Caribbean. I have here only the first page, and then the
9 illustrations for the introduction. What does climate change mean?
10 Difference between climate and weather, and this will be something
11 like 16 pages. It's has already been sent to the illustrator to
12 work with it.

13
14 As soon as we have the draft, we will send it to the DAPs, and we
15 will send it also to the people on the Council so that we can have
16 that. Because this booklet on climate change will have the
17 scientific information, but in a very daily language so that they
18 can see what the news means when they say that the weather, the
19 ocean water is getting warmer. The ocean water is getting more
20 acid. What does it mean, and what impact does it have on the
21 resource? But also, it will be very important for this to make
22 very good emphasis on our responsibility as a species and a social
23 species on the problems of climate change.

24
25 So, the fishers and the communities will see the effects of their
26 area of work, but also will find out what they are doing that is
27 making climate change even worse and what should we do to something
28 to either slow it, adapt to it, but things have to be taken, not
29 only from the industrial or from the fishers, it has to be taken
30 from how the society, our society, has been, you know, working
31 with climate change.

32
33 For 2024, we have a preproposal that has been submitted to the
34 Council for the new IRA to conduct workshops with fishers and their
35 communities on these issues of climate changes that impact the
36 U.S. Caribbean marine fisheries. So, what we have for this booklet
37 that is very, very simple, very illustrative, we will use that as
38 a basis for a workshop booklet for the fishers. And we will conduct
39 workshops in Puerto Rico in all the coasts. Probably, two in the
40 North, two in the South, and then one or two in the West and one
41 or two in the East, covering Vieques and Culebra. Also, for the
42 Virgin Islands.

43
44 So, we will have climate change as a general topic, as a common
45 topic for the fishing communities. The other thing we are working
46 on, and it was something that was suggested a long time ago by
47 Adyan, that we should have information on the fisheries for the
48 children so that they can start to recognize the species, the

1 color, their sizes. They enjoy that, and then probably we will get
2 them to be fisheries biologists. We will get to have them working
3 in fisheries. And with that, and it's something that I have dreamed
4 of all my life, is to introduce those concepts on marine fisheries
5 ecosystem to the regular education curriculum. I am not talking
6 about science. I'm talking at every class, every course, every
7 level from kindergarten to high school.

8
9 It's something very sad, but we are, at least Puerto Rico, we are
10 an island, but we get to the water to swim when you are probably
11 an adolescent or an adult. But none of the classes, none of the
12 training of the students in the elementary school have to do with
13 the sea. The sea is water, and at some time, the Department of
14 Education doesn't allow us to get the students to the water. So,
15 we will produce the materials, and we will see how we can have it
16 introduced in the in the regular curriculum.

17
18 The other things, and these are things that the DAPs have asked
19 for. They need one material for snapper/grouper deep-water fishing
20 recommendations on fishing regulations. Apparently, that's
21 something that they have to have with them all the time. So, we
22 have to make the fact sheets. We will have to make the small
23 posters, whatever they need so that all the information is always
24 available.

25
26 The issue of a stock assessment. That's something that we need to
27 put it in a better vocabulary, in a better format that we can
28 understand it after the SEDAR and why does the SEDAR happen. And,
29 also, understanding this management terminology or the why for
30 optimum yield, and allowable catch limit, acceptable biological
31 catch. Those are words. Those are Phrases. Those are all terms
32 that we use in all the meetings that we have with the fishermen.
33 So then, we have to have that information in a very, very simple
34 and easy to understand vocabulary.

35
36 I have been asked, also, to produce a fact sheet on Bajo de Sico
37 and the fishery management regulations in the area. That's a very
38 important place for Puerto Rico in the same way that they are
39 working with Grammanik Bank and with the Lang Bank. Bajo the Sico
40 is one of the ones that needs the same information that you are
41 going to develop for those in Saint Croix and Saint Thomas.

42
43 The OEAP should offer a workshop on fishery management regulation
44 for new DAP members, and it should be similar to the PEPCO
45 workshop. Otherwise, we should introduce, or integrate the OEAP
46 information completely in the PEPCO. The same way that Wilson says,
47 and you will hear him talk about that in his report, the same way
48 that they, sort of, familiarize those beginners, fishers that are

1 beginning to deal with the industry on the vocabulary, on the on
2 the facts, on the signs behind this fishing action.

3
4 That's all I have for my report. If you have any questions, I'll
5 be very, very, very glad to answer. I wish you a very, very happy
6 2024.

7
8 **CARLOS FARCHETTE:** Thank you, Alida. Do we have any questions for
9 Aida? Okay. Seeing none. I'm going to move forward to the-- What
10 happened? Oh, yeah. Okay. Cristina.

11 12 **CFMC Social Media Update**

13
14 **CRISTINA OLÁN MARTÍNEZ:** Good afternoon. Again, my name is Cristina
15 Olán. I'm the social media manager for the Council. I'm going to
16 give you a quick update on what we have been doing.

17
18 As you know already, we have Facebook, Instagram, X which before
19 it was Twitter and YouTube. There are some numbers. I also have
20 the statistics in case you need more in-depth numbers and
21 statistics, please let me know.

22
23 We have been publishing information regarding fishing, seasonal
24 closures of species, meetings, activities. We share information
25 from other organizations, associations, and agencies as well,
26 local and federal.

27
28 We collaborate with Wilson and Nicole with their WhatsApp list. We
29 prepare the messages so they can resend them to their fishers in
30 the different islands. We also have all the documents in ISSUU.
31 You have been becoming familiarized with ISSUU already. The
32 briefing book is there, and the documents of the briefing book are
33 there as well. I have seen some of you looking at it. You can
34 download it, share it, and read the documents there.

35
36 We also publish a monthly bulletin that we upload to ISSUU. You
37 can read from ISSUU or share it. We also share it through the
38 social media and WhatsApp as well. It is distributed, as I
39 mentioned, through ISSUU, social media and WhatsApp. The content
40 is about fishery resources, fishers, announcements, reminders.

41
42 Every month we highlight a fisher from Puerto Rico or from the
43 U.S.V.I.s. Everything that we publish in social media and the
44 bulletin is published in Spanish and English. We have also been,
45 in some of the slide shows, adding voice as well.

46
47 We also have been sharing all the materials prepared for the Big
48 Fish Initiative Campaign. And as always this is the last page of

1 the December 2023 bulletin. Thank you, gracias to all the people
2 that follow us, fishers and all the fishing community and the
3 people that are interested in marine resources and fisheries.
4
5 Thank you very much. If you have any questions, I'm here. If not,
6 you can always reach me through my email or through the inbox, DM.
7 As always, we are always answering the DMs and inbox because people
8 also make questions to us or requests on materials and documents
9 from the Council. Thank you.
10
11 **CARLOS FARCHETTE:** Thank you, Cristina. Any questions for Cristina?
12 Alrighty. Hearing none. Next on the agenda is the--
13
14 **SENNAI HABTES:** One question.
15
16 **CARLOS FARCHETTE:** Sennai.
17
18 **SENNAI HABTES:** Cristina, I believe we've already mentioned, we
19 have for the NOAA strategic planning process, the communications
20 meetings that we do. I was wondering if we could add you into some
21 of the conversations for that working group. And if you wouldn't
22 mind if I gave that presentation so we can summarize it in our
23 communication strategies that we're trying to put together. Yeah.
24 Great.
25
26 **CARLOS FARCHETTE:** You guys in Fish and Wildlife have an outreach
27 person also? Is that what you call?
28
29 **SENNAI HABTES:** We have liaisons, and our fisheries biologists do
30 our outreach, as well as myself. Yeah.
31
32 **CARLOS FARCHETTE:** Okay. So, Next up is the liaison reports.
33 Liandry De La Cruz.
34
35 **MIGUEL A. ROLÓN:** Carlos, before you can do that, our shy social
36 network expert forgot to mention that she improved the web page
37 that we have, and now the briefing book is in the web page as well.
38 So, you just punch it there and you have the documents and
39 everything.
40
41 **GRACIELA GARCÍA-MOLINER:** Good.
42
43 **MIGUEL A. ROLÓN:** You don't have to rehash the whole thing, but at
44 least for them to see it.
45
46 **GRACIELA GARCÍA-MOLINER:** Day 1, day 2.
47
48 **MIGUEL A. ROLÓN:** By the way, María López loves it, so we're okay.

1
2 **SENNAI HABTES:** Mr. Chair, if I may.
3
4 **CARLOS FARCHETTE:** Sennai.
5
6 **SENNAI HABTES:** Sorry. One more question. Cristina, for the Big
7 Fish Campaign, have you guys started rolling out, like, information
8 on social media associated with that?
9
10 **CRISTINA OLÁN MARTÍNEZ:** Yes.
11
12 **SENNAI HABTES:** Okay. When you do that, do you mind-- are you
13 sharing it with Nicole Greaux and Liandry and then also share with
14 myself, and we can see if we can get it post it to our local agency
15 social medias whenever it comes out as well.
16
17 **CRISTINA OLÁN MARTÍNEZ:** Okay. Thanks.
18
19 **SENNAI HABTES:** Alright. Perfect. Thanks.
20
21 **CARLOS FARCHETTE:** You want to follow-up?
22
23 **SENNAI HABTES:** Apparently, we are already doing this. My
24 apologies. Nicole Greaux is on top of it, as she always is, as the
25 fisheries liaison for Saint Thomas.
26
27 **ALIDA ORTIZ SOTOMAYOR:** Exacto.
28
29 **SENNAI HABTES:** I'm sure both her and Liandry will probably have
30 it in their reports. So, my apologies for wasting your time.
31
32 **ALIDA ORTIZ SOTOMAYOR:** Exacto.
33
34 **CARLOS FARCHETTE:** Okay, Liandry, floor is yours.
35
36 **LIANDRY A. DE LA CRUZ:** Afternoon. Buenas tardes. No estoy
37 nerviosa, tengo frío. Mucho frío. I'm going to do the liaison
38 report for Fish and Wildlife.
39
40 **MIGUEL A. ROLÓN:** Liandry, excuse me. Can you identify yourself
41 for the record?
42
43 **CFMC Liaison Officers Reports**
44 **St. Croix, USVI-Liandry De La Cruz**
45
46 **LIANDRY A. DE LA CRUZ:** Yes. I'm the fisheries liaison and a port
47 sampler from Saint Croix for Fish and Wildlife. Liandry de la Cruz
48 Quiñones.

1
2 So, first I want to start with the activities and initiatives that
3 I had the pleasure of being a part of this year. Since August,
4 I've gotten the opportunity to connect, not only with different
5 kinds of fishers, but the general community, which was one of my
6 main goals when I started in May, in so many different ways.

7
8 As the holidays approached, many different events, tournaments,
9 initiatives popped up and I was able to share with so many families
10 what it means to be reef responsible and begin teaching children
11 and families the importance of this kind of education.

12
13 At the same time, I was learning more about the pelagics that we
14 fish. And the events recognized the efforts of men, women,
15 families, kids, even the veterans of our island. I engage with
16 kids of all ages. And after all, I know now more than anything,
17 how essential it is to carry out this kind of education to as much
18 communities and people that we can.

19
20 Opportunities that I even grew up unaware of. I didn't even know
21 I had this many things for fishing or how essential fishing was
22 until I got into this field. But it really is able to bring together
23 who we are, our culture, our interests and we even have students
24 in our JROTC programs. We have JROTC from middle school up until
25 high school, and that's a leeway for kids to be enrolled in the
26 military once they're out of high school.

27
28 So, many of these fishers I got to talk to. There are people
29 willing to share what they know. They even offer me, like, Gerson
30 and so many other fishes, they offer me the chance to be able to
31 fish with them and to come out with them, even if it's just to
32 spend a day and to teach me the things that they know. Even in the
33 next year's tournaments, just to show me what it's like for them
34 on a day-to-day basis.

35
36 It's events and opportunities that are so family oriented and so
37 important to tap into, because this is the kind of culture that
38 us, as an agency, in other words, Fish and Wildlife, must be able
39 to demonstrate in order to build that trust that's so necessary in
40 the work we do with the community.

41
42 I also helped put together one of the first official Equity and
43 Environmental Justice focus group workshops alongside Brent
44 Stoffel on Saint Croix. He was super patient with me, and it was
45 an amazing success. It gave selected fishers, who also brought
46 their families and their loved ones, the chance to talk personally
47 and from their firsthand experience about the issues that they
48 consistently face in fisheries and because of current management

1 on Saint Croix and the changes that must be made if we're ever
2 going to reach a point where we could all cooperate on a genuine
3 and trusting basis, and if we want to see more advancements on how
4 we work together, or could potentially work together as a team.

5
6 I think it's safe to say that they felt hurt to some extent, but
7 what will push us forward, or even more forward, is if we had the
8 chance to show them our genuine efforts in putting what they had
9 to say to good use. Start changing their minds in terms of coming
10 out and attending these events even more and being able to feel
11 comfortable enough to share how they feel and what they think,
12 with us, with the government, with NOAA and etcetera.

13
14
15 Like I said, every event was super beautiful. From here on now we
16 learn together, and we make a presence, and we start reaching out
17 to those who matter, our fishers, our communities and our loved
18 ones.

19
20 So, I had a bunch of pictures and I wanted to show them all, but
21 I picked the ones that, well, I guess I just picked the ones that
22 showed what I really wanted to see. Yeah. These are the pictures
23 from the events and award ceremonies. The first is, our winning
24 yellowfin tuna and it was the only tuna caught, because most of it
25 was wahoo and mahi and it was from the Dudes and Dames Shootout.

26
27 It was caught by Taina Velez on the day for the dames, which was
28 on Saturday. And it comes from the winning family which is in the
29 picture for the award ceremony. It was a Sanchez family. They
30 fished on both days together, and separate males and females, kids.
31 And the medal was given to her baby. His name is Ricardo Jose
32 Sanchez. I'm mentioning their names and who they are because they
33 matter. It's very important to get to know them and show them why
34 they are so essential to have them on here.

35
36 But yes, I showed that picture as well because he is growing up to
37 be a prodigy in fishing as well. As small as he is, I watched him
38 during the tournament, and he was super interested. He was not
39 scared at all. He was running around, almost off pier, much like
40 all the children of the families that I get to see and meet.

41
42 The other event was the trick or treat events. There was a lot of
43 lights, so the picture isn't too good. But that's a moko jumbie
44 standing on the side. It was hosted by a restaurant called Louie
45 & Nacho's, which is next to the fishing market, next to what we
46 call small dock, it's on the 2nd pier in Frederikstedon on Saint
47 Croix. They were very interested in us making an appearance at
48 their event, and it gave me the opportunity to start teaching

1 families and kids who actually really appreciated the effort to
2 carry out that kind of information even on Halloween night.

3
4 Although we live on an island, we have to understand that we aren't
5 always educated so heavily on our impact. I knew this because as
6 I talked to them, they knew little things, but they were so much
7 more interested in understanding even more about our fishing
8 communities and the importance of it and how they make such an
9 impact to our environment. Their reaction, their appreciation on
10 their well-being is and should always be our drive to maintaining
11 our fisheries.

12
13 So, yes, I do a lot with Reef Responsible, because it was my main
14 thing when starting to work in this position. I have made it a
15 goal to finish a few initiatives that I and the agency had pending.
16 It took a little longer than usual as I dealt with school and more
17 events on interested fishers that kept popping up. But these are
18 things that are going to be taken into 2024 to truly begin making
19 that impact.

20
21 This includes collaborating with the Good Food Coalition to begin
22 including fishers into the fishers and farmers section of their
23 phone book, thus expanding the limit of people who could conduct
24 business with our fishers. From restaurants to anyone just trying
25 to buy fish and who have access to that phonebook and can see the
26 information provided in that section.

27
28 I also began some work with the local food on farm Council to begin
29 efforts into considering our fishers as farmers in order for them
30 to gain more access to the opportunities offered to farmers. To
31 gain recognition for the work that they do and gain benefit of
32 such a label in our island. Our island is mainly agricultural, and
33 fishing compared to the other islands In the Virgin Islands.

34
35 But yes. I'm also finishing up a children's edition of the Reef
36 Responsible training presentation and looking at potential
37 materials. I'm working on creating more ideas to carry this
38 education to schools, programs, after schools, families, so much
39 more. This kind of education is really important because our
40 children should be able to grow up understanding that, living on
41 an island. It should be taught from young. Should be discussed
42 within families, even if those families don't fish, because that's
43 the things that we depend on. That's the things we eat.

44
45 Even if they don't fish, this is passed onto their generations and
46 their kids. This is what provides us with that security in the
47 future of our fisheries, through their knowledge. Now we have the
48 education and the knowledge and the information, but it won't ever

1 make a difference if we don't share it with everyone that we can.
2 Not only fishers and restaurants, but to those families that might
3 not have grown up with that kind of understanding, seeing it from
4 their parents and their grandparents like I did.

5
6 And so lastly, I am finishing up the design of the Fisher's
7 Phonebook to include all the newly interested fishers, from the
8 times of our pre-registration and from the ones who are coming to
9 renew their licenses nowadays, because there's still some renewing
10 their licenses by the way. But yeah, to get that information
11 available to all the restaurants with the purpose of minimizing
12 illegal purchase of fish, the importation of fish and also helping
13 our fishers to support themselves through other methods that we
14 could make the effort of providing them with. It's a small help,
15 but it's one, nevertheless, that they're willing to cooperate with
16 us on.

17
18 And lastly, I want to talk about what's next for our program and
19 for outreach on Saint Croix. With the updated phone books and
20 presentations, after what seems like a long period of time, we
21 will begin to conduct restaurant and fisher once again and begin
22 getting program materials into restaurants. We have a lot of
23 materials that are in some restaurants that we used to work with.
24 But those materials are really outdated, and they now want to be
25 able to get that new training and get those new materials.

26
27 It's stuff that their customers come and see, and just random
28 people come and see. They ask questions about it and they're able
29 to talk to them. They're basically, people who are able to transfer
30 the education that we give them on their own, even being owners of
31 their own businesses and restaurants.

32
33 But yeah, not only to restaurants, but other possible locations,
34 like dive shops, marinas, and etcetera. And begin spreading the
35 presence of the program on formally educating and certifying them.

36
37 Something different restaurants have expressed looking forward to.
38 Again, this includes bringing the presentations to children, like
39 I mentioned before, and collaborating with marine programs. We
40 have new marine classes that have been newly implemented in our
41 high schools. I know because they started implementing them in my
42 last year of high school. I didn't get to experience them, but a
43 lot of the kids that are coming in, really do understand. Well,
44 while I talk to them, and while I get to know them, on my personal
45 time, they're starting to develop these interests they didn't even
46 know they had in these classes.

47
48 So, our goal is to begin the transition of the education that we

1 could provide into our school's curriculums in order to make it
2 something common and something known. This transition should
3 follow into homes and hearts alike. Events that can be created
4 entirely about the program, like once before. This is something
5 that older fishers have also talked to me about at different
6 events, how they miss seeing how much of an impact the program was
7 making and how it brought our communities together. They were
8 learning at the same time, they themselves, even being fishers.

9
10 So, to begin sharing what we know about the general fisheries
11 industry as well and that includes things like essential species
12 to our economy, using materials like the grouper ID guide I just
13 got today. And protected species that are important to the
14 environment, our ecosystems, fish ID. General information like
15 that, being able to get it to our communities, make it a
16 conversation, again, by anyone and everyone.

17
18 From this, we could continue to develop more programs and
19 initiatives directed towards marine education on conservation.
20 Begin making our locals and our children a part of those
21 initiatives, making it important resources for children interested
22 in it from young.

23
24 Everything that I have, I got it by luck. It wasn't because it was
25 so known, and it was so accessible. So, my goal is being able to
26 spread it into our communities, into our projects, into our homes
27 so that they could come to school anywhere they go. These are the
28 kind of opportunities being presented to them and they have a
29 greater chance of filling our industries, filling our agencies and
30 our divisions with the knowledge that they gain from young.

31
32 And lastly, working with those collaborators and sponsors from
33 these events, common families and local businesses like the Sanchez
34 Family, like Bengoa's Cooling, like Golden Hook, to begin creating
35 joint events for our children and fishers alike. This includes
36 things that they talk to me about, like online tournaments for
37 kids that they want us to start putting back on by next year.

38
39 The idea is to begin spreading the word of those events through my
40 presentations while having our presence at those events as well.
41 And, yes, to begin getting them from a young age to start
42 experiencing these things and being a part of them.

43
44 Our mission should be making this a sure chance for every child
45 and person. Sharing these things with the people that we truly
46 created them for. Begin targeting the heart of our islands in the
47 most influential areas. This includes community centers, schools,
48 programs, after schools. And as we work together, we can move

1 forward. And as we move forward, we could begin building this new
2 culture within our agencies in order to make our initiatives and
3 environments more family and citizen centered and begin building
4 that trust on collaboration between everybody once again.

5
6 Next slide. Thank you. This is the end of my report. Thank you for
7 listening.

8
9 **Questions/Comments**

10
11 **CARLOS FARCHETTE:** Thank you, Liandry. Any questions for Liandry?
12 Vanessa?

13
14 **VANESSA RAMÍREZ:** Thank you, Mr. Chair. Vanessa Ramírez for the
15 record. Just to tell you, continue with that energy and working
16 with your young fishermen. You're going to be a big resource in
17 this position and I know that you're doing a great job in your
18 area. Thanks.

19
20 **LIANDRY A. DE LA CRUZ:** Thank you.

21
22 **CARLOS FARCHETTE:** I have to agree with what Vanessa said. I think
23 Liandry is doing an excellent job, and the children are our future.
24 Once we get them to understand the need for sustainable fisheries,
25 the better it's going to be for everyone and the resource.

26
27 So next we have, Nicole Greaux.

28
29 **St. Thomas/St. John-Nicole Greaux**

30
31 **NICOLE GREAUX:** Good afternoon. Nicole Greaux for the record. I do
32 not, for once, have a presentation. So, I'm just going to give a
33 brief report.

34
35 This year, or since August, there have been some things that we
36 have been involved in or that I have been involved in as liaison.
37 I'm just going to touch on the things that were the most
38 significant.

39
40 So, in September, we had the EEJ meeting. That was held at the
41 Emerald Beach Resort. There were fishers there that had never been
42 to any sort of meeting before and it was very interesting to see
43 that they had a lot of opinions on issues from the federal rule
44 management, with things dealing like the lobster closure, the
45 enforcement outside of the 3 mile limit and also with how they
46 feel about their voices not being heard when it comes to decision
47 making with rules and regulations. So that was taken into
48 consideration by Brent.

1
2 Also, through the EEJ meeting and these fishers speaking with Mr.
3 Stoffel, we have realized that there needs to be some other form
4 of communication or maybe availability through the enforcement
5 section of DPNR and then also forming a relationship between them
6 and our Division of Fish and Wildlife where they do not feel
7 apprehensive about coming in and asking questions or stating their
8 opinions on different rules and regulations that they see probably
9 need to be taken a second look at. All in all, the meeting in
10 September was extremely useful and I do believe that Mr. Stoffel
11 got a lot of information to bring forward out of that meeting.

12
13 The next event was the Reef Responsible Table at our Fishing Youth
14 Journey that was held by the Game Fishing Club out on the east
15 end. Now, this was an opportunity for us to not only pass out
16 materials to the young kids that were there, but also to help them
17 with things like fish identification. Through that, we were able
18 to realize that we probably should have more books available
19 through the schools and also at the Game Fishing Club to give to
20 these kids so they can have a ready reference available for when
21 they go out and they see these fish so they can easily identify
22 them.

23
24 The Coral Reef Task Force was at an event held at Fort Christian.
25 It was surprising, to me, to know that a lot of these coral
26 scientists were not only unfamiliar with different fish species,
27 whether I gave them the scientific name, but also some of the
28 relations towards these fish species and the coral reefs. That was
29 an eye opener for me.

30
31 The Reef Responsible information that we had there was handed out
32 to a majority of the scientists that attended the Coral Reef Task
33 Force. So they are going to be a bit more informed on the
34 relationship between certain species of fish and the corals that
35 they are trying so hard to protect.

36
37 The Good Food Coalition that Liandry had mentioned, had asked Reef
38 Responsible to help them with getting a list of fishers that we
39 consider fishers that are in good standing, that know how to fish
40 sustainably. In saying that, I do want to say that the Virgin
41 Islands have some of the most regulatory enforcement and rules for
42 our fisheries. So, all in all, the majority of commercially
43 licensed fishers that are going into that phonebook are already
44 considered a sustainable choice, due to the fact that they are
45 heavily regulated.

46
47 The only thing that we looked out for myself and Emily, who was
48 the person in charge, is to make sure that fish species that were

1 going into the phonebook were sustainable. So, some things like
2 swordfish were removed from the list. Imported seafood was removed
3 from the list, just to make sure that the products and the fishers
4 that were going in there were solely locally grown.

5
6 Another thing that I was responsible with doing was trying to find
7 information on climate change research dealing with the marine
8 fisheries. Through that, I realized that there are studies that
9 are taking place within Saint Thomas and Saint John, but the factor
10 or variable that is specific or inclusive of the fisheries, is
11 either inferred to or it is just a tactic subject. But nothing has
12 been established between that correlation, that correlation being
13 climate change and the effects on what was being studied. Whether
14 that was the mangroves or specific corals, there was no information
15 that was in tie with climate change factors.

16
17 I also realized that there was a mandate that was passed for a
18 climate change initiative by the interior in 2016 that
19 unfortunately we have not moved forward on. So, I didn't go any
20 further to see whether the Council had anything to do with the
21 issuing of that particular mandate, but that is something that I
22 would like to bring before the Council as the outreach and
23 education liaison to state and clarify that we do desperately need
24 to have more projects within the Virgin Islands.

25
26 I can only speak for Saint Thomas and Saint John that are directly
27 related to the effects of climate change, pH levels, temperatures,
28 the die offs of specific things, in relation to climate change and
29 things like the mangrove habitats, the benthic habitats because we
30 currently have none of those studies being done, and there are
31 volumes and volumes of information that comes from Puerto Rico.

32
33 I also reached out to 2 professors at the University of the Virgin
34 Islands, and they have told me that they will speak to some of
35 their master's students that are doing studies right now, to see
36 if maybe they can include climate change factors into that as well.

37
38 The Reef Responsible program is quickly becoming our main source
39 of education and outreach. So, a lot of the information that I
40 receive from the Council, being the wonderful grouper guides that
41 we've received, the posters, the booklets that I mentioned earlier
42 up in the year and my last report from ISSUU, we take those and
43 they come with me to the Reef Responsible education programs that
44 we have.

45
46 So, I'd like to say thank you very much to the Council for providing
47 those materials to me so that I can in turn pass them out onto the
48 public. And that concludes my report. Thank you.

1
2 **Questions/Comments**
3

4 **CARLOS FARCHETTE:** Thank you, Nicole. Any questions for Nicole?
5 Miguel?
6

7 **MIGUEL A. ROLÓN:** Not a question, but to Nicole and the other two
8 liaisons. The project that we are going to put together with Dr.
9 Alida Ortiz for the IRA funds, will include the three of you. We
10 are going to take-- Some of the recommendations that you have will
11 be included in the report. So probably, we'll be talking to you,
12 Liandry and Wilson during this coming week. Dr. Martha Prada and
13 Aida Ortiz are in charge of that. They will call you.
14

15 **CARLOS FARCHETTE:** Thank you again, Nicole. Wilson?
16

17 **Puerto Rico-Wilson Santiago**
18

19 **WILSON SANTIAGO:** Yes. Thank you, Mr. Chair. Wilson Santiago for
20 the record. I am the Puerto Rico Fisheries Liaison. This will be
21 my report from August, since the last meeting to now. Some of the
22 of the activities that I did before August, they are not in this
23 report.
24

25 Okay. So, since August to now, we have been sending the educational
26 post via WhatsApp. As Cristine Olán said, she has helped us a lot
27 with the material to send those posts via the WhatsApp broadcast
28 list. The list of the fishers, the contacts of the fisher has been
29 going up. Right now, I have, like, more than 500 fishers, that are
30 receiving weekly, educational, closures, and materials on federal
31 and local.
32

33 We are continuing supporting the fishers with issues and
34 information via the mobile or in person. We are giving them
35 educational material for the fishers and fishing communities. For
36 this, we travel-- I live in the west side of the island, so for
37 this, I travel around the island and visit the municipalities of
38 the island as well as Vieques and Culebra.
39

40 For that, I have my partner Jannette Ramos, from the Sea Grant
41 Program. She is always accompanying me in these travels. We are
42 helping with the MREP Puerto Rico steering committee. A couple of--
43 - two weeks ago, we participated in the MREP Southeast Workshop.
44 So, we learn a lot of the science and management and all the
45 communications that those fishing in the Gulf and the South
46 Atlantic have. So, it was very good feedback and mixture of
47 cultures that we have. For that, Vanessa Ramírez was with me. Right
48 Vanessa? We had a very good experience.

1
2 So, participating in the Caribbean communication project meetings.
3 For this thing, monthly, we have been meeting, via Zoom. Right
4 now, I'm in that communication. I'm participating in the
5 communication meetings with Sennai, Stephanie, from the Science
6 Center.

7
8 I also participated, like a month ago, participated in the
9 presentation of the documentary. I think her name is Claudia--
10 Claudia, I don't remember the last name. This is a student from
11 the college of engineers. Well, this girl made this documentary
12 about the Fishing Village. Specifically, from Cabo Rojo and maybe
13 around the island.

14
15 Dr. Alida Ortiz couldn't go to this presentation. So, she invited
16 me as a liaison, and I went. It was pretty good. I can say to maybe
17 put her in communication with the Council or maybe she can present
18 this documentary here in the Council in some next meetings.

19
20 Continue supporting the NGO with new projects in communication
21 with the fishers. For this NGO the presentation that you heard
22 about the seaweed farming, we have been supporting them with the
23 communication with the fishers, giving them some contacts of
24 fishing villages, presidents, administrators around the island, so
25 we are supporting them.

26
27 So, my next steps are, we will continue supporting the educational
28 program for recreational fishers. Since August to now-- the
29 educational program for recreational fishers is with Helena
30 Antoun. This year we started giving the present meetings. So, since
31 August we haven't given any meetings.

32
33 Also, the PEPCO program, we haven't had any meetings since August
34 to now, but during the year we made five of the PEPCO programs.
35 PEPCO program is an educational program for commercial fishers.

36
37 So, continue giving support for the Council, the DNER, and other
38 agencies regarding communication for fishing communities around
39 Puerto Rico. Continue giving support to the social medias, the
40 CFMC, DNER, Sea Grant, and have a partner from the DNER in the
41 recreational program, statistic program. They are doing a pretty
42 good job, really. So, we support them and participate in some of
43 their publications.

44
45 Participating in workshops for any new topic that we can pass to
46 the fishing communities. This is like the example from the MREP
47 Southeast workshop. So, we learn a lot of the science and
48 management in those Council and that other area.

1
2 Support the fishers, with issues with their DNER license and
3 permits. My phone number is private but it's public for everyone
4 really. Nelson and all the fishers here, everyone knows here that
5 my phone is public, but I have an hour just to call. All days,
6 Sunday, Saturday, I'm assisting them with issues with their license
7 and permits. Whatever I can do, I help them. Also, bring to the
8 community educational material to the fishing communities and
9 communicate with them to know what they can do better regarding
10 the outreach and education of fishing communities.

11
12 I also, in my in my participation as a liaison, participated as
13 well in the EEJ meetings here in Puerto Rico. There were four of
14 them. North, West, South and East. So, I want to talk a little
15 more about what we heard in those meetings, and give thanks to
16 María Del Mar, Graciela, Jeannette Ramos as well. My work was more
17 about the communication with the fishers to invite the fishers,
18 with Jeannette Ramos of Sea Grant.

19
20 Some of the issues that I can remember that were all the same in
21 the four corners of Puerto Rico was pollution. Pollution for them
22 is like the major problem. Pollution regarding the discharge in
23 the river mouth, the construction near the coast, some fishing
24 villages that are destroying them due to private persons buying
25 the land to build buildings or apartments or anything. So that
26 contamination has been an issue for those fishing communities.

27
28 Also, the communication with the local and federal governments. So
29 specifically, the issue for them was more regarding the economic
30 help, the Federal economic help that comes to the island. The
31 communication with the fishing communities is very low. So, that
32 was one of the major issues that we heard from the fishers as well.

33
34 Issues, concerns and participation from fishers. Puerto Rico DNER
35 commercial fishing license, like I told you in the past slide.
36 Electronic statistics report, how to use it. I also have a contract
37 with DNER as a port sampler, so I am working with the eReporting
38 APP, the electronic reporting APP, commercial. Also, all week, I
39 have been attending calls, messages on how to use the app. We even
40 made a guide on how to use the app. So, every time they have some
41 issues, they just call me or call the office.

42
43 Fishers, via feedback sent from the WhatsApp broadcast list, are
44 more interested in participating at meetings and bringing
45 comments. We have seen this in the DAP meetings. We have more
46 participation from the fishers. I didn't put it here, but one major
47 issue that we heard from the EEJ meetings around the island and
48 through feedback via the WhatsApp broadcast list, was regarding

1 the communication in Spanish. Like, yesterday, Kevin and Jessica,
2 were presenting the NOAA permit website. One comment that I made
3 was, a question that I had was if the website was in Spanish. That
4 is a very huge concern from the fishing communities.

5
6 I was making a study with Ricardo López, and we found that only 27
7 maybe 30 people around the island have an HMS Caribbean small boat
8 permit. I know that maybe Vanessa can correct me on this, maybe
9 some of them don't know how to apply for it because it's in English.
10 So, I know this is a recommendation that NOAA fisheries has heard
11 a lot of time but translate it. Don't just translate it with the
12 browser but give us the choice of choosing a different language.

13
14 **MIGUEL A. ROLÓN:** Wilson, a way that you can convey the message
15 just what they taught yesterday, use the browser and you have the
16 whole thing.

17
18 **WILSON SANTIAGO:** Yes. But sometimes the Google translate can bring
19 some--

20
21 **MIGUEL A. ROLÓN:** No. No. I agree with that, but the other thing
22 is that you can get together with Alida and see if we can have a
23 fact sheet on how they can apply and where to go to apply for it.

24
25 **WILSON SANTIAGO:** Yeah. We have worked together with Delisse Ortiz
26 from HMS and all the fishers that come to me and ask, "I want to
27 fill out the form for the HMS permit," I just send her their
28 telephone number. She's Puerto Rican, so she's just always helping
29 them.

30
31 So, that will be all for me. Cristina, can you go to the-- That's
32 my contact number and email. Any question or something. Thank you.

33
34 **CARLOS FARCHETTE:** Thank you, Wilson. Any question for Wilson?
35 We're going to move forward here real quick. Thanks, Wilson. So,
36 I have got to bump the agenda again. I apologize for that, but
37 that happens. We're going to go to the NOAA Fisheries' Equity and
38 Environmental Justice Report Update.

39
40 **NOAA Fisheries' Equity and Environmental Justice (EEJ) Strategy**
41 **Update-NOAA Fisheries**

42
43 **BRENT STOFFLE:** Hello, everybody. This is Brent Stoffel from the
44 Southeast Fisheries Science Center. I'm going to ask whomever is
45 there to go ahead and advance the slides for me as we move through.

46
47 Before I begin, I have to say what a wonderful out reporting that
48 was, by the liaisons. I almost feel like I don't even need to do

1 my presentation. They did such a comprehensive job of responding
2 to some of the key issues. But that having been said, let me go
3 ahead and try to run you through as quickly as possible some of
4 the key items, that we have learned from our focus groups and catch
5 you up on what some of the future steps are, so that you can see
6 the progress that's being made.

7
8 So let me begin first by saying, thank you to my Regional Office
9 partners, Heather Blough, María López, and Sarah Stephenson, for
10 all their time and effort working on the issues related to EEJ and
11 the people of Puerto Rico and the U.S.V.I., specifically those
12 that assisted with the focus groups. In addition, we could not
13 have been as successful as we were without the help of Council
14 staff, the liaisons from Puerto Rico and U.S.V.I., Wilson, Liandry,
15 and Nicole. Thank you for your time and effort and great concern
16 for advancing this charge.

17
18 To Jeannette and Alida in Puerto Rico and, of course, Carlos and
19 Gerson in Saint Croix, we could not have had such engaging
20 discussions without your assistance. Some of these relationships
21 are new, and we are creating a bond of trust and improved
22 communication. And some of these relationships go back 20 years of
23 working together on a number of issues and other basis for much of
24 the social science research conducted in the U.S. Caribbean. For
25 all these relationships, I am grateful and without them, we could
26 not be moving forward in such a manner as we are right now.

27
28 Let me give you a little background info to get us up to speed.
29 We're still on the title slide. As a reminder, the National EEJ
30 Plan was finalized and rolled out last spring. This plan requires,
31 the development of region-specific implementation plans. Today, we
32 will update you on the status of that work and review key takeaways
33 to date. It is our hope that you will take this opportunity to
34 make sure that we got it right.

35
36 As a reminder, this initiative is focused on advancing equity and
37 environmental justice through our external mission related work,
38 so it's interconnected with, but separate from the agency's
39 internal DEIA efforts, which focus on cultivating a diverse and
40 inclusive workforce through implementation of our diversity and
41 inclusion strategic plan.

42
43 Equity. Let's go over some definitions that are key to this, just
44 as a little background. Equity means the consistent and systematic
45 fair, just, and impartial treatment of all individuals, including
46 individuals who belong to underserved communities that have been
47 denied such treatment.

48

1 Environmental justice is the fair treatment and meaningful
2 involvement of all people, regardless of race, color, gender,
3 national origin, or income, with respect to the development and
4 implementation, and enforcement of environmental laws,
5 regulations, and policies but not but not limited to equitable
6 protection from environmental and health hazards; equitable access
7 to decision making processes; an equitable opportunity for
8 disadvantaged communities that have been historical historically
9 marginalized.

10
11 Underserved communities have been systematically denied a full
12 opportunity to participate in aspects of economic, social, and
13 civil life. These include geographic communities as well as
14 population sharing particular characteristics, such as gender,
15 ethnicity, and a variety others listed here. This is all based on
16 the Executive Order Definition from 13985.

17
18 This is basically how EEJ is impacting our lives at NOAA right
19 now. It is helping us to develop a framework to incorporate EEJ
20 into our daily activities. It is requiring us to create step down
21 regional implementation plans, and it's seeking to remove barriers
22 related to EEJ. It also seeks to promote equity in all that we do.

23
24 As a refresher, these are the six objectives outlined in our
25 national EEJ strategy. The first is to broaden the research and
26 monitoring work that we do to identify underserved communities so
27 that we can better understand and address the impacts of our
28 decisions on their livelihood and culture. A second objective is
29 to incorporate EEJ into our policies and plans in a way that helps
30 us to better serve communities that have been under or unserved in
31 the past.

32
33 Our inclusive government objective aims to ensure that all
34 stakeholders are equally welcome and encouraged to participate in
35 the decisions that are affected. We want to more equitably
36 distribute benefits among stakeholders by increasing the share of
37 funding opportunities and habitat restoration and other services
38 to underserved communities and identifying and addressing any
39 systemic barrier.

40
41 We want to ensure our outreach and engagement platforms and
42 activities to effectively reach underserved communities. And
43 finally, we want to create an empowering environment by identifying
44 EEJ as a priority at all levels of the agency and meaningfully
45 integrate EEJ considerations into all the work that we do.

46
47 So, as already mentioned, here's a list of the places that we went
48 to where we conducted the focus groups. But in addition to that,

1 we also attended, or I also attended FAC meetings in Saint Croix
2 and Saint Thomas. And we conducted a trilingual webinar, that was
3 done at the end of September. That was, I wouldn't say as well
4 attended as we had hoped, but we're hoping that this is just the
5 first time that we tried it, and that as we move forward with it
6 in the future, as we advertise it better and we work through some
7 of the technological kinks, we'll be able to make it more available
8 to more people.

9
10 So, who have we engaged in the U.S. Caribbean? Well, you know,
11 basically, the sample and the methods of our research, of our work,
12 we've engaged various ethnic groups, various people from gender
13 backgrounds, various education levels, people from different age
14 groups, and people from different employment backgrounds. We
15 engaged in focus groups and scoping efforts. In addition, we also
16 engaged in key informal interviews, participation in FHC meetings,
17 in Saint Croix and Saint Thomas.

18
19 We hope to engage more people in future efforts. We were hamstrung
20 for time yet produced fantastic focus groups, thanks in large part
21 to the people I mentioned earlier who are on the ground talking
22 with folks and sharing the message of why this effort is so
23 important.

24
25 Some of the key takeaways that we saw both nationally and within
26 the islands is that underserved communities do not feel decision
27 makers understand, consider, or represent their perspective and
28 viewpoints. Underserved communities feel exploited by industry and
29 federal projects, often being left out or excluded from these
30 projects. And underserved communities are depending on us, meaning
31 NOAA, to partner with each other and other state and federal
32 agencies to find solutions.

33
34 I think this is a critical thing that we need to understand. Some
35 of the concerns that come up in our focus groups are things that
36 are not within our jurisdiction. Other things that come up are
37 things that happen at a macro level. These are changes that would
38 be fundamental changes in the way that we do business. These are
39 things made at a much higher level than, personally, where I'm at.

40
41 But these things don't preclude us from listening or prohibit us
42 from listening and bringing this message to the powers that be. As
43 I see it, we are a conduit of information, and even though we may
44 not perhaps be involved in something like an expansion of a
45 national park or something like that, it's something that we can
46 bring up as a concern and work with across agency counterparts.

47
48 Just to let you know, this week already, I've had a meeting with

1 BOEM about future discussions of spatial planning, and other issues
2 that they're considering as it relates to offshore wind development
3 in the U.S.V.I. So as a part of this desire for us to partner with
4 other folks, we are engaging in those efforts.

5
6 Some of the key focus group, takeaways. As you heard from Nicole,
7 from Liandry and from Wilson, we need to further diversify our
8 communications and outreach platforms to more effectively meet in
9 underserved communities where they are. In terms of location, we
10 need to come to them. Timing, we need to consider their work
11 schedules, fishing seasons, and hurricane seasons.

12
13 Education level, we need to make sure that we're able to convey
14 our message in very plain language so that it's able to be
15 digested. We shouldn't pretend that we're speaking at an academic
16 meeting, but we should be speaking as if we're sitting across the
17 table from one another, sharing a piece of food and just having a
18 very frank discussion about concerns.

19
20 We need to think about the technological capabilities of folks.
21 That some folks have access to cell phones, computers, and
22 broadband internet, and others may not have that access. So, we
23 need to take that into consideration. Language, what you guys were
24 just mentioning a few minutes ago, about hitting the Google
25 translate. That's one form, but as Wilson mentioned, maybe it
26 doesn't translate well.

27
28 Right now, just so that you know about steps that we're taking,
29 I'm a member of the EEJ executive board and on the national level
30 working group, and we are looking to develop a contract with the
31 state department for translation services for 52 different
32 languages and dialogues. This means that we should be able to, in
33 the steps that we're taking in the future, when we have our
34 divisional breakdowns with our communications divisions and our
35 outreach and education, we should be able to begin discussions on
36 how to effectively get you the information in a format and in a
37 language that is more digestible, and easier for people to
38 participate in whatever program that it is.

39
40 In addition, I've spent a great deal of my working life in the
41 Caribbean and realize that certain things like radio programs and
42 mouth to mouth are often the most common formats for information
43 to be shared. So, the use of radio programs and podcasts or short
44 verbal or video announcements that can be shared with liaisons and
45 in turn shared with their various social and occupational networks,
46 is potentially a means of being able to reach out to a larger
47 portion of that underserved community.

1 One of the other things that they wanted to have, is an increased
2 presence in the community, and leverage the support of trusted and
3 knowledgeable community liaisons, be it from Sea Grant, board
4 agents, community NGOs, or the ones that, currently, we're working
5 with. And we're applicable, we need to recognize their value, which
6 means that not only do we recognize what it is that they offer to
7 us but compensate them for their efforts.

8
9 You know, a lot of this takes time away from other efforts. We
10 need to make sure that we're finding a way to value the work that
11 they provide. We need to institutionalize communication mechanisms
12 with community liaisons by establishing direct points of contact
13 and ensuring regular check ins. We are doing this now with regular
14 meetings. In the future, my plan is to formalize a monthly catch-
15 up meeting with liaisons from the U.S. Caribbean about EEJ and
16 other fishery related issues.

17
18 Listening to Liandry's report about the different tournaments and
19 the things that she was involved in, if she can give us that
20 feedback, that perhaps allows us to find ways to use these avenues
21 of these events to share information and to share our message. And
22 so, the back and forth, is not just a one-way street. It's not
23 just NOAA coming to the Caribbean, but it's also the Caribbean
24 coming back to NOAA and saying, "Hey. You know, it would be a great
25 thing if you were here."

26
27 One of the things we did, quite a long time ago, was we participated
28 in Saint Thomas in the fishery fun day in Frenchtown. These are
29 the kinds of events that can demonstrate the collaborative and
30 cooperative efforts that we hope to create between NOAA and local
31 communities.

32
33 In the future, we plan to work with our communications and outreach
34 and education divisions to improve access to information and
35 opportunities for local folks to be involved in research and
36 science as well as educational opportunities. Just to let you know,
37 we hope to create something where we can have a monthly emailed
38 blast. That will go out to, liaisons that can share with people in
39 the underserved communities so that they can recognize the
40 opportunities that are coming up and the deadlines, and some of
41 the key criteria that they would need to participate in such
42 events.

43
44 So, the next slide with key focus group takeaways, Puerto Rico.
45 Commonalities across Puerto Rico and its fisheries, as Wilson
46 mentioned, pollution is a key issue on all sides of the island.
47 Some of these may not be NOAA related things. There may be more
48 EPA or other kinds of local government, kind of, issues. But if

1 this is a key issue amongst fishermen, this is certainly one that
2 we need to convey.

3
4 We need to create greater transparency with government at all
5 levels. There's a desire to know that when local governments get
6 funding, for how much and for what are they going to spend it on?
7 And hopefully, that the local fishermen and local stakeholders can
8 have an influence on the creation of a spending plan that will
9 best suits all concerned. Especially as it relates, as Wilson
10 mentioned, with disaster relief and then the forces gentrification
11 and postal redevelopment, which often follows eliminating
12 important infrastructure for the commercial fisheries.

13
14 And, again, there's a desire to collaborate on the development of
15 priorities for funding. They also want to improve access to
16 opportunities, as mentioned. Infrastructure maintenance and
17 redevelopment are key concern. Grants and loans, not only in the
18 language that it comes in, but navigating the process. As you know,
19 some of these things can be complex. It almost feels like you need
20 a law degree to be able to get through them.

21
22 We need to either, provide a mechanism for having a liaison be
23 able to be trained and assist in navigating that process, or we
24 need to have somebody that they can call, back at NOAA, and that
25 can assist them in navigating the process.

26
27 Research and management. We need to involve locals more, not only
28 in cooperative research programs, but also to assist them in
29 running their own citizen science research. And one of the things
30 that was, again, what Wilson said, and something that Liandry hit
31 up on as well, is the vocational educational system. Providing
32 knowledge in the schools about the importance of fishing, about
33 the value of fishing, the food security issues related to fishing.

34
35 All of these kinds of things need to be taught and understood. And
36 then and then perhaps also, it's a mechanism for when we have this,
37 quote, unquote, graying of the fleet, where we're going to see no
38 new entrants into the fleet. Hopefully, we can encourage people to
39 see fishing as a viable form of occupation.

40
41 They also asked for there to be a greater presence of NOAA,
42 physical presence, face to face. And, of course, enforcement is a
43 key issue, especially related to capacity and training.

44
45 Key focus takeaways from the U.S.V.I., Saint Thomas and Saint John
46 and Saint Croix. There was a concern about the development and
47 replacement of FADs to ease pressure off inshore fisheries. The
48 belief that, and we talked about it with Toby Tobias, who has, of

1 course, a million years of knowledge about all of these kinds of
2 issues, and the complexity of the recertification process and the
3 longevity of a FAD. And so, these are key issues that fishermen
4 feel can be useful in eliminating some of this inshore pressure by
5 attracting pelagic species.

6
7 Enforcement, they don't feel that there are enough people, and
8 they need to be better trained. Again, one of the key
9 considerations is that these people on enforcement are overtaxed.
10 That there's not enough time for people to be able to do their
11 jobs effectively, and that improved enforcement would go a long
12 way just by simply having more people who are better trained.

13
14 So perhaps one of the key takeaways could be an annual training or
15 certificate program, with regards to just something as simple, as
16 mentioned earlier, as species recognition. There was the comment
17 made that there are officers that understand what a snapper is,
18 but they don't understand the difference between the types of
19 snappers. And so, one might say, "Oh, well, that's a snapper," but
20 not know whether it's in season or out of season.

21
22 One of the key and most emotional discussions that we had was the
23 creation of a safe fishing zone in Lang Bank. And this has a large
24 part to do with the closure of the industrial port over in Gallows
25 Bay. Now the larger ships will make their way, they're supposed to
26 go around Lange Bank, but they will cut off the point in order to
27 save time, and tread through very shallow waters creating greater
28 risk for running our ground.

29
30 As Mr. Daley said, let's not wait until they run over our divers
31 or run over one of their boats and we lose somebody before we
32 recognize this as an important issue. I want people to know that
33 we've made head roads into finding out about how to create a safe
34 fishing zone, and we will share that information with the liaisons
35 and the local government, for their consideration so they can
36 follow-up on that.

37
38 Again, creating a better awareness for opportunities and
39 collaborate on research, finding scholarships for the youth and
40 taking part in internships and paid internships. Because anybody
41 that can afford to do an unpaid internship is probably not
42 vulnerable. And so, we want to make sure that the internships that
43 people participate in allow them to cover their costs while
44 engaging in that activity.

45
46 And we want to improve our communication with our community
47 liaison, something that I'm trying very hard to do. And I hope
48 that, people have noticed a difference, over the last year or two

1 about our attempt to engage with the community liaisons and local
2 officials.

3
4 Another major concern is a timelier discussion of assistance after
5 disasters. I'll just leave that as it is because I realize how
6 complex that issue is.

7
8 We are now turning our attention to analyzing our stakeholder input
9 and drafting a regional implementation plan, which is now due April
10 5th, 2024. Last month we conducted a workshop that pulled together
11 all of the responses and have begun to separate them into different
12 kinds of bins. We met for three days, and since, have held numerous
13 virtual meetings combing through all the data.

14
15 We hope that today we have represented your issues and concerns,
16 and that if we have missed something, please make sure to let us
17 know. This is not a one and done type of project. This is a living
18 breathing effort, that will build upon mistakes and successes, for
19 we will not be perfect, but we will strive for it.

20
21 We appreciate the efforts of all in the Council and their
22 engagement in this work to date, and we'll continue to determine
23 how best to incorporate Council input and feedback into this
24 process. The same can be said for those who assisted in the
25 development of the focus groups, realizing that they are key
26 components to any success in this effort.

27
28 For the local fishermen and other stakeholders, it is the first
29 step in a process, and we are moving forward, hopefully
30 representing your issues and concerns. We realize that there may
31 be things outside our agency's jurisdiction, and maybe there are
32 processes that can't be altered from the manner in which they are
33 conducted now. However, this does not mean that we won't hear your
34 concerns and try our best to point you in the right direction for
35 answers to your questions.

36
37 Also internally, we are going to need a little time to handle how
38 this impacts our way of doing business. Some of the things are
39 easily addressed and other things are more complicated, but most
40 importantly know that we are working as hard as we can to improve
41 our service, especially as we look forward to impacts associated
42 with the development of the blue economy, issues coming to face
43 the U.S. Caribbean like offshore wind and the development of
44 aquaculture.

45
46 And, I might reiterate that we are going to, over the next few
47 months, engage in discussions with our divisions, to discuss with
48 them about how EEJ is going to essentially affect how they do

1 business in the future. And so, we're going to work closely with
2 leadership and then we're going to take it down group by group.
3 Our hope is that we can find a way to make sure that as we move
4 forward, EEJ is a part of our normal process, not an add on to our
5 work here at the Science Center and in the region.

6
7 And so, with that, I'd just like to say thank you again. Thank you
8 to all the people that helped with the focus groups and that have
9 helped and been constant supporters of our effort. Because my hope
10 is, looking back from 20 years ago, when I came here to where we
11 are today, and thinking about 20 years in the future, that the
12 possibilities that exist for more collaborative efforts, whether
13 it be research or management, I think the future looks very bright.

14
15 So anyway, with that, I thank you for your time, and thank you for
16 the invitation to present today.

17
18 **CARLOS FARCHETTE:** Thank you, Brent. Any quick question for Brent?
19 Hearing none. Brent, I'll be talking to you. I'll call you. I want
20 to talk to you about my boy, Tom Daley, and Lang Bank. Thanks a
21 lot. Alright.

22
23 **BRENT STOFFLE:** Okay. Excellent.

24
25 **CARLOS FARCHETTE:** Okay. So, I was bumping agenda item. Now, I'm
26 going to be bumping people. So, in the Advisory Panel Reports, I'm
27 going to go first with Crespo.

28
29 **District Advisory Panel Reports**
30 **Puerto Rico - Nelson Crespo, Chair**

31
32 **NELSON CRESPO:** Thank you, Mr. Chair. Nelson Crespo for the record.
33 I don't have any ports, but I would like to bring to your attention
34 the matter of the DNER administrative order 2023-07 that addresses
35 the issue of the Snapper Unit 2 special permit for state waters.

36
37 The comments that I'm going to make are based on concerns brought
38 to me by scientists, fishers, and my own knowledge. I have been
39 fishing queen snapper for over 40 years, and I know this fishery
40 very well. I dare say that this administrative order does more
41 harm than good to the fish, the commercial fishermen, and the
42 culinary industry.

43
44 This fish is regarded at top of the line in the industry. Before
45 opening the fishery to all commercial fishermen, the DNER should
46 have worked together with the Council, the Science Center, the
47 DNER Fisheries Board, and above all, the fishermen who have been
48 participating in this fishery for decades. With the last two group,

1 as required by the law 228 article 5 as amended on April 15th,
2 2005, that says, "for the purposes of any attempt to regulate the
3 Puerto Rico fishery by the DNER, its approval must take into
4 account the position of the recognized groups of fishermen and the
5 DNER fishery advisory board." The result of this lack of inclusion
6 and the total absence of common sense, will make these management
7 measures a fiasco.

8
9 By opening this limited fishery to participant, obviously, the
10 catch report will increase. It is very naive though, to try to
11 make intelligent people like you believe that with the increase in
12 the number of fishermen, the extraction level of the species will
13 remain the same.

14
15 I believe that first, a moratorium should have been made, as has
16 been suggested on several occasion, to allow the [coaching?]
17 fishermen to enter into the fishery, collect the data, and see how
18 the resource behaves before making such a risky move.

19
20 This administrative order established a three-month closed season
21 beginning the 1st June and ending on the last date of August. What
22 is the reason for establishing this closure if the DNER claims
23 that this resource is healthy? If it ain't broke, don't fix it.

24
25 This closure cut 25% of the annual income of fishermen that will
26 occur in the middle of a hurricane and back to school season, where
27 there are so many expenses. It's a self-evident statement that
28 imports will increase right in the middle of the summer, causing
29 a negative impact on the local economy.

30
31 We just saw this same movie with the mahi mahi, tuna, and swai.
32 Even worse, with the increase of volume of this import, the stellar
33 status of queen snapper in restaurant and hotel industry will
34 change. And as has happened in the past, many restaurants will not
35 want to buy fresh local fish again, because the imported one is
36 cheaper. Lower quality, but cheaper.

37
38 We don't have to be scientists to understand the big pressure that
39 this measure is going to bring to the Snapper Unit 2, where large
40 numbers of the possible individuals who are preparing for the
41 aggregation in October are going to be capture. And for sure, in
42 a short time, we are going to see these two snapper units in
43 danger.

44
45 Sadly, this looks more like a political solution due to that the
46 local government has not been able, for the past 10 years, to
47 stabilize monitoring or increase the ACL of an evidently healthy
48 species. It makes no sense to increase the number of fishermen

1 without first increasing the ACLs. And surely, when all of this
2 gets out of control, no one will know what to do, only to implement
3 a closure when all the parties involved are going to be affected.
4

5 My last comment is, what will happen to the catch made in the EEZ?
6 It is legal to land them, or will it be necessary to create a
7 fishing manifest or a special snapper permit for federal waters?
8

9 Thank you for your attention.
10

11 **Questions/Comments**

12
13 **CARLOS FARCHETTE:** Thank you, Nelson. Gerson.
14

15 **GERSON MARTÍNEZ:** Saint Croix's Chair supports Puerto Rico's Chair
16 on the comments he just made on his concerns about the snapper
17 fisheries.
18

19 **CARLOS FARCHETTE:** Julian.
20

21 **JULIAN MAGRAS:** I support Nelson and what he just said, but I just
22 want to make another comment also. You know, we are moving when
23 you can harvest these snappers and you're opening up where you
24 have the spawning season. We were tasked to come up and give the
25 dates and the times of the year where the different species spawn.
26

27 We did this through the Sustainable Fisheries Act back in 2005
28 where we all separated out in groups and came up with all of these
29 seasonal closures to help with the reduction of the 30% that was
30 required in order for us to continue fishing. So here it is. We
31 have the time when the fish are supposed to be protected, and we
32 are moving out of that time.
33

34 Right now, we're in the middle of the seasonal closure in Saint
35 Thomas/Saint John. So, it's closed until December 31st, because
36 this is the time that the fish are spawning. So, I have concerns
37 that you're going to be harvesting fish during the spawning period,
38 which we talked so heavily about in this room that we need to
39 protect those fish during that period, and that's why we gave the
40 three months that we gave back in 2005. Thank you.
41

42 **CARLOS FARCHETTE:** Thank you, Julian. Vanessa.
43

44 **VANESSA RAMÍREZ:** Thank you, Mr. Chair. Vanessa Ramírez for the
45 record. I just want to make my comment and put on the record that
46 I have an appointment with Mr. Ricardo López. I asked for a meeting
47 and he answered my request. I have time to check for the basic of
48 this. As Nelson says that is the situation of the commercial

1 fishermen. It is, of course, something that took us by surprise.

2
3 I think that, in a way, Ricardo could explain better and maybe we
4 can make an education and campaign with the open door that this
5 will be evaluated in December, as soon as they have more
6 information. We know that we have a lot of commercial fishermen in
7 that fishery. They were requesting to open the permits.

8
9 We know that we have a lot of commercials that are requesting the
10 new permits that were not fishing, but they want to fish. And also,
11 we know that we have a lot of recreational fishermen that are not
12 in the system, and they will not be, until I don't know when.

13
14 So, I recognize that Ricardo explained to me that this closure of
15 three months is preventive for this year, and I hope that we can
16 later sit and evaluate this situation. Thanks.

17
18 **CARLOS FARCHETTE:** Thank you, Vanessa. Miguel?

19
20 **MIGUEL A. ROLÓN:** No. No. Just to ask whether Ricardo has any
21 comments about this situation. What is your take about the future
22 actions that the local government will take? On the sidebar with
23 Ricardo, he was talking about collecting the data, etcetera. And
24 another possibility could be, to have the closed season the same
25 as the federal, so the fishermen will not lose. But you have to
26 support that with data about the time the species spawn. So, you
27 care to add anything, Ricardo, regarding the topic?

28
29 **RICARDO LÓPEZ-ORTIZ:** Thank you, Mr. Chairman. Thank you, director,
30 for the opportunity and for the question. Of course, I would like
31 to clarify every doubt. My office is open for everybody. I just
32 received Vanessa, and I also received the concern of Dr. Michelle
33 Schärer. I answered Dr. Schärer by letter and I received Vanessa
34 in my office. I'm willing to answer Mr. Crespo, all his doubts,
35 and the Council if they have doubts too.

36
37 I can give you a presentation at another moment, probably during
38 the next meeting, or I can make a written statement for all of
39 you, if you want to. I'm available. I can provide-- Well, I will
40 have to translate many things and, check with my partners at DNER
41 in order to be ready for you, but I can do it later.

42
43 **MIGUEL A. ROLÓN:** This thing that we mentioned is, let's say that
44 the order of Puerto Rico prevails. Then, we have the issue of
45 enforcement versus innocent transit from the EEZ to the area of
46 jurisdiction of Puerto Rico. One alternative-- This is for the
47 local government; this is not the Council. We have to be careful
48 with that.

1
2 There could be a possibility of establishing a special permit of
3 manifesto. So, the fisher who has a valid license, they are bona
4 fide fishers, can then be recognized by the local government and
5 have this document that would allow them to transit. Do you think
6 that could be a possibility, Ricardo, or are we too early to start
7 working in that direction?

8
9 **RICARDO LÓPEZ-ORTIZ:** Well, this was an administrative order. This
10 can be changed at any time. We can make a new amendment. We can
11 make a new order.

12
13 If there's new information, scientific information or any concern
14 or any suggestion, of course, we're going to take it into
15 consideration, and we can manage that. We can change the order at
16 any time.

17
18 **MIGUEL A. ROLÓN:** Do you need anything from the Council at this
19 time, regarding those lines?

20
21 **RICARDO LÓPEZ-ORTIZ:** Only the opportunity to explain and to listen
22 to all the parts.

23
24 **MIGUEL A. ROLÓN:** No. I'm talking about the science information.

25
26 **RICARDO LÓPEZ-ORTIZ:** I believe I have everything that we have
27 available. I don't think that there's new data, at least when we
28 work this administrative order. If there's any new data, I would
29 love to have it. But you will see with my explanation why we
30 decided to do that. Definitely, this is more a social issue than
31 a scientific issue for me.

32
33 The problem began before 2013, right, when we went above the ACL.
34 And then during December, the fishery of the two snappers' stocks
35 was closed and it was closed during the other closure seasons too.
36 So, those fishermen couldn't go fishing. That was the main problem.

37
38 So, that's why we put those three months, just to reduce the
39 probability of getting there again. But if everybody think that
40 that's not necessary, if the Council think that that's not
41 necessary, if the fisherman thinks that that's not necessary, then
42 they can write to us, and we can amend the order and remove those
43 three months.

44
45 Those three months, we chose them mostly in a social basis. But
46 but at the same time, we picked, from those available, from the
47 ones that made sense and that didn't make a big change for the
48 fishermen, we pick the better one in terms of the science that we

1 have.

2
3 **GRACIELA GARCÍA-MOLINER:** So, a couple of things. One of the issues
4 that we are thinking about has to do with the fact that the way
5 that the ACL overage was dealt with, at the time, it began counting
6 in December backwards. December, November, October. That changed
7 and now the overages are taken, starting on September 30th and
8 moving backwards, because of all the social and economic
9 considerations that were dealt with at the time.

10
11 In addition to that, the data that comes in the administrative
12 order, or the citation that it has, is no longer real in the EEZ,
13 because now we have island-based FMPs rather than what we had
14 before. And I think that probably the main issue of all of this
15 has to do with that innocent transit, because we know that most of
16 the EEZ, that's where the deep-water snapper, the queen snapper,
17 and the muniamia de afuera are taken from.

18
19 So, you know, that issue that in other times we have stated that
20 if you come through the state waters with the stowed equipment
21 that you've used for harvesting and the harvest or the catch
22 separate from the gear that you're using, that was part of the
23 information that we had in the other FMPs and that's still, you
24 know, a viable option.

25
26 So, you know, because things have changed through dramatically, I
27 think that it would be worthwhile to revise the information that
28 was set forth to come to the conclusion of the administrative
29 order. And because of the economic significance of that fishery,
30 in terms of the EEZ, I think that that would also be a social issue
31 to deal with.

32
33 **CARLOS FARCHETTE:** Miguel?

34
35 **MIGUEL A. ROLÓN:** No, I would like to yield to Ricardo to follow.

36
37 **RICARDO LÓPEZ-ORTIZ:** Yes. I understand. Please, feel free to send
38 us all the recommendations. You can send it to me directly, or you
39 can write to the subsecretary to the secretary. Any way you prefer.

40
41 Send those recommendations, send that data to me, and I'll be sure
42 to recheck the order. If we think that we can amend it, we will do
43 it as soon as possible.

44
45 **CARLOS FARCHETTE** Miguel.

46
47 **MIGUEL A. ROLÓN:** Thank you, Ricardo. Because probably what we
48 could do here is to accept the invitation by Ricardo here. I may

1 have a committee, Graciela, your laboratory, and an observer,
2 Nelson, and you can sit down and come up with the facts and how
3 Puerto Rico then can modify, if needed, the order that you have
4 now.

5
6 Because as I said, we're all fighting for the same thing. Our
7 common goal is to have a sustainable fishery with the least amount
8 of harm to the socio-economy of that fishery. We can do that in
9 the first quarter of 2024. And then, by the next meeting, as
10 Ricardo suggested, he can present to the Council, all the options
11 available and the information that is needed to be exchanged
12 between the Council, the local government and perhaps even the
13 federal government.

14
15 **RICARDO LÓPEZ-ORTIZ:** Yes. We can do that. Ricardo, for the record
16 again. Vanessa is also invited. María del Mar, María López is also
17 invited. We can do the meeting with all the parts that we need to
18 do that with. I have the location. You just have to give me the
19 date.

20
21 **CARLOS FARCHETTE:** Alright. So, before I go to María, I know that
22 the hot item here is the queen snapper fishery in Western Puerto
23 Rico, but that federal permit is actually for other species also,
24 and I just don't want to throw that out just because of one species.
25 I want that opportunity to be available and I don't know what the
26 Council's thought is on this, because in the future, we may come
27 up with a limited access fishery for our species, and we have the
28 people here to talk.

29
30 **MIGUEL A. ROLÓN:** Yeah. But those two things are different. This
31 one is done. We can do that and then we can talk about the permit,
32 because that's something that was presented today. Because you're
33 right, this permit covers more species than the ones that we're
34 talking about at this time. Probably, that's something that we
35 should indicate, the pleasure of the Council regarding the
36 presentation that you have seen at this meeting, and would you
37 like to pursue establishing of a federal permit in the area of the
38 U.S. Caribbean?

39
40 **CARLOS FARCHETTE:** I also wanted to mention, I know Graciela
41 mentioned about stowing equipment, because we have that situation
42 with the Buck Island Monument on Saint Croix, that when you're
43 transiting through, if your rod and reels and stuff are stowed
44 down below, everything is good. But when it comes to queen snapper
45 fishery, that's a hydraulic winch, so I don't know. It's not that
46 easy to take that down and stow it. I know that María wants to
47 talk. Coast Guard, do you want to say something?

48

1 **UNKNOWN 1:** Okay. I'm the supervisor down here at the Boat Forces
2 Unit in Saint Thomas. As far as when you're transiting through a
3 body of water, if you're carrying a species of fish that you went
4 out to a different fishing ground and harvested, you can't stop
5 and make what we call a constructive presence in the other waters
6 that you're passing through.

7
8 Now for instance, like, the winches you guys are talking about, we
9 get it. You can't just take it off and hide it. But as far as,
10 like, fishing gear goes, like fishing poles, you shouldn't have to
11 put them away. As long as you don't stop and make a constructive
12 presence or continue to fish in that area, you're fine to just
13 drive through it.

14
15 **CARLOS FARCHETTE:** Okay. Thank you. María?

16
17 **MARÍA LÓPEZ-MERCER:** Yes, thank you. This is María López for the
18 record. I would like to make a motion, for the Council to make a
19 letter to the DNER communicating the recommendations that were
20 provided during this meeting by the Council's biologists, and also
21 requesting correction to the administrative order, where the ACLs,
22 the Annual Catch Limits, that were cited in the administrative
23 order are not the current ACLs that apply right now to the species
24 in Puerto Rico.

25
26 For example, the ACLs that are listed in the administrative order
27 are the ones that were set in 2012. And in 2022, with the
28 implementation of the Puerto Rico management plans, the numbers of
29 the ACLs were significantly higher for this deep-water snapper,
30 snapper unit 2, cardinal and queen snapper, that we're talking
31 about here, for both sectors? Thanks.

32
33 **MIGUEL A. ROLÓN:** Mr. Chairman, you have authority to do that
34 without a motion, but I believe that-- let them finish.

35
36 **MARÍA LÓPEZ-MERCER:** What did you say? I'm sorry.

37
38 **MIGUEL A. ROLÓN:** Yeah. The Chairman has authority to do that, if
39 you incorporate into the record what you just said. So, the motion
40 could be to send a letter to the appropriate authorities, the
41 Department of Natural Resources, to correct-- what you just said
42 as per the record. So, that way, we incorporate everything into
43 the letter. We will prepare a draft language that you can review
44 for us, please, and then it can be sent to the secretary. But
45 that's, again, that's parallel to the meeting with Ricardo.

46
47 And the other thing, if you are going to do this the correct way,
48 you have to go through the Junta. That's what you have in the

1 Department of Natural Resources. The Junta is the counsel of the
2 secretary. But, anyway, it's up to the secretary to do it because
3 she or he, a secretary, can do away with the Junta at any time,
4 except for that the Junta is set by law, and you have to be careful
5 how you do it if you are secretary or not. So, can we get the
6 screen for the motion?

7

8 **RICARDO LÓPEZ-ORTIZ:** Can I make a comment to María?

9

10 **MIGUEL A. ROLÓN:** Let's do the motion first, and then in the
11 discussion, you can comment. María, short.

12

13 **MARÍA LÓPEZ-MERCER:** Yeah. Thank you. *The motion should read, the*
14 *Council will draft a letter to the Department of Natural Resources,*
15 *Puerto Rico communicating the recommendations in regard to*
16 *Administrative Order 2023-07 that were provided during this*
17 *meeting.*

18

19

20 I would like to also add *and request the DNER to correct the*
21 *references to the annual catch limit for the Puerto Rico snapper*
22 *unit 2 in this Administrative Order to reflect the current ACLs*
23 *established in the Puerto Rico FMP.*

24

25 We can, perhaps fix it a little bit if you guys understand it is—
26 Okay. Thank you.

27

28 **MIGUEL A. ROLÓN:** I believe, that's the motion. We need a second.

29

30 **VANESSA RAMÍREZ:** Second.

31

32 **CARLOS FARCHETTE:** Open for discussion. Right. But can I tell them
33 about the motion here real quick? It says, "the recommendations on
34 regard the administration" it should be "regarding the
35 Administrative Order." Katherine?

36

37 **KATHERINE M. ZAMBONI:** And just so you know, right now this motion
38 is just to draft a letter, not to send it. So, if the intent is to
39 actually send a letter. I would change that verb to "prepare and
40 send a letter." And if you want, it could also say that the Chair
41 is authorized to sign the letter on behalf of the Council.

42

43 You know, you can talk about at what point are you all comfortable
44 with it. You know, are you going to send a draft and review it,
45 you know, electronically first? But anyway, I just thought I'd
46 alert you to that.

47

48 **CARLOS FARCHETTE:** Roberto.

1
2 **ROBERTO SABATER:** Shouldn't it say what's the latest ACL? What
3 year it was the latest one to clarify it more?
4
5 **MARÍA LÓPEZ-MERCER:** Well, yes. We can definitely say, established
6 in the Puerto Rico FMP implemented in 2022. Thank you for the
7 suggestion.
8
9 As the creator of the motion, I would like to modify it to add
10 what Kate discuss about giving authority to the chair to sign the
11 letter and send it.
12
13 **VANESSA RAMÍREZ:** I agree with that.
14
15 **LIAJAY RIVERA GARCÍA:** Hi, María. Where would you like me to put
16 that sentence?
17
18 **KATHERINE M. ZAMBONI:** You can just create a new sentence at the
19 end that says, "The Council Chair is authorized to sign the letter
20 on behalf of the Council."
21
22 **CARLOS FARCHETTE:** Okay. We're still open for discussion. I think
23 Ricardo has--
24
25 **RICARDO LÓPEZ-ORTIZ:** Yeah. This is definitely a way to go. Ricardo
26 López for this record. I'm just reading the statement there. I
27 believe that when you say, "that were provided during this
28 meeting," the rest of the line in that sentence, seems to me like
29 it is one of the recommendations that you will provide on that
30 letter. That's everything.
31
32 **KATHERINE M. ZAMBONI:** That's a fair point. The benefit of calling
33 out the ACL, is that that's a very specific thing that the Council
34 wants to have in the letter. So, leave it to you all if you want
35 to call that out or just leave it more general about the
36 recommendations, but I think María said that specifically because
37 that's a particular thing that she wants to have in the letter.
38
39 **MIGUEL A. ROLÓN:** Yeah. The other thing you have to be careful,
40 the Council does not dictate to the secretary what she or he will
41 do. The only thing that we can do is to correct any information
42 that is provided that is outdated, and this is what we're doing
43 now.
44
45 With the meeting with Ricardo and the others, maybe we can do that.
46 So, the letter will be sent, by the way, the Chair always has the
47 authority to send the letter or not. But, anyway, we'll have it be
48 approved this way. So, in essence, what we are doing with this

1 motion is to make a correction on the language of the order that
2 they have there. And probably by the time you get this letter, the
3 order could be rescinded by the secretary at any time.

4
5 That's what Ricardo is saying. You know, the order is not building
6 concrete. They would like to make sure that everything is followed
7 the right way for this order, either modification or [inaudible]
8 order. So, Mr. Chairman, you can vote if you want to because that's
9 the only--

10
11 **CARLOS FARCHETTE:** Yeah. But real quick, when Ricardo mentioned
12 this about "that were provided during this meeting," should it
13 say, "that were providing during the 183rd meeting" or just "this
14 meeting?"

15
16 **KATHERINE M. ZAMBONI:** I think at that point it's a question of
17 whoever is going to be responsible for drafting this letter, and
18 it might be Council staff. As long as they understand what that
19 means and given that Council staff is the one that basically
20 articulated it, I would think she does, but, obviously if you feel
21 uncomfortable with the way the motion's worded and you'd be more
22 comfortable identifying which meeting and who made those comments,
23 you can modify the motion.

24
25 **CARLOS FARCHETTE:** No. I'm good. I understand what you're saying.

26
27 **MIGUEL A. ROLÓN:** Mr. Chairman, the letter will be drafted by
28 Graciela, you and I.

29
30 **CARLOS FARCHETTE:** Any further discussion? Alrighty. Hearing none,
31 all in favor, say aye.

32
33 **GROUP:** Aye.

34
35 **CARLOS FARCHETTE:** Any nays? Any abstentions? *Motion carries.*

36
37 Yeah. So, I have Julian on the DAP, the Advisory Panel Report.

38
39 **Saint Thomas/Saint John - Julian Magras, DAP Chair**

40
41 **JULIAN MAGRAS:** Yeah. Good afternoon. Julian Magras, for the
42 record. So, it's quick. We had one meeting back in August 30th, and
43 it was a joint meeting with all the DAPs. We had some presentations
44 that were given. We had a conceptual model presentation that was
45 given by Tarsila. We had a presentation that was also given for
46 establishing accountability measures. That was given by Sarah
47 Stephenson and María López.

48

1 Then the final presentation was the EEJ strategy implementation
2 plan. That was given by Heather Blough. It was a very good
3 educational meeting. A lot of information was provided to each of
4 the committees, and it helped them understand the process of how
5 things operate and what's ongoing and what the future looks like
6 to continue.

7
8 So, that's my update for today. I'm not going to waste any more
9 time. At this time, I just like to say happy holidays to everyone,
10 and have travels back and see you for 2024.

11
12 **CARLOS FARCHETTE:** Thank you, Julian. Gerson?

13
14 **Saint Croix - Gerson Martínez, DAP Chair**

15
16 **GERSON MARTÍNEZ:** Thank you, Mr. Chair. Gerson Martínez, DAP Chair
17 Saint Croix, for the record. I just have a concern on any future
18 regulations or closures for the queen conch. And I wrote as
19 follows. Over the years as a commercial fisherman, I have learned
20 to gain knowledge on being a responsible fisherman, and I also
21 have encouraged other fishermen to be responsible in what they
22 catch.

23
24 This morning, after being around so much smart people in this room,
25 I had a moment. And in that moment, this thought came to my head.
26 And this is how you guys feel every day. Wow. It's not what you
27 fish today that matters, but the ability to fish tomorrow because
28 you didn't fish it today thinking about tomorrow. And saying that,
29 I like to have the ability to fish tomorrow, because today, I
30 overprotected my resource.

31
32 Being a member of the Fisheries Advisory Committee in Saint Croix,
33 we have done a lot in protecting that resource, we have given
34 almost half of our year to a close season, no possession of queen
35 conch, and we have re-modified the amount of or the bag limit that
36 each fisherman can catch. Doing this, we have lost 1,000,000 of
37 dollars. I cannot tell you how much. But we have done the work of
38 protecting that resource.

39
40 And because other people around the world have been irresponsible
41 in not taking care of that resource, I don't think we, in the
42 Virgin Islands, should be penalized for doing our homework and
43 being law abiding citizens in protecting this resource. For those
44 5 months that this resource was closed, we only fished two days a
45 week, and it gets very hard. But we always put food on our table,
46 and we pay our bills. Sometimes not in time, but we always do pay
47 those bills in those five months.

1 And we ask the Council to consider any future regulations or
2 anything that has to do anything close to a closure or a complete
3 closure of that fishery. Because that is a very socio-eco
4 economical fishery for the Virgin Island, not only for us fishermen
5 but for our restaurants.

6
7 I would like to see the faces of those people who taste that queen
8 conch that was prepared yesterday. I know you guys enjoy the taste
9 of that queen conch and that's why we love that queen conch in our
10 in our tables in the Virgin Islands. And this said, I humble myself
11 and ask you any future regulations, please keep that into
12 consideration. Thank you so much.

13
14 **CARLOS FARCHETTE:** Thank you, Gerson. So, we're going down to
15 enforcement reports. We don't have much time left. So, Puerto Rico
16 DNER?

17
18 **Enforcement Reports**
19 **Puerto Rico DNER - Ricardo López-Ortiz**

20
21 **RICARDO LÓPEZ-ORTIZ:** Yes. Ricardo López for the record. Cristina,
22 whenever you think is possible. Okay. Perfect.

23
24 Yes. This presentation was prepared by me, but it couldn't be done
25 without the help of Yamiré Pérez Román, who is the DNER Ranger
26 working with Maritime Zone and with the review of Carmen Santiago.

27
28 Okay. This, presentation is similar to others that I have done
29 here. You can see in the green squares, Puerto Rico fisheries law
30 and fisheries regulations. That's the amount of interventions that
31 the DNER Rangers Corp had during this year. I mean, during this
32 period. It's very similar to the other periods.

33
34 You can see here in detail what intervention was done. Four cases
35 for the Puerto Rico Fisheries law and 21 cases for Regulation on
36 Fisheries. Some of them were very interesting, so I brought some
37 pictures for you.

38
39 Here you can see an intervention of lobsters. Most of them small
40 lobsters. This one is about queen conch. You can see that many of
41 them were small and during the closure season. And this other one
42 was kind of new for me. It's about HMS. That case was reassigned
43 to the law enforcement agent of NOAA. He's taking care of this.
44 And those are some of the pictures of that intervention.

45
46 Those are the contact. If you have any question, I'm here.
47
48

1 **Questions/Comments**

2
3 **CARLOS FARCHETTE:** Thank you, Ricardo. Any questions for Ricardo?
4 We have one on the chat. Is it chat or just live?

5
6 **CRISTINA OLÁN MARTÍNEZ:** Dr. Michelle Schärer.

7
8 **CARLOS FARCHETTE:** Go ahead, Michelle.

9
10 **MICHELLE SCHÄRER-UMPIERRE:** Thank you, Mr. Chairman. Buenas
11 tardes. I was just wanting to inquire on the incident of a
12 commercial fisher killing a 300 pounds goliath grouper on the North
13 Coast of Puerto Rico. What actions has the department taken on
14 that case? Thank you.

15
16 **RICARDO LÓPEZ-ORTIZ:** Yes. Thank you, Michelle, for your question.
17 That case was taken by the DNER Ranger with the help of a NOAA
18 agent to the to the tribunal de Arecibo. What's the name of
19 "tribunal?" To the court at Arecibo. The judge just said that the
20 recreational fisherman was not obligated to have a course to
21 identify fishes, so he can make a mistake, and he was released.
22 Any other question?

23
24 **CARLOS FARCHETTE:** Thank you. That's not surprising. We've had
25 turtle cases on Saint Croix and the judge has dismissed them for
26 trivial reasons. So, that's not any surprise to me. Chat.

27
28 **MICHELLE SCHÄRER-UMPIERRE:** Michelle wrote in a chat, "It was a
29 commercial fisher. So, what was the consequence?"

30
31 **RICARDO LÓPEZ-ORTIZ:** No. Well, the information that I have is
32 that he was a recreational fisherman, but I can recheck that.

33
34 **CARLOS FARCHETTE:** Thank you. Okay. There is no DPNR enforcement
35 report, so we're going to go-- and the Coast Guard-- So, we're
36 going to go down to NOAA Fisheries. Manny?

37
38 **NOAA Fisheries Office of Law Enforcement - Manny Antonaras**

39
40 **MANNY ANTONARAS:** Good afternoon, everybody. My name is Manny
41 Antonaras. I'm with NOAA's Office of Law Enforcement. With me is
42 Alex Terrero, he's here to my left. He's the enforcement officer
43 for U.S.V.I. He's assigned here in Saint Thomas. We also have,
44 many of you know Miguel Borges, a special agent. He is not here
45 with us now, but he is the Agent assigned to our San Juan field
46 office.

47
48 So, a lot of the cases here that I'm going to talk about, they're

1 just a few of them. I'm not going to go over some of the routine
2 day to day offloads and monitors and that sort of thing. But we do
3 have some updates on some sea turtle cases, and some investigations
4 that were conducted, in conjunction with Puerto Rico and U.S.V.I.
5 along with U.S. Coast Guard and CBP. We also have worked cases in
6 the past with the FDA, and the U.S. Park Service.

7
8 We have a case right now that's ongoing. It's a fish trap case.
9 We've gotten some inquiries on this case from various folks. I
10 can't go into too much detail on the case because it is ongoing.
11 It's my understanding that we have completed the investigation.
12 The case was referred to us. It came in the form of a complaint,
13 and our folks did follow-up.

14
15 The Complaint was that there were traps that were deployed in the
16 Hind Bank. With assistance of the U.S. Coast Guard, they were able
17 to send out one of their assets along with their officer to
18 document the location of those traps, document the markings of
19 them, and then Coast Guard also followed up with an at-sea boarding
20 after the fact, with the vessel that was involved.

21
22 Like I said, the investigation is complete and it's my
23 understanding that we are referring that case to our Office of
24 General Counsel for review, this week. Then if you go to the next
25 slide, that's just a close-up of the location of where the report
26 came in, where those traps were observed, and the closure. So, I
27 hope to provide some updates during the next meeting on the status
28 or the outcome of that case.

29
30 We worked a possession of a blue marlin in th, U.S. EEZ case. This
31 case was initiated by, I believe it was Customs and Border
32 Protection. There were a couple things that were documented. On
33 the fisheries side, it was possession of, like I said, the blue
34 marlin fillets. There were also some narcotics involved, and my
35 understanding is that subject was arrested for those charges, but
36 as far as the fisheries side goes, we did issue a \$2,750 summary
37 settlement offer, for the fisheries violation.

38
39 This is an update. I've mentioned this case during the last
40 meeting. It's an ESA case involving, sea turtle take in Saint
41 Croix. During the last meeting I reported that, Roberto Carmona,
42 he was the 1st defendant that plead guilty to two counts and was
43 sentenced to one year probation and a \$500 fine.

44
45 I know that we just did talk about some of the penalties. So, just
46 to be clear, this was Federal District Court, so it's a federal
47 case that was taken through the U.S. Attorney's Office. And then,
48 the 2nd subject involved in that case, also plead out and they were

1 issued the same sentence of one year probation and a \$500 fine.
2
3 I believe those were both, or that particular case was a hawksbill
4 sea turtle.
5
6 This is another sea turtle case out of Puerto Rico. We did execute
7 an arrest warrant for the subject that was involved in this case.
8 It is still early in the case, so we don't have any outcomes, but
9 we'll share that, hopefully, next meeting or in one of the future
10 meetings. This particular case was a with a green sea turtle.
11
12 I did mention that both cases were initiated by our JA partners
13 both Puerto Rico and U.S.V.I.
14
15 As far as our trade monitoring goes, we do regularly conduct import
16 container exams at the airports and the ports. We're looking
17 primarily for SIMP species and other species. Typically, in this
18 area we're looking at things like lobster, snapper, mahi, and tuna.
19 Recently, we've been working with U.S. Fish and Wildlife on some
20 CITES related issues involving queen conch.
21
22 And for those that-- I think I shared this during a previous
23 meeting, but the SIMP species, there's 13 of them, categories of
24 species, that cover over 1,100 actual species within the SIMP
25 program that require additional reporting as part of that program.
26 And we're doing a lot of this stuff in conjunction with Coast Guard
27 CBP and FDA does assist as well.
28
29 Just an update on our Puerto Rico U.S.V.I. Environmental Crimes
30 Task Force. We are following up on some complaints, as part of
31 that task force, that were received by the task force. One of the
32 bigger ones that our agent is involved in it right now is a Jobos
33 Bay matter. I've already reported during a previous meeting that
34 two men were indicted as part of the Jobos case, and the
35 investigation is ongoing on that one.
36
37 This is just a Couple updates on training outreach and education.
38 Our agent in Puerto Rico, Miguel Borges, participated in the Marine
39 Resource Education Program, MREP. Wilson reported on earlier, in
40 his brief. There were approximately 30 fishermen that were in
41 attendance on that training. We did get some good feedback from
42 that. I was participating in the MREP that was held in Saint Pete,
43 where Vanessa and Wilson were also there, and that was a great
44 event as well.
45
46 We also had a training event that took place with border patrol
47 agents at their station, that would be at Puerto Rico. Miguel
48 presented to those folks as well on some federal fisheries

1 regulations. And they did some scenario type training. I think we
2 have another slide or two.

3
4 Next slide is just our enforcement priorities, which on the last
5 slide you'll see it's a link to our website. Our priorities are
6 now final for 2023 through 2027. So, we just set the 5-year
7 priority setting.

8
9 We set annual priorities, but the 5-year document is a more
10 comprehensive listing of priorities for 5 years. That's available,
11 like I said, on the website along with a link here to the IUU fact
12 sheet.

13
14 And then, next slide has a couple of links to our website, with
15 annual reports, some vessel monitoring information that we've
16 gotten questions on, along with the IUU fact sheet I mentioned.
17 There is a link there on the slide for fishery bulletins that we
18 get questions on from time to time, for folks to sign up.

19
20 And then the link on the bottom is access to the Office of General
21 Counsel's website, where you can find a list of penalties, whether
22 they're notice of violations, assessments, permit sanctions that
23 sort of thing, for cases that are referred to their office.

24
25 And then, finally, we do have the OLE Council report. We put those
26 together on a quarterly basis. It's the same report we provide to
27 the South Atlantic, the Caribbean, and the Gulf. And those are all
28 included in the briefing book.

29
30 And final slide is, just questions for you all. Thank you.

31

32 **Questions/Comments**

33
34 **CARLOS FARCHETTE:** Thank you, Manny. Any questions for Manny?
35 Hearing none. Thanks a lot, Manny.

36
37 **CRISTINA OLÁN MARTÍNEZ:** Dr. Michelle Schärer, "Question for Mr.
38 Antonaras. Will NOAA OLE be bringing vessels to the U.S. Caribbean
39 anytime soon for the underwater patrols?"

40
41 **MANNY ANTONARAS:** Yeah. At this time, we don't have any plans to
42 acquire new vessels for the Caribbean. We don't have-- We rely
43 heavily on partnerships for that sort of thing, for at-sea patrols.
44 The JEA is with the Commonwealth and Territory, we view that as a
45 force multiplier for us for getting out to some of the closed areas
46 to conduct at-sea patrols, and of course, the U.S. Coast Guard.

47
48 But as far as, officer law enforcement goes, we don't have vessels

1 out here and really don't have plans in the near future to obtain
2 our own vessels for this area. We are very limited in numbers of
3 vessels we have. Relatively speaking, for the entire division, we
4 have, I think, two larger patrol boats, four smaller ones, in
5 addition to a few other specialized boats, but that's really it
6 for us.

7

8 **CARLOS FARCHETTE:** Chat.

9

10 **CRISTINA OLÁN MARTÍNEZ:** Mr. Andrew McGraw mentioned that he can
11 share the U.S. Coast Guard Enforcement highlights. He is online.

12

13 **CARLOS FARCHETTE:** Okay.

14

15 **ANDREW MCGRAW-HERDEG:** Yes. Thank you, Mr. Chairman. I can upload
16 the PDF here in the chat. It's just a few highlights. Let me know
17 if you're able to open that.

18

19 **CRISTINA OLÁN MARTÍNEZ:** You can share your screen if you want to.

20

21 **ANDREW MCGRAW-HERDEG:** Let me try that as well. Okay. Can everyone
22 see this?

23

24 **CRISTINA OLÁN MARTÍNEZ:** Yes.

25

26 **U.S. Coast Guard - Andrew McGraw-Herdeg**

27

28

29 **ANDREW MCGRAW-HERDEG:** Great. So, thank you again for your time.
30 And, again, huge thanks to NOAA OLE, and all our partners.

31

32 Just a couple things recently I'd like to highlight. So first of
33 all, we had a training session for LMR Boarding Officer School
34 down from the Southeast Regional Fisheries Training Center, SRFTC.
35 We were able to qualify 14 new LMR Caribbean boarding officers
36 across our station sector, our BFD over in Saint Thomas, you guys,
37 and crest 4 of the cutter fleet. That's a huge help for us. Those
38 guys will be able to enforce all applicable federal fisheries laws.

39

40 In addition, the one major case I'd like to highlight, again, NOAA
41 was a huge help with this, and they, kind of, gave their
42 perspective. This case in Saint Thomas where we suspected unlawful
43 commercial fishing from the Hind Bank MCD. We were able to
44 terminate the voyage and force the captain with a court order to
45 terminate that commercial fishing venture and seize all the catch,
46 again with NOAA's help.

47

48 The case is still pending enforcement action, mostly from the civil

1 penalty side, again for the commercial fishing without the correct
2 documentation. This is a great example of interagency operation.
3 We had P.R. municipal police help with the escorting of the vessel
4 back, as well as customs board protection.

5
6 We had Border patrol take interest in the individual as well as,
7 air and marine operations assist with some follow-up later on. So,
8 again, big thank to BFD Saint Thomas for doing that boarding and
9 getting this guy off the water.

10
11 As far as future operations, we do have a couple of things planned
12 for the near future that we can't say too much about, but we're
13 discussing with Dr. Schärer and Special Agent Borges, trying to
14 make sure our cutter fleet can go out and put some of that training
15 to work.

16
17 So, Thanks again for your time. If there's no other questions,
18 feel free to move to whoever's next.

19
20 **CARLOS FARCHETTE:** Thank you, Coast Guard. Any questions for the
21 U.S. Coast Guard? Hearing none, we'll move forward to the Advisory
22 Body Membership. Miguel?

23
24 **Advisory Bodies Membership**

25
26 **MIGUEL A. ROLÓN:** Thank you, Mr. Chairman. This time it's sort of
27 easy. We have to reappoint two member who were willing to be
28 reappointed. You reappointed them the last time and now they're
29 due for reappointment. In the case of the SSC, we have Todd Gedamke
30 and Dr. Cope. Dr. Cope and Dr. Gedamke. In the case of EBFM TAP,
31 we need to reappoint everybody because their term expired on
32 February 24. In the case of the DAP Saint Thomas, we are okay until
33 the 4/24. Everybody's On board.

34
35 We have two vacancies in the Puerto Rico DAP and two vacancies in
36 Saint Croix DAP.

37
38 **NELSON CRESPO:** I think it's only one vacancy.

39
40 **MIGUEL A. ROLÓN:** Okay. If it's only one, it's okay. If we have a
41 change, then we can reappoint the next time.

42
43 So, I stand corrected. In the case of Puerto Rico, it is only one
44 vacancy. And I believe that-- Julian?

45
46 **JULIAN MAGRAS:** Yeah. Julian Magras for the record. I have a
47 question. I don't know if it, I don't think it was filled as yet.

48

1 I know from the SSC we had Doug Gregory that resigned earlier in
2 the year. We submitted a letter with two names for one of our
3 individuals, either Virginia Shervette or Elizabeth Kadison to
4 replace him for representation from the U.S. Virgin Islands. I was
5 just trying to get an update on where we at with that, if that has
6 been spoken about yet or it's for the future.

7
8 **MIGUEL A. ROLÓN:** Not yet. We're going to do it in April at a
9 closed session. In order for us to have that we have to have the
10 close session sharp. But no, we haven't forgotten about it. But
11 here in the open, these are the only instructions I got at this
12 time.

13
14 So, Mr. Chairman, the first motion, taking into consideration what
15 Julian mentioned, and we're going to do that at the end. But
16 anyway, we need a motion to reappoint.

17
18 **DIANA T. MARTINO:** Motion to reappoint Dr. Todd Gedamke and Jason
19 Cope.

20
21 **VANESSA RAMÍREZ:** So moved.

22
23 **ROBERTO SABATER:** Second.

24
25 **CARLOS FARCHETTE:** All in favor, say aye.

26
27 **GROUP:** Aye.

28
29 **SENNAI HABTES:** One question. Just to confirm, this is for the
30 SSC. Correct?

31
32 **CARLOS FARCHETTE:** Yes. Any nays? Any abstentions? Motion carries.

33
34 **DIANA T. MARTINO:** Okay. The next motion would be to reappoint all
35 the members of the EBFM TAP, which are Juan Cruz Motta, Stacey
36 Williams, Tarsila Seara, Orian Tzadik, Kevin McCarthy, Sennai
37 Habtes, Alida Ortiz and Edwin Cruz-Rivera.

38
39 **VANESSA RAMÍREZ:** So move. Second.

40
41 **ROBERTO SABATER:** I second.

42
43 **CARLOS FARCHETTE:** All in favor, say aye.

44
45 **GROUP:** Aye.

46
47 **CARLOS FARCHETTE:** Any nays? Any abstentions? Hearing none, motion
48 carries.

1
2 **MIGUEL A. ROLÓN:** And then, Mr. Chairman, as I said, we have one
3 vacancy in Puerto Rico, but we have a tradition that whenever we
4 have a Council member that is valuable, but their term expires, we
5 usually want to keep that institutional memory for the Council.
6 So, at this time, we would like to propose to consider appointing
7 Marcos Hanke to the DAP Puerto Rico vacancy that we have at this
8 time.
9
10 **CARLOS FARCHETTE:** Motion.
11
12 **VANESSA RAMÍREZ:** So moved.
13
14 **ROBERTO SABATER:** I second.
15
16 **CARLOS FARCHETTE:** All in favor, say aye.
17
18 **GROUP:** Aye.
19
20 **CARLOS FARCHETTE:** Any nays? Any abstentions? Motion carries.
21
22 **MIGUEL A. ROLÓN:** Okay, Mr. Chairman. The letters will be drafted
23 by the staff and to be signed by you and send it to the
24 reappointments and the new appointment. In the case of Saint Croix,
25 do you have a member?
26
27 **CARLOS FARCHETTE:** Yes. I have Randy Brewington. I have a biography
28 for him. He's a charter fisherman and licensed commercial holder
29 and he's also a member of our Fisheries Advisory Committee on Saint
30 Croix.
31
32 **MIGUEL A. ROLÓN:** And he's willing and able to be a member?
33
34 **CARLOS FARCHETTE:** Yes. We already spoke. He's willing and able.
35
36 **MIGUEL A. ROLÓN:** So, we need a motion to appoint Mr.--
37
38 **SENNAI HABTES:** Motion to appoint Randy Brewington to the Saint
39 Croix DAP.
40
41 **ROBERTO SABATER:** I second.
42
43 **CARLOS FARCHETTE:** All in favor, say aye.
44
45 **GROUP:** Aye.
46
47 **CARLOS FARCHETTE:** Any nays? Any abstentions? Hearing none, motion
48 carries.

1
2 **MIGUEL A. ROLÓN:** And the last one is a question to the Coast
3 Guard, whether they will be willing to continue being a member of
4 the DAP for Puerto Rico and the U.S. Virgin Islands, Saint Thomas,
5 and Saint Croix. You don't have to answer now, but it's for the
6 next meeting.

7
8 The reason for that is that one of the Coast Guard officials told
9 us that they didn't because of some [monetary?] constraint and
10 some workload, they were not attending the meetings. But we want
11 to ask them, you know, for the next meeting, probably we can have
12 the answer.

13
14 The Cost Guard is important in the District Advisory Panels because
15 you have the practicality and the expertise of enforcement out
16 there. You know, we can discuss an issue, prepare a recommendation
17 for the Council, but is that something that is not enforceable or
18 goes against rules and regulations that the Coast Guard has to
19 follow? We need to know at the level of the DAP. So just for the
20 next meeting, you can tell us your wishes to participate or
21 continue participating in the DAP.

22
23 You don't have to participate in person. Now we have also
24 facilities for virtual participation.

25
26 That's all we have, Mr. Chairman, so far. For the next meeting, we
27 are going to consider the membership of the SSC. We need to fill
28 that vacancy and we have to consider the letter that Julian alluded
29 to today.

30
31 **SENNAI HABTES:** Just to clarify, how many vacancies are there still
32 on the SSC that need to be filled? Just one. Correct? Okay.

33
34 **CARLOS FARCHETTE:** Okay. Thank you. We have a public comment
35 period, and I have, Kelvin Vidal. Kelvin Bailey. Sorry. My
36 apologies. I don't know if you know Kelvin Vidal. That's attorney
37 Vidal. Sorry.

38
39 **Public Comment Period**

40
41 **KELVIN BAILEY, JR.:** Good afternoon, Mr. Chair, distinguished
42 guests, everyone in the room. For the record, my name is Kelvin
43 Bailey, Jr. I am the president of the Virgin Islands Game Fishing
44 Club located here on Saint Thomas.

45
46 The issue I would like to bring before the Council is in reference
47 to the reciprocal fishing agreement between, the Government of the
48 United States of America and the Government of the United Kingdom

1 of Great Britain and Northern Ireland, which starts in opening,
2 the Government of the United States of America and the Government
3 of the United Kingdom of Great Britain and Northern Ireland,
4 seeking to maintain the long-standing and cooperative fisheries
5 relations in adjacent waters which have formed a part of the close
6 ties between the people of the British Virgin Islands and the
7 people of the United States.

8
9 Desiring to ensure effective conservation of fishery stocks in the
10 exclusive fishery zones of the British Virgin Islands and the
11 United States.

12
13 Before I go further, I want to make absolutely sure that this
14 proposal in no way seeks to revise the boundaries between the
15 U.S.V.I. and the British Virgin Islands. Rather, the proposal seeks
16 to invoke the provisions of Article VI of the 1983 treaty,
17 Reciprocal Fisheries Agreement between the same Parties, which
18 permits in relevant parts, either Party to request a consultation
19 to discuss implementation of the fisheries agreements, which I'll
20 go into detail.

21
22 Under Article VI, consultations shall be held at the request of
23 either Party to this agreement when: (b) either Party seeks a
24 change in existing patterns or levels of commercial or recreational
25 fishing, referred to in Articles II and III. Or Section (d) If
26 there is a need to discuss implementation of any provision of this
27 Agreement.

28
29 It's also in preference, the specific provisions of this agreement
30 which are as follows.

31
32 In Article II, commercial fishing by vessels of the British Virgin
33 Islands may continue in the exclusive fishery zones of the United
34 States in accordance with existing patterns and at existing levels.
35 The Government of the United States extends access to its exclusive
36 fishery zone to vessels of the British Virgin Islands for the
37 purpose of conducting such fishing.

38
39 Under Article III, commercial fishing by vessels of the United
40 States may continue in the exclusive fishery zone of the British
41 Virgin Islands in accordance with existing patterns and at existing
42 levels. The Government of the United Kingdom of Great Britain and
43 North Ireland extends access to the exclusive fishery zones of the
44 British Virgin Islands to vessels of the United States for the
45 purpose of conducting such fishing.

46
47 Further, under Article IV of it, the Government of the United
48 Kingdom of Great Britain and North Ireland shall have exclusive

1 authority to enforce the provisions of this Agreement and
2 applicable national fisheries regulations with respect to fishing
3 by vessels of the United States in the exclusive fishery zone of
4 the British Virgin Islands; provided that such national
5 regulations as may be applied shall not disturb existing patterns
6 and levels of fishing.

7
8 Under Article IV, Section 2, the Government of the United States
9 shall have exclusive authority to enforce the provision of this
10 Agreement and applicable national fishery regulations with respect
11 to fishing by vessels of the British Virgin Islands in the
12 exclusive fishery zone of the United States; provided that such
13 national regulations as may be applied shall not disturb existing
14 patterns and fishing levels.

15
16 The request is for clarification of fishing rules and the zones to
17 enable fishermen to routinely and safely fish in these designated
18 zones without fear of seizure of their vessels and catch, and being
19 subject to sizable fines.

20
21 That concludes my--

22
23 **MIGUEL A. ROLÓN:** Well, I just have to say, it's too late. That
24 document that you cited was withdrawn by the United Kingdom several
25 years ago.

26
27 **KELVIN BAILEY, JR.:** Mhmm.

28
29 **MIGUEL A. ROLÓN:** So, it's no longer valid. And they left to the
30 discretion of the local government of the British Virgin Islands,
31 and the U.S. Virgin Islands to come to some agreements that would
32 be beneficial to both areas.

33
34 The equidistant line is not movable. That's set by international
35 law. So, in this case, if what the local government and-- The local
36 fishers and the local government of the U.S. Virgin would have to
37 do is open the discussion for access on both areas of the
38 equidistant line. Then, that can be started by the local government
39 in consultation with the British Government.

40
41 The Council can serve as a platform, a neutral platform. That's
42 what we did the last time. We just went there, got the nice food
43 and everything, but we kept our mouth shut. And then, the two local
44 governments got into the actual discussions of the things that
45 were of importance to both areas.

46
47 The British Government, the United Kingdom, decided to leave to
48 the discretion of the British Virgin Islands, the management of

1 the fishery areas under their jurisdiction. So, they gave them
2 that authority. In the case of the Puerto Rico and the U.S. Virgin
3 Islands, Washington still has the last word. However, we use the
4 Magnuson-Stevens Act and the National Marine Fisheries Services to
5 behave ourselves.

6
7 So, in this case, if you come in pursue to clarify, to make sure
8 that the local government and the fishers, especially, have the
9 right knowledge so they can come back [inaudible]. That's something
10 that could be discussed. But at this time, the British Virgin
11 Islands has the authority to seize any vessels at the discretion
12 of the government following the laws and regulation they have
13 established.

14
15 And so be it. You know, if that's what you want, you can send me
16 an email, to me and Carlos, the Chair, and we can start the ball
17 rolling.

18
19 **KELVIN BAILEY, JR.:** That is exactly what I would like. Thank you
20 very much.

21
22 **MIGUEL A. ROLÓN:** Okay. The Department of State is a member of the
23 Council. It's a non-voting member of the Council. But when we
24 created that, there was no International Fisheries Affairs, Trade
25 and Commerce Office within NOAA. Now they have that, and they have
26 been able to help in some of these negotiations. So, please send
27 an email, to me and/or Carlos, and we will follow it with the
28 appropriate action.

29
30 **KELVIN BAILEY, JR.:** Thank you very much. That's what I need.

31
32 **MIGUEL A. ROLÓN:** Thank you.

33
34 **CARLOS FARCHETTE:** So, on a follow-up to that, I remember many,
35 many years ago when I was in DPNR enforcement, I was part of the
36 Marine Advisory Board and we traveled to Tortola to meet with the
37 Prime Minister and our Commissioner, and our Governor at the time
38 was Charles Turnbull. I don't know what went wrong, but they
39 utterly refused reciprocity in fishing rights, and that has been
40 a long-standing fight.

41
42 And I know that presently with Governor Bryan, who's the present
43 governor now, they have a Marine Advisory Committee. I don't know
44 if you're aware. You are? Okay. So, maybe that's also an avenue
45 that you need to follow-up with Governor Bryan and that way he
46 can-- I know he's back and forth with this.

47
48 **KELVIN BAILEY, JR.:** Yes. I am aware. It's called the IVIC, Inter

1 Virgin Islands Council. I have participated in the last two
2 sessions with the BVI. It's still very tough. So, we would like
3 any additional assistance in starting these discussions with the
4 British Virgin Islands, please.

5

6 **CARLOS FARCHETTE:** Thank you, Mr. Bailey. I got it right this time.

7

8 **MIGUEL A. ROLÓN:** I would like to make a note here. I met the old
9 Bailey when he was your age. So, the old Miguel and old Bailey
10 were friends a long time ago when you were a young kid.

11

12 **KELVIN BAILEY, JR.:** I would sit in the back of the room quietly
13 and listen to you all. You all had [crosstalk].

14

15 **MIGUEL A. ROLÓN:** I know. [laughter]

16

17 **KELVIN BAILEY, JR.:** Thank you for your time.

18

19 **CARLOS FARCHETTE:** Thank you. I think we're done. No more public
20 comments? Hearing none, go ahead, María.

21

22 **MARÍA LÓPEZ-MERCER:** Okay. Thank you. This is María López. So,
23 earlier today when we were discussing the federal permits to
24 develop-- Yesterday, when we were discussing the development of
25 federal permits, that conversation, that discussion was not
26 completed, because we were requesting additional guidance from the
27 Council to be able to move this forward.

28

29 So given the essence of time I am going to propose to the rest of
30 the Council members, that this topic be brought to the next April
31 Council meeting so we can continue the discussion of this very,
32 very important topic.

33

34 **CARLOS FARCHETTE:** Thank you. Sennai?

35

36 **SENNAI HABTES:** I do think to make a more useful discussion
37 regarding the federal permits, the Council does, in the interim,
38 identify specific management actions or needs related to permits
39 that we want to either prioritize or promote.

40

41 I think creating an overly inclusive federal permitting system for
42 the U.S. Caribbean, maybe a heavy lift. But if we identify
43 prioritization ones, things that we feel are really important and
44 are necessary, it will help both the NOAA staff and other agencies
45 give us the right information that we need to develop this type of
46 system.

47

48 **CARLOS FARCHETTE:** Miguel.

1
2 **MIGUEL A. ROLÓN:** Perhaps, the two local governments can send a
3 communication to us about those issues as you see them. And then,
4 we can get that information from Ricardo and from you and discuss
5 it with the Regional Office so we can prepare for the next meeting
6 in April.
7
8 We have the benefits of being able to hear the present status of
9 the office for permits, and we will do that.
10
11 María, is that's okay? Does it follow-- I want to make sure that
12 we paid attention to what you were saying and that you agree with
13 it. For the next meeting, we will have this information by the two
14 local government. They're going to send me information on what
15 type of permit they would like to see towards species and every so
16 we can prepare for the meeting in April.
17
18 **MARÍA LÓPEZ-MERCER:** That's okay with me. Local govern-- you're
19 talking about--
20
21 **MIGUEL A. ROLÓN:** Local governments, because Sennai said that they
22 have to identify, you know, to which species, what type permit we
23 would like to see as a Council and also in conjunction with the
24 local government and what they need to have.
25
26 **MARÍA LÓPEZ-MERCER:** Okay, I mean you guys can put together a list
27 of ideas. I mean we had a presentation yesterday about what the
28 process is. However, the need is to, of course, narrow the scope.
29
30 I think from the input from Council members and probably the DAP
31 will be very important to define what the Council will be looking,
32 as well as the local governments if they want to provide input as
33 well.
34
35 **MIGUEL A. ROLÓN:** Okay. I have Clay and then Jessica.
36
37 **CLAY PORCH:** Yeah. I just wanted to follow-up on actually a comment
38 the Chair made, as he's leaving. I think, the deep-water snapper
39 fishery is an excellent candidate for that. We have an opportunity
40 to do something really special there because it's a relatively new
41 fishery, probably not over capitalized yet. So, this is a good
42 opportunity to put a program in place.
43
44 Also, of course, get the seasons for the federal and territorial
45 waters aligned, which is always important to do. Develop the
46 appropriate parameters for when you would let people into the
47 fishery, you know, when do you cap the licenses.
48

1 And I say that, not only because it's a relatively new fishery.
2 Like I said, I don't back that it's probably over capitalized, but
3 we're also implementing a deep-water abundance survey. So, if you
4 cap the licenses, you see how the catches settle out, and then you
5 start seeing, maybe the stocks are staying in good shape, then
6 perhaps you could let a few more people in. Do you see that the
7 abundance is going down? Then, you know, maybe you have too many
8 licenses.

9
10 But I think, again, you have something to do really special with
11 this species, with this complex.

12
13 **CARLOS FARCHETTE:** Thank you, Clay. Jessica.

14
15 **JESSICA STEPHEN:** Yes. I'll also support what Clay said. When
16 you're thinking about it, don't think about what permits you need.
17 Think about what fisheries have problems that permits can solve.

18
19 And so, you know, think of it again as a tool that can help you
20 with something. It's not just a tool you want to apply overall,
21 right? You want to have a need and a purpose to it. We could even,
22 think about, maybe you take one example and just start with one
23 permit for one fishery. See how that works.

24
25 You're going to gain a lot of that, where if you want to expand
26 permits to other fisheries, the knowledge that you gain through
27 working through that. So, say maybe even doing a white paper to
28 get some more discussion going or some workshops to get some more
29 discussion going. That's going to lead you to take the presentation
30 they did and apply some of those concepts to where you're moving
31 forward.

32
33 And, again, I'm happy to come back to another Council meeting and
34 have more discussions about permits.

35
36 **CARLOS FARCHETTE:** Thank you. Julian and then Crespo.

37
38 **JULIAN MAGRAS:** I know we're pretty much out of time, and I would
39 request if we could really have a good discussion on this
40 permitting process at the next Council meeting. Because I was
41 hoping that we would've had enough time today to really get into
42 discussions. I know a few years back it was on the table.

43
44 And, you know, is this going to be something that's mandatory? Are
45 we just going to be-- you know, I have so many questions about it,
46 so I don't want to get into that today. If we could please ensure
47 that it is on the agenda, and if we could have that presentation
48 available, and your presence, so that we can go over it.

1
2 I think the fishers have a lot of concerns, and it would be good
3 to discuss it.
4
5 **CARLOS FARCHETTE:** Nelson.
6
7 **NELSON CRESPO:** Thank you, Mr. Chair. Nelson Crespo for the record.
8 Clay and Jessica, I support your words. I also support Julian's
9 statement. You know, we have to learn a little bit more to know
10 about what's going on with the permits, but I totally agree that
11 the deep-water snapper is great opportunity to start developing a
12 permit in federal waters.
13
14 **CARLOS FARCHETTE:** Miguel?
15
16 **MIGUEL A. ROLÓN:** Yeah. I believe that we have enough elements to
17 prepare something for you to discuss at the April meeting.
18
19 One caveat. A permit is not the same as the license. Sometimes
20 they are look at the same, but they are not. In the case of Puer-
21 Well, we discussed this a long time ago. We couldn't implement it.
22
23 The Council wanted to implement a general universal permit-license
24 for Puerto Rico, at that time. But Puerto Rico requires a 1-year
25 residency, and the federal government does not. That's when it
26 stopped. Because the GC at that time said, no way Jose, you're not
27 going to do that.
28
29 It's 6 o'clock. I don't think that we have to go into all the
30 things there, but these are the type of things that we want to
31 collect the information on and bring it back to you at the next
32 meeting. In between, we probably will be conferences with everybody
33 that is necessary, before the April meeting.
34
35 **CARLOS FARCHETTE:** Graciela?
36
37 **GRACIELA GARCÍA-MOLINER:** So, I think that the other sector that
38 we're forgetting is the National Salt Water Registry and that, you
39 know, that supposed to-
40
41 **MIGUEL A. ROLÓN:** Eso lo discutimos en abril.
42
43 **GRACIELA GARCÍA-MOLINER:** Excuse me?
44
45 **MIGUEL A. ROLÓN:** Que lo vamos a discutir en abril, todas esas
46 cosas.
47
48 **GRACIELA GARCÍA-MOLINER:** But I'm bringing it up because, you know,

1 we're supposed to be registering when we're fishing in the EEZ,
2 and we're not, etcetera. And I think that that's a very big sector
3 that we're missing a lot of information. Especially, because
4 they're going into the deep-water snapper fishery.
5

6 **CARLOS FARCHETTE:** So, next week I have a meeting with my local
7 Fisheries Advisory Committee. Most of those members are District
8 Advisory Panel for the Council members. So, I'm going to start the
9 ball rolling and hopefully get some information for next year.
10

11 **MIGUEL A. ROLÓN:** Ricardo tiene un comentario. Pero antes, eso es
12 un topico-- Sorry. It's a topic that the Junta should address, so
13 it can be prepared. Because the Junta is equivalent of the
14 Fisheries Advisory Committee.
15

16 **RICARDO LÓPEZ-ORTIZ:** I remember that Bill Arnold tried to work
17 with a permit for the deep-water snapper. It's important to
18 consider what he did, to see what was wrong and what is right.
19

20 **MIGUEL A. ROLÓN:** That's the one I was referring to. It was stopped
21 because Puerto Rico was requiring a year residency for any permits,
22 and it's in the law. It's still in the law of Puerto Rico. But,
23 anyway, all this will be brought to your attention in spring.
24

25 **MARÍA LÓPEZ-MERCER:** Okay. I am going to recommend that you let
26 us, our staff, work on a deep-water snapper for an example in
27 Puerto Rico, as was suggested by Clay, as an exercise to show how
28 decisions could be made and bring that to the Council. It is just
29 to show you how, you know, based on the presentations and the
30 information that Jessica and Kevin brought and how the process
31 works, to show the Council members how a decision could be made,
32 and we can then start from there.
33

34 **CARLOS FARCHETTE:** Julian.
35

36 **JULIAN MAGRAS:** I would like to request that Jessica meet with the
37 DAPs and give her presentation. That way we can have a prepared
38 statement for the next Council meeting, and that would save us
39 some time, if her presentation can be presented to the District
40 Advisory Panel. That way, our members can have a good discussion
41 on the process, prior to the April meeting instead of us trying to
42 do it after we have the discussion on the April meeting. I Think
43 that would save us a lot of time. So, if that is possible, Miguel,
44 if we can put that on the agenda for next year.
45

46 **MIGUEL A. ROLÓN:** Yeah. Actually, we can have a virtual meeting of
47 the three DAPs as we did before. And they can give that
48 presentation, and you will be able to discuss it amongst yourselves

1 and prepare whatever you need to prepare for recommendation to the
2 Council.
3
4 **CARLOS FARCHETTE:** Okay. Good. So, on a lighter note, I have the
5 Chairman of the Saint Thomas Fisheries Advisory Committee here,
6 Young Vidal. Young Bailey, I'm stuck with that name. Young Bailey.
7
8 **CLAUDE BERRY:** From birth since I was 19. We never go fishing, we
9 go catching. Now, we lost better than 80% of some of our fishing
10 on top the surface. We lost the bait population in the eighties.
11
12 We used to go outside the shore and catch whatever amount of
13 sailfish you can or you want to. They're gone. We don't know for
14 sure whether it is scientific or whatever it has caused the bait
15 depletion, but not much bait around anymore.
16
17 In turn, the charter boats are having a hell of a time which
18 benefits a lot of the economy in the Virgin Islands. People from
19 all over the world will come to Saint Thomas, stay in hotels, fish,
20 and stuff like that. We use our big tournaments. Proceed goes to
21 the boy scout, girl scout, and stuff like that. It's history.
22
23 We don't know if the scientists around or whoever can figure out
24 why we lose the bait. I go fishing sometimes, and if you catch a
25 bonito, that's a big day. The tourists that we've taken out when
26 they come in, unhappy.
27
28 I gave my boat to Game Fishing Club as a price for our kid's
29 tournament. The kids want to go fishing. I'm afraid to take him
30 fishing because you can't catch anything. And something needs to
31 be looked at. It's over and above.
32
33 We can tell you what happened in the past, what's going on now.
34 We're not scientists. We have eyes on what's happening today and
35 what can happen in the tomorrows. We go back Fish and Wildlife, we
36 use FADs. FADs work, but we work against the FADs. We're taking
37 the babies before they hatch, before they develop.
38
39 You know, I shiver when I go to the street line and see we're
40 selling 4-pound dolphins. Wahoos under 10 pounds. We in the Virgin
41 Islands, which I'm a part of, we beat the federal government in
42 their restriction. We were the first one to go into tag and
43 release, you know, billfish.
44
45 We try to stay ahead of the regulations. Even in Puerto Rico, I
46 used to fish the tournaments in Puerto Rico. They used to kill
47 everything in Puerto Rico. And Saint Thomas, we're very proud of
48 being champion in conservation.

1
2 The ocean needs help, in a big way. If this plan has to go another
3 50 years we are in trouble. Big trouble. And I'm not a speaker,
4 but I have first-hand knowledge, and the man is foolish to die
5 with his knowledge and speak the way you want to and spit out the
6 way you want to and let the brain put it together. Thank you.

7
8 **CARLOS FARCHETTE:** Thank you, Mr. Berry. Yeah. Well, Brent kind
9 of mentioned that, but in the April meeting, I want to bring up
10 the situation that we're having on Saint Croix with the port and
11 Christiansted's closing. So, there's going to be an increased
12 traffic over Lange Bank and that area being an EFH, I think it
13 needs some protection against some vessels over a certain tonnage.
14 Especially, the cargo vessels that take shortcuts in the shallows
15 and they pick up a string of 10, 12 fish traps and drag it across
16 the bottom and destroy a whole bunch of coral, soft and hard
17 corals. And I think that we need to find a way to keep them outside
18 the 100-fathom curve. But more on that when I get better
19 information for next April. And it's also a safety at sea for
20 fisher. I think Brent mentioned that.

21
22 **CARLOS FARCHETTE:** Miguel.

23 24 **Next Meetings**

25
26 **MIGUEL A. ROLÓN:** Thank you, Mr. Chairman. Every December, we
27 announce the meetings for 2024. Of course, Diana is going to send
28 an email to everybody, and we will publish it in our web page. But
29 tentatively, we have April 23-24, our first meeting of 2024,
30 followed by August 13-14, and then we end up with, December 4-5.

31
32 Those are the regular meetings that we have, but if in between we
33 need to have another meeting, either virtual or hybrid meeting,
34 the chair will call for that meeting and everybody will be known.

35
36 Next year, I'm stuck with being the coordinator for the CCC, and
37 that meeting will take place in Puerto Rico, San Juan de Puerto
38 Rico, 21st to 23rd. Hopefully, we'll have Dr. Werner at that meeting.
39 And then it will be followed by the October 16-17. That meeting is
40 coordinated by the National Marine Fisheries Service in
41 conjunction with the CCC. So, those are the meetings that we have
42 in place. We will announce it to everybody.

43
44 And now that I'm talking, I want to thank everybody who attended
45 this meeting, and also, I'd like to wish you a hell of a holiday
46 year. You all deserve it. Good year. I hope that this year is
47 better than this one.

48

1 We are at your service anytime. I'm glad that we were able to see
2 Dalila all the way from Mexico here. Laura Cimo all the way from
3 Washington and Cisco Werner. So, for that, we are very grateful.

4
5 And I have to say this, yesterday, I was surprised by Julian and
6 a bunch of other fishers. I have some conspiracy people in the
7 staff, they knew it. I didn't know anything. But to me, to receive
8 something like that from the fishers of Saint Thomas, is something
9 that I will never forget. From now on, I will adopt a watch for
10 every Council meeting.

11
12 Yeah. I used this one, but I promise you that watch will be with
13 me because the watch has the islands of the Virgin Islands in the
14 middle of it. So, anyway, thank you very much, Julian. Please
15 convey the message to everybody there.

16
17 And happy holidays to everybody. Thank you, Mr. Chairman.

18
19 **CARLOS FARCHETTE:** Thank you, Miguel. So, I kept everyone on
20 overtime today. Hopefully that won't happen in the next meeting.
21 So, meeting adjourned at 6:02 on December 6, 2023. Meeting
22 Adjourned.

23
24 (Whereupon, the meeting adjourned on December 6, 2023.)