

1 GULF OF MEXICO FISHERY MANAGEMENT COUNCIL

2  
3 JOINT MEETING OF THE SPECIAL CORAL SCIENTIFIC AND STATISTICAL  
4 COMMITTEE AND CORAL AND SHRIMP ADVISORY PANELS

5  
6 Gulf Council Office Tampa, Florida

7  
8 September 16, 2019

9  
10 **CORAL AP VOTING MEMBERS**

11 J.P. Brooker.....Ocean Conservancy  
12 Scott Hickman.....Galveston, TX  
13 Morgan Kilgour.....Sacto, CA  
14 Shelly Krueger.....Key West, FL  
15 Rob Ruzicka.....St. Petersburg, FL  
16 Portia Sapp.....FDACS

17  
18 **SPECIAL CORAL SSC VOTING MEMBERS**

19 Sandra Brooke.....St. Teresa, FL  
20 Paul Sammarco.....Houma, LA  
21 G.P. Schmahl.....Flower Garden Banks NMS

22  
23 **SHRIMP AP VOTING MEMBERS**

24 Corky Perret.....MS  
25 Steven Bosarge.....Pascagoula, MS  
26 Thu Bui.....Lafayette, LA  
27 Glenn Delaney.....Southern Shrimp Alliance  
28 Gary Graham.....Brazoria, TX  
29 Harris Lasseigne.....New Braunfels, TX  
30 Lance Nacio.....Montegut, LA  
31 Thomas Shultz.....Biloxi, MS  
32 Thomas Shultz, Jr.....MS  
33 Franklin Parker.....Biloxi, MS  
34 John Williams.....Tarpon Springs, FL

35  
36 **STAFF**

37 Zeenatul Basher.....Coral and Habitat Biologist  
38 Matt Freeman.....Economist  
39 John Froeschke.....Deputy Director  
40 Lisa Hollensead.....Fishery Biologist  
41 Natasha Mendez-Ferrer.....Fishery Biologist  
42 Camilla Shireman.....Administrative & Communications Assistant  
43 Carrie Simmons.....Executive Director

44  
45 **OTHER PARTICIPANTS**

46 Heather Blough.....NMFS  
47 Leann Bosarge.....GMFMC  
48 David Dale.....NMFS

1 Kenneth Daniels.....Seminole, FL  
2 Beth Dieveney.....FKNMS  
3 Benny Gallaway.....LGL Ecological, TX  
4 Susan Gerhart.....NMFS  
5 Frank Helies.....NMFS  
6 Sharon McBreen.....Pew Charitable Trusts  
7 Kelli O'Donnell.....NMFS  
8 Lauren Waters.....NMFS  
9 Stephen Werndli.....FKNMS  
10  
11 - - -  
12

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PAGE 79: Motion to request that staff include all relevant information regarding shrimp effort point data for the FKNMS expansion, not just the point data in the GMFMC jurisdiction, for consideration for making recommendations about the FKNMS expansion. [The motion carried on page 81.](#)

PAGE 91: Shrimp AP only motion to oppose the proposed northwestern expansion of the FKNMS boundary. [The motion carried on page 97.](#)

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PAGE 132: Motion that, given the unexpected substantial declines in nesting activity in Mexico in 2018 and 2019, there is a critical need for a stock assessment update for Kemp's Ridley sea turtles performed by competent sea turtle experts. This stock assessment should address, among other things, if, how, and to what degree density dependence, the 2010 Deep Water Horizon spill, and marine debris may be contributing to this decline. [The motion carried on page 136.](#)

PAGE 136: Coral AP and Coral SSC only motion to have the Gulf Council start work on Coral Amendment 10. [The motion carried on page 147.](#)

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1 The Joint Special Coral Scientific and Statistical Committee and  
2 Coral and Shrimp Advisory Panels of the Gulf of Mexico Fishery  
3 Management Council convened at the Gulf Council Office on Monday  
4 morning, September 16, 2019, and was called to order by Dr.  
5 Natasha Mendez-Ferrer.

6  
7 **INTRODUCTION OF MEMBERS**  
8

9 **DR. NATASHA MENDEZ-FERRER:** Good morning, everybody. First of  
10 all, I would like everybody to introduce themselves. I also  
11 want to mention that this meeting will be transcribed, and so,  
12 before you speak, please say your name, so that that can be  
13 included in the documents. My name is Natasha Mendez-Ferrer,  
14 and I am a fishery biologist with the Gulf Council, and we  
15 continue introducing ourselves to my right.

16  
17 **MS. SHELLY KRUEGER:** Good morning. My name is Shelly Krueger,  
18 and I am the Florida Sea Grant agent in the Florida Keys for the  
19 University of Florida IFAS Extension.

20  
21 **MR. SCOTT HICKMAN:** Captain Scott Hickman from Galveston, Texas,  
22 a thirty-five-year professional charter boat fisherman and  
23 commercial fisherman, and I'm currently the Chair of the Flower  
24 Garden Banks Advisory Council.

25  
26 **MR. G.P. SCHMAHL:** Good morning. My name is G.P. Schmahl, and I  
27 am the Superintendent of the Flower Garden Banks National Marine  
28 Sanctuary based out of Galveston, Texas.

29  
30 **DR. MORGAN KILGOUR:** Morgan Kilgour, and I am a Senior  
31 Environmental Scientist with the State of California, but I'm  
32 here because I have a lot of vested interest in corals in the  
33 Gulf of Mexico.

34  
35 **DR. SANDRA BROOKE:** Sandra Brooke, Florida State University, and  
36 I'm a coral ecologist, and I'm on the Coral SSC.

37  
38 **MS. PORTIA SAPP:** Portia Sapp, and I'm with the Florida  
39 Department of Agriculture and Consumer Services, and I'm the  
40 Director of the Division of Aquaculture.

41  
42 **MR. FRANK PARKER:** Frank Parker, and I'm a commercial fisherman  
43 from Biloxi, Mississippi, and I'm on the Shrimp AP.

44  
45 **MR. STEVE BOSARGE:** I'm Steve Bosarge, and I'm a commercial  
46 fisherman and Vice Chair of the Shrimp AP, and I'm a  
47 commissioner with the Department of Marine Resources, and I've  
48 been doing this for a long time, and I'm looking forward to the

1 meeting.  
2  
3 **MR. LANCE NACIO:** I'm Lance Nacio, Anna Marie Seafood, and I've  
4 a shrimp boat, and I have a reef fish boat, and I've been doing  
5 it for a while.  
6  
7 **MS. THU BUI:** Thu Bui, and I'm with Louisiana Sea Grant and LSU  
8 Ag Center, and I'm a Marine Extension personnel.  
9  
10 **MR. HARRIS LASSEIGNE:** Harris Lasseigne from New Braunfels,  
11 Texas, retired commercial fisherman, invested in all phases of  
12 the shrimp industry.  
13  
14 **MR. CORKY PERRET:** Corky Perret, Chairman of the Shrimp AP from  
15 Poplarville, Mississippi.  
16  
17 **MS. LEANN BOSARGE:** Leann Bosarge, voting member on the Gulf  
18 Council, serving as the liaison for the Shrimp AP meeting today.  
19  
20 **MR. JOHN WILLIAMS:** John Williams, Executive Director of the  
21 Southern Shrimp Alliance.  
22  
23 **MR. GARY GRAHAM:** I'm Gary Graham, and I'm retired from Texas  
24 Sea Grant as a fisheries specialist, and I'm also involved in  
25 the commercial shrimp fishery.  
26  
27 **MR. PAUL SAMMARCO:** Paul Sammarco, and I'm Professor Emeritus at  
28 Louisiana University's Marine Consortium, or LUMCON, in  
29 Louisiana, and coral reefs are my thing.  
30  
31 **MR. THOMAS SHULTZ, JR:** Thomas Shultz, commercial fisherman from  
32 Biloxi, Mississippi.  
33  
34 **DR. MATTHEW FREEMAN:** Matt Freeman, one of the council staff  
35 economists and the staff liaison for the Shrimp AP.  
36  
37 **DR. ZEENATUL BASHER:** Zeenatul Basher, and I'm the Coral Reef  
38 and Habitat Biologist for the Gulf of Mexico Fishery Management  
39 Council.  
40  
41 **DR. MENDEZ-FERRER:** We can continue with the members that are in  
42 the back, and can we turn on the microphone?  
43  
44 **DR. BENNY GALLAWAY:** Good morning. Benny Gallaway with LGL  
45 Ecological Research Associates, and I have worked a long time  
46 with most of the fisheries in the Gulf of Mexico. Thank you.  
47  
48 **EXECUTIVE DIRECTOR CARRIE SIMMONS:** Carrie Simmons, council

1 staff. Good morning.  
2  
3 **MS. SUSAN GERHART:** Susan Gerhart, NOAA Fisheries Service.  
4  
5 **MR. FRANK HELIES:** Frank Helies, NOAA Fisheries, Gulf shrimp  
6 lead.  
7  
8 **MS. KELLI O'DONNELL:** Kelli O'Donnell, NOAA Fisheries, Gulf of  
9 Mexico Branch.  
10  
11 **DR. JOHN FROESCHKE:** John Froeschke, Gulf Council staff.  
12  
13 **MS. SHARON MCBREEN:** Sharon McBreen, Outreach Officer for the  
14 Gulf of Mexico for Pew Charitable Trusts.  
15  
16 **MS. HEATHER BLOUGH:** Heather Blough, NOAA Fisheries.  
17  
18 **MS. BETH DIEVENNEY:** Beth Dieveney, Florida Keys National Marine  
19 Sanctuary.  
20  
21 **DR. LISA HOLLENSEAD:** Lisa Hollensead, council staff.  
22  
23 **MR. KENNETH DANIELS:** Kenneth Daniels, commercial fisherman,  
24 bottom longliner, and a member of SOFA.  
25  
26 **DR. MENDEZ-FERRER:** All right. I think that's all. This group  
27 hasn't met in a while, and so, because we have some new members  
28 for the Coral AP, this morning, we will be going through the  
29 election of the Coral Advisory Panel Chair and Vice Chair, and  
30 so I will open the floor to nominations. I have to remind  
31 everybody that only the Coral AP members will be voting on this  
32 item.  
33  
34 **MR. PERRET:** Are we going to adopt the agenda before we do  
35 anything else?  
36  
37 **DR. MENDEZ-FERRER:** We're going to have the Coral AP Chair run  
38 the rest of the meeting.  
39  
40 **MR. PERRET:** That's fine, and so he's going to propose the  
41 agenda, or she?  
42  
43 **DR. MENDEZ-FERRER:** Yes, he or she.  
44  
45 **MR. GLENN DELANEY:** Natasha, we have some folks on the webinar  
46 that you might want to introduce. This is Glenn Delaney with  
47 the Southern Shrimp Alliance, and I'm a member of the Shrimp AP.  
48

1 **DR. MENDEZ-FERRER:** Good morning, Glenn. Do we have any other  
2 members that are joining us on the webinar? Okay.

3  
4 **ELECTION CORAL ADVISORY PANEL CHAIR AND VICE CHAIR**

5  
6 **MR. HICKMAN:** I would like to nominate Dr. Morgan Kilgour for  
7 Chair. I will need a second, I guess.

8  
9 **MS. KRUEGER:** I second that.

10  
11 **DR. MENDEZ-FERRER:** Do we have any other nominations? Okay.  
12 Well, congratulations, Morgan. Now we have nominations for Vice  
13 Chair.

14  
15 **MS. KRUEGER:** Captain Scott Hickman for Vice Chair.

16  
17 **DR. MENDEZ-FERRER:** Do we have any other nominations for Vice  
18 Chair? Congratulations. Morgan, now you get to sit next to me,  
19 and we're going to have you read the Chairman's statement.

20  
21 **CHAIRMAN KILGOUR:** Good morning. I am Morgan Kilgour, Chair of  
22 the Coral Advisory Panel of the Gulf of Mexico Fishery  
23 Management Council, and I welcome you all to the Joint Coral  
24 Advisory Panel, Shrimp Advisory Panel, and Coral Scientific and  
25 Statistical Committee meeting.

26  
27 We appreciate your participation in this meeting. Representing  
28 the council is Leann Bosarge, and council staff in attendance  
29 are Natasha Mendez-Ferrer, Zeenatul Basher, Matt Freeman, and  
30 Camilla Shireman. This meeting is open to the public. Notice  
31 of this meeting was provided to the Federal Register, posted on  
32 the council's website, and sent via email to the subscribers of  
33 the council's press release email list.

34  
35 If you have not already done so, please register in the sign-in  
36 book at the entrance. An agenda, which outlines all of the  
37 topics for today's discussion, may be found at the council's  
38 website. Hard copies have been provided to you as well.

39  
40 This meeting will cover the following topics: Election of Coral  
41 AP Chair and Vice Chair; Adoption of Agenda and Approval of  
42 Minutes from the Joint Shrimp AP, Coral AP, and Coral SSC from  
43 the August 3 and 4, 2016 meeting; Update on the Implementation  
44 Status of Coral Amendment 9; Update on the Flower Garden Banks  
45 National Marine Sanctuary Expansion; Florida Keys National  
46 Marine Sanctuary Expansion and Implications for Fisheries  
47 Management; Presentation on Stony Coral Tissue Loss Disease;  
48 Update on the Coral Reef Conservation Program; and any other



1 business that might come before the advisory panels and/or the  
2 SSC.

3  
4 This meeting is being streamed live via webinar and recorded.  
5 When you wish to speak, please press the talk button on the  
6 microphone and state your name before commenting. Please  
7 deactivate your microphone when you are finished speaking. A  
8 summary of the meeting, verbatim minutes, and digital recordings  
9 will be produced and made available to the public via the  
10 council's website. For the purpose of voice identification,  
11 please your name beginning on my left. I think we already did  
12 that. I need a motion to adopt the agenda.

### 13 14 **ADOPTION OF AGENDA**

15  
16 **MR. HICKMAN:** Motion to adopt the agenda.

17  
18 **MR. PERRET:** I would like to add, under Other Business, a  
19 discussion of the decline in nesting of the Kemp's ridley sea  
20 turtle. Just a little housecleaning matter. On September 16,  
21 I, and other members of all of these committees, got an email  
22 from staff advising us of the date of the meeting and that a  
23 final agenda and background materials will be forthcoming. I  
24 started getting calls from Shrimp AP members, and, as of right  
25 now, the Shrimp AP has never received any background materials,  
26 nothing, not go to the website or anything.

27  
28 We have got one Shrimp AP member that has never made a meeting.  
29 I mean, he had no idea what was going on. In discussions with -  
30 - We're meeting once a year, at most, and so please send us  
31 materials so we can review. I know we can get a link and go to  
32 the website, but we never got a link. We got nothing.

33  
34 I have been a council member for thirty years, and I have been  
35 on this AP since I got off the council, and it's the first  
36 meeting that I have ever gone to where I never received any  
37 briefing material of any kind. We want to provide input, and we  
38 need something to provide input on. Thank you.

39  
40 **DR. MENDEZ-FERRER:** I apologize. I guess, if the agenda wasn't  
41 provided via email -- I guess I was under the assumption that  
42 the members were familiarized in visiting the website and  
43 downloading it from there.

44  
45 **MR. PERRET:** You deal with it every day, but we're asked to come  
46 to a meeting once a year, and we try and keep up, but just  
47 please provide us with the background -- I am not blaming  
48 anybody, but just look at the position, and I assume the Coral

1 people got no information also, and I don't know, but the Shrimp  
2 AP got nothing.  
3  
4 **DR. MENDEZ-FERRER:** It's been noted, and it will not happen  
5 again.  
6  
7 **MR. PERRET:** Thank you.  
8  
9 **DR. FREEMAN:** Corky, for admin staff at the back of the room,  
10 could you phrase again how you would like that agenda item added  
11 under Other Business? I believe you made a motion to that  
12 effect.  
13  
14 **MR. PERRET:** I would move that we add, under Other Business, a  
15 discussion of the decline in nesting of the Kemp's ridley sea  
16 turtle. I guess I need a second on that.  
17  
18 **AP MEMBER:** I will second that motion.  
19  
20 **MR. HICKMAN:** I don't know if they need to put this in Other  
21 Business or tell me, Chairwoman, if -- On the Florida Keys  
22 National Marine Sanctuary expansion, the issue with the trolling  
23 provision at the Western Dry Rocks, if that can be brought up  
24 and discussed during the presentation, or does that need to be  
25 in Other Business?  
26  
27 **CHAIRMAN KILGOUR:** I think that's covered under the implications  
28 for fisheries management, and so I am happy to do either, but I  
29 think we can cover it there.  
30  
31 **MR. HICKMAN:** Thank you.  
32  
33 **MR. SAMMARCO:** I think some of the material that we're covering  
34 today, the background of it, particularly with respect to the  
35 Flower Garden Banks expansion, and not all of it, but most of  
36 it, I think we were dealing with that earlier, a couple of years  
37 ago, and I think we did have some of that material, maybe just  
38 as a reminder, to say, hey, we did send this material to you  
39 earlier, some of it, and then supplement whatever is needed and  
40 so forth, and I think some of it we've had before, and I  
41 remember some pretty extensive stuff coming through.  
42  
43 **MR. LASSEIGNE:** The Shrimp Advisory, will we be able to make any  
44 comments or anything or ask questions?  
45  
46 **CHAIRMAN KILGOUR:** Absolutely, and so I guess we will go item-  
47 by-item on whether or not we want to have a joint motion from  
48 both the APs and the SSC or if we want to do individual motions,

1 which I know is a lot more intensive for Camilla back there, and  
2 so, when we did this three years ago, I was a member of the  
3 staff, but I do recall that, when there was consensus among the  
4 room, we had a joint motion from all three groups, but we also  
5 had motions where specifically the Shrimp AP provided that, and  
6 I think Corky ran those motions when that was the case, but I  
7 think we'll just go topic-by-topic and see where the group  
8 falls, but absolutely you can provide input, and you can make  
9 motions, and they can just be shrimp motions, and that's fine,  
10 too.

11  
12 **MR. LASSEIGNE:** Okay. Thank you.

13  
14 **DR. MENDEZ-FERRER:** I don't know if this would be a motion, but,  
15 for Agenda Item Number VI, which would be the Status on Coral 9,  
16 the presenter is having some issues, and so it's been requested  
17 if he could be moved to after the update on the Flower Garden  
18 Banks expansion.

19  
20 **CHAIRMAN KILGOUR:** All right, and so we've got a few motions on  
21 changing the agenda. Is there any opposition to adding the  
22 discussion of the Kemp's ridley and moving the update on Coral 9  
23 to a later time in the day? All right. I guess the motion  
24 passes.

25  
26 **MR. SCHMAHL:** I was wondering if you could maybe just briefly go  
27 over the logistics part. I know that, with two different  
28 advisory panels and the SSC, in terms of voting and motions --  
29 Actually, I'm not quite sure if the SSC can make motions and  
30 vote.

31  
32 **CHAIRMAN KILGOUR:** Yes.

33  
34 **MR. SCHMAHL:** Okay. I wanted to clarify that, and that could  
35 either be separately as the SSC or together with one or both of  
36 the advisory panels, and is that correct?

37  
38 **CHAIRMAN KILGOUR:** Absolutely.

39  
40 **MR. SCHMAHL:** Okay. Thank you.

41  
42 **CHAIRMAN KILGOUR:** Maybe Natasha can keep us honest and ask if  
43 the Coral SSC wants to be part of that motion and if the Coral  
44 AP wants to be part of that motion, and, if so, then it can be a  
45 group motion. If not, then we can do separate AP and SSC  
46 motions as needed, but -- It will make things a little bit more  
47 confusing, but hopefully Camilla doesn't have to write three  
48 motions for every single topic. Hopefully there will be some

1 consensus.

2  
3 I am going to need a motion to approve the minutes from the  
4 August 3 and 4, 2016 meeting, or are there any questions or  
5 comments or complaints about the meeting summary and the  
6 minutes? Does anyone want to make a motion to approve those  
7 minutes?

8  
9 **APPROVAL OF THE JOINT SHRIMP AP, CORAL AP, AND CORAL SSC MINUTES**  
10 **FROM AUGUST 3-4, 2016 MEETING**

11  
12 **MR. HICKMAN:** Motion to adopt.

13  
14 **CHAIRMAN KILGOUR:** Does anyone want to second?

15  
16 **AP MEMBER:** Second.

17  
18 **CHAIRMAN KILGOUR:** All right. Any opposed to the motion? The  
19 motion passes. Now you get to run it.

20  
21 **DR. MENDEZ-FERRER:** Okay, and so the next item on the agenda  
22 would be a presentation by Mr. G.P. Schmahl, and so he will be  
23 giving us an update on the Flower Garden Banks National Marine  
24 Sanctuary Expansion.

25  
26 At this point, we are not asking for additional comments. This  
27 was presented and brought up to the council during the public  
28 comment period in 2016, and so he's going to give us an idea of  
29 where we are in regard to rulemaking for the expansion.

30  
31 **UPDATE ON THE FLOWER GARDEN BANKS NATIONAL MARINE SANCTUARY**  
32 **EXPANSION**

33  
34 **MR. G.P. SCHMAHL:** I do have a presentation, a PowerPoint. I  
35 didn't know exactly how much background everyone had on it, and  
36 I know a lot of the folks here have been involved and at least  
37 are aware of what the general proposal is, but I did want to --  
38 I will back up a little bit and kind of give a brief overview of  
39 what got us to where we are now.

40  
41 Basically, the Flower Garden Banks is a National Marine  
42 Sanctuary. We are one of fourteen, and now actually fifteen,  
43 National Marine Sanctuaries in the U.S. We are the only one  
44 that is in the Gulf of Mexico, and, of course, National Marine  
45 Sanctuaries, we compare them a little bit to National Parks,  
46 except National Marine Sanctuaries, of course, are in the water  
47 of the coastal and marine areas of the country and also in the  
48 Great Lakes.

1  
2 We are the only one that is in the Gulf of Mexico. It was  
3 designated in 1992, and it is composed of three separate bank  
4 features, the East Flower Garden Bank, West Flower Garden Bank,  
5 and Stetson Bank, which was added in 1996. It's located about -  
6 - Well, depending on which bank, from about seventy-five miles  
7 to a hundred miles offshore. If you drew a line straight down  
8 from the Texas/Louisiana border out to the edge of the  
9 continental shelf drop, that's generally where these bank  
10 features are located.

11  
12 It was designated primarily for the incredible coral reef that  
13 occurs, primarily at the East and West Flower Garden Banks. In  
14 this time of major decline of coral reef ecosystems throughout  
15 the world, the Flower Garden Banks coral reefs are actually in  
16 quite good health. They exhibit over 50 percent living coral  
17 cover, which is very high anywhere, essentially, in the world,  
18 especially in the Caribbean right now, and it has been  
19 maintained at that level since the earliest surveys that were  
20 done in the 1970s and through an annual coral reef monitoring  
21 program that we've done in conjunction with the Bureau of Ocean  
22 Energy Management since 1989.

23  
24 It's an area that also is a place where encounters with large  
25 marine animals, such as whale sharks, manta rays, and sea  
26 turtles, actually loggerhead sea turtles and hawksbill sea  
27 turtles, can be seen, and it's a prime destination for  
28 recreational divers, and it's become known as a world-class dive  
29 destination for those who are interested in diving.

30  
31 I think, from the perspective of this council and this group,  
32 these areas are also extremely important as nursery areas for a  
33 variety of fish and invertebrate species of commercial and  
34 recreational importance, and we've documented that in our fish  
35 counts and population surveys over the years.

36  
37 This particular photograph was taken at Stetson Bank, which is  
38 an amazingly diverse area, and it's not quite a true coral reef,  
39 but there are reef-building corals there, along with a variety  
40 of other types of corals and sponges and other benthic  
41 invertebrates of significance.

42  
43 The Flower Garden Banks, those three banks that make up the  
44 sanctuary, however, are just three of dozens of reefs and banks  
45 that occur along the edge of the continental shelf in the  
46 northern Gulf of Mexico. The ones that are circled in yellow  
47 there are the East and West Flower Garden Bank and Stetson Bank,  
48 but you can see there is a number of features that occur along

1 those, and most of these areas were created geologically from  
2 underlying salt dome formations, and that has caused these areas  
3 to be elevated above the surrounding seafloor and exposed  
4 hardbottom substrate, which has allowed the colonization of  
5 corals of various types, true coral reefs, at the Flower Garden  
6 Banks, because they are shallow enough, and there's enough light  
7 penetration in deeper areas on these banks.

8  
9 Our deeper-water corals are what we call mesophotic corals, or  
10 mid-light-level corals, and these are primarily black corals,  
11 small branching stony corals, and octocorals.

12  
13 These features were studied and recognized early on, back in the  
14 1970s, and there was a whole series of studies that were  
15 supported by the Bureau of Land Management at that time, mostly  
16 carried out by people at Texas A&M University, and here's a  
17 couple of pictures of Dr. Tom Bright and others in some of those  
18 early expeditions, and that resulted in the publication, in  
19 1985, of an extremely important book called *The Reefs and Banks*  
20 *of the Northwestern Gulf of Mexico*, and it was the result of  
21 those studies that first identified those areas that needed to  
22 be protected from offshore oil and gas development, which was,  
23 at the time, moving offshore, from the nearshore areas out into  
24 the outer-shore areas.

25  
26 In fact, most of those areas have been designated by BLM, which  
27 became Minerals Management Service and is now the Bureau of  
28 Ocean Energy Management, or BOEM, as protected areas, or  
29 sensitive areas, because of the biological communities there,  
30 and they have established no-activity zones on the tops of these  
31 features and buffer areas around these features, which other  
32 types of regulations are applied for offshore oil and gas  
33 development.

34  
35 Most of these areas have also been identified by the Gulf of  
36 Mexico Fishery Management Council. Back in 2006, a number of  
37 these areas were designated as habitat areas of particular  
38 concern, and you can see that the blue boxes on this map have  
39 been separated into eastern area and western area, and some of  
40 these -- Many of these are HAPCs without specific regulations,  
41 but several of them are ones that exhibited high concentrations  
42 of stony corals and were identified as coral HAPCs, and that  
43 includes the East and West Flower Garden Bank and Stetson Bank,  
44 but it also includes McGrail Bank, which is another very high-  
45 density coral area.

46  
47 I mention this because these areas have been identified by their  
48 agencies and other procedures, and it kind of highlights the

1 level of national significance that these areas have already  
2 been recognized, even before we began our sanctuary expansion  
3 process.

4  
5 There is a number of potential threats to these areas. I  
6 mentioned oil and gas, and this is a slightly outdated -- This  
7 is from a couple of years ago of the number of oil and gas  
8 platforms in the Gulf of Mexico and pipelines. At its peak,  
9 there was about 3,000, a little over 3,000, oil and gas  
10 platforms in the northern Gulf of Mexico, and it has actually  
11 declined in recent years.

12  
13 They are down, I believe, to around 1,800 platforms, but they're  
14 still concentrated in various areas, but specifically around  
15 these areas that we're particularly interested in, because those  
16 salt dome features also is where a lot of natural gas and oil  
17 accumulates, because of the geology underlying those features,  
18 and so these are target areas for oil and gas exploration.

19  
20 There are also fishing impacts that we have demonstrated and  
21 documented in a number of these reefs and banks, and a lot of it  
22 has to do with discarded or lost fishing gear and things of that  
23 sort. One of the biggest threats that we do have is large  
24 vessel anchoring, and, when I say large, I'm talking about ships  
25 in the range of 900 to 1,000 feet, and this is actually taken in  
26 the Dry Tortugas, but it shows you the size of an anchor  
27 compared to a diver, for example, and you can imagine the  
28 destruction that could happen from anchoring of a large vessel  
29 on some of these features.

30  
31 Anchoring by large vessels is not prohibited at this time, and  
32 most of these areas are right off the shipping lanes that run  
33 right south of this line of reefs and banks, and sometimes, for  
34 whatever reason, a ship will come up and anchor on these shallow  
35 features, to either wait for their next assignment or because  
36 there's a mechanical problem or something like that, and this is  
37 just -- As an example, Geyer Bank, one of the features that  
38 we're talking about, fairly recently was documented as anchoring  
39 directly on top of the bank, and, unfortunately, we were not  
40 able to document the injury associated with that, but you know  
41 that it had to be quite severe.

42  
43 Because of a process that we actually started in 2006 to revise  
44 our management plan, because every National Marine Sanctuary has  
45 a management plan and is required to review and update it  
46 periodically, and one of the things that came out of our  
47 management plan review that started in 2006 was the interest in  
48 expanding the sanctuary, expanding the protection and the

1 potential management of the sanctuary program, to additional  
2 reefs and banks in the northwestern Gulf of Mexico.

3  
4 It took a while, but, in 2016, we did release the official  
5 proposal to expand the sanctuary along with a draft  
6 environmental impact statement, and this was released in June of  
7 2016, and the public comment period went through the summer of  
8 2016.

9  
10 I'm not going to go into detail about this, but we did, as  
11 typical with a federal action, we did propose a range of  
12 alternatives for expansion. The area in red is the area that we  
13 looked at as our area of interest, and you will notice that it  
14 did -- Our area of interest did expand to the east, a good  
15 extent to the east, of the Mississippi Delta, and that was  
16 primarily because of the major Deepwater Horizon oil spill event  
17 that happened in 2010 and the interest from the public to look  
18 at these areas farther to the eastern areas of the places that  
19 we were originally looking at previously.

20  
21 Very quickly, we had five alternatives, and there was the no  
22 action alternative, where it was the three banks that already  
23 occurred inside the sanctuary. The second alternative was to  
24 increase the number of banks to be included to nine additional  
25 banks in six polygon features, and this was actually a  
26 recommendation that we received from our advisory council in  
27 2007.

28  
29 Our third alternative, and what we identified as our preferred  
30 alternative, is a variation of this, but it was slightly  
31 enlarged, with fifteen additional reefs and banks, and I will  
32 show you that outlined in a minute, because that is the focus of  
33 the area that we're looking at now, and then we had two larger-  
34 scale alternatives that, like I mentioned, did look at an  
35 expanded area of interest, both to the east of the reefs and  
36 banks of the northwestern Gulf of Mexico, including some of the  
37 areas off of Mississippi and Alabama known as the Pinnacles, and  
38 that was in that, and also some of the deeper-water coral areas,  
39 both on the shelf slope and in deepwater areas, and what's of  
40 interest there is many of those areas that were included in that  
41 alternative are also ones that have been either already  
42 recommended as habitat areas of particular concern under this  
43 process and also may be subject to future designations by the  
44 council as HAPCs.

45  
46 Finally, there was a little bit even broader expansion of some  
47 sites, including some underwater Maritime Heritage Sites,  
48 including some shipwrecks of national importance, but the



1 preferred alternative is the one that's shown in this diagram  
2 here. There is fifteen reefs and banks, for a total of 383  
3 square miles of area, and the existing sanctuary is  
4 approximately about fifty-six square miles.

5  
6 Also, the proposal was then to expand the sanctuary to include  
7 those fifteen additional areas in the polygons that we described  
8 and to apply the existing regulations that apply now in the  
9 Flower Garden Banks National Marine Sanctuary to these new  
10 areas, and, very briefly, those regulations, or prohibitions,  
11 are shown here, and they're talking about -- That includes  
12 vessel anchoring of all sorts of vessels, any type of vessel,  
13 fishing with or possession of fishing gear other than what is  
14 defined as conventional hook-and-line gear, and hook-and-line  
15 gear can be both the traditional kind of recreational hook-and-  
16 line gear, but it also includes what is known as bandit rigs, as  
17 long as it's a single line, and it could have multiple hooks,  
18 and it can be either hand-wound or mechanically wound. All of  
19 those fall under the definition of conventional hook-and-line.  
20 There is no distinction between commercial and recreational.  
21 It's just the gear type that is the subject of this prohibition.

22  
23 There is a general prohibition on possession of essentially any  
24 kind of fish, invertebrate, unless it's those that were taken by  
25 hook-and-line gear, any kind of alteration of the seabed,  
26 injuring or moving coral, other benthic plants or invertebrates,  
27 and then oil and gas exploration and development is prohibited  
28 inside the no-activity zones within these areas, and I will talk  
29 a little bit more about that in a moment. Our regulations  
30 actually do allow for oil and gas exploration and development  
31 inside the sanctuary boundaries, but outside the no-activity  
32 zones, and those no-activity zones were those that were defined  
33 and established by MMS, which is now BOEM, for several decades  
34 now.

35  
36 We know a lot about these areas, and we knew a lot about them  
37 from the original studies that were done in the 1970s and 1980s,  
38 and, since that time, we have conducted a large program of  
39 scientific exploration ourselves, including very detailed  
40 multibeam benthic mapping of many of these areas.

41  
42 We have utilized -- Most of these areas are deeper than scuba-  
43 diving depths, and so we have utilized primarily ROV surveys,  
44 and we have an ROV of our own, and we have also used other ROVs  
45 that are available in the scientific community to groundtruth  
46 many of these areas, and that has resulted in being able to  
47 characterize most of these features, both with physical mapping  
48 and with identifying what kind of biological communities are

1 associated with those areas and being able to come up with  
2 habitat characterization maps and defining these areas of what  
3 are most important in terms of deepwater coral and other types  
4 of important benthic communities.

5  
6 I won't get into this, but it's like these areas are extremely  
7 important, extremely diverse, but they are different than a  
8 coral reef, and so, if you are thinking about the coral reef at  
9 the Flower Garden Banks, this is not quite that. You get deeper  
10 than about fifty meters or so and the community changes quite  
11 significantly from those reef-building stony corals to these  
12 areas of what are known as mesophotic or deepwater corals, up in  
13 the upper-left-hand corner, for example. You can see these  
14 fields of -- This is mostly a mix of black corals and  
15 octocorals.

16  
17 Some of the shallow areas, you still have enough light to have a  
18 lot of algal growth, microalgal growth, as photographed from  
19 Bright Bank. In some of the even deeper areas, there is even  
20 some glass sponge communities, which are extremely rare in the  
21 Gulf of Mexico. This particular one is from Elvers Bank, and  
22 all of these have significant reef fish populations, including  
23 some potential spawning aggregation sites within several of the  
24 features that are in the proposed expansion.

25  
26 This is data actually that Paul Sammarco was the lead PI on, in  
27 a study that was funded by BOEM to look at what they call their  
28 potentially-sensitive biological features, and I mentioned the  
29 no-activity zones, which are off-limits to oil and gas, but  
30 there is also regulations, lease stipulations, that BOEM  
31 requires companies to avoid, potentially sensitive biological  
32 features, and that is areas where there is hard bottom, over  
33 eight foot of relief, and that have a high density of coral  
34 communities associated with them.

35  
36 Some of these -- These are just basically coral counts per  
37 square meter on a variety of the banks that are of interest, and  
38 these are actually three different kinds of coral groups, and,  
39 if you add them together, some of these, you're looking at  
40 densities of twenty to thirty corals per square meter, and this  
41 is some of the highest densities that I know about of mesophotic  
42 deepwater corals of anywhere in the world, and so these are  
43 incredibly important.

44  
45 After the release of the draft EIS and proposal in 2016, we went  
46 through a public comment period, and we received a lot of public  
47 comment, over 8,000 public comments. Also, during that period,  
48 we were required, under our National Marine Sanctuary Act, to

1 consult with the fishery management council. It's under a  
2 provision in our National Marine Sanctuary Act, known as  
3 304(a)(5), and so we did that.

4  
5 We presented the information, of course, to the Gulf Council,  
6 and the Gulf Council came back with a series of recommendations  
7 that I believe you are familiar with, and I will go over that in  
8 a second as well.

9  
10 The primary recommendation, without getting into the details, is  
11 to look at these areas of expansion and to sort of concentrate  
12 on the previously-identified no-activity zones as the areas  
13 where most of those stricter regulations would be applied, and  
14 so the prohibitions that I mentioned earlier about no anchoring,  
15 the no use of types of gear, other than conventional hook-and-  
16 line, and this area, of course, would include shrimping, and it  
17 would include bottom longlines and other types of fishing gear  
18 that would impact or touch the bottom, but that we apply those  
19 strict prohibitions only within the no-activity zone areas and  
20 the areas outside of the no-activity zones, but still inside the  
21 proposed sanctuary boundary, should be allowed to keep open for  
22 historical fishing activities, but that there would be an  
23 endorsement process, so that the people fishing in these areas  
24 would be aware of the sensitivity of them and to come up with  
25 types of fishing practices that would mitigate and reduce any  
26 potential impact to coral communities that occurred outside that  
27 area.

28  
29 Meanwhile, because of this, because of all of the public comment  
30 that we received, and I will say that there also was a good bit  
31 of concern from the oil and gas industry about potential impacts  
32 to their ability to freely explore and develop some of these  
33 areas, and so we engaged our Sanctuary Advisory Council.

34  
35 All of the National Marine Sanctuaries have an advisory council  
36 that is made up of constituents and stakeholders from individual  
37 sanctuaries. Scott Hickman mentioned that he is on our council,  
38 and, in fact, he was recently elected as chair of our council.

39  
40 We put together a boundary expansion working group, and we went  
41 through a process, and, in fact, it was quite exhaustive, I  
42 think. There was, I think, a total of twenty-one meetings that  
43 were held and took input from a variety of sources. Again,  
44 there was a lot of interest and concern about potential impacts  
45 to both the fishing industry, fishing community, and the oil and  
46 gas community, and the result of that -- That was over a year  
47 period that this took place, and they came up with a -- You  
48 might recognize some of the folks on the council. Some of them

1 have probably interacted a lot with you, besides Scott. Buddy  
2 Guindon was on the council and Shane Cantrell, and so we did  
3 have a good bit of fishing representation on that working group.  
4

5 They made a recommendation to our full council, which was  
6 adopted by our full council, to modify the preferred alternative  
7 that we had presented in 2016, which would generally reduce the  
8 footprint of each of those areas that we were proposing for  
9 expansion, keying in, again, on those no-activity zones that  
10 were brought up by the Gulf Council in their general  
11 recommendations and, of course, from the oil and gas industry.  
12

13 It's a little bit hard to see on this map, but there's a purple  
14 line sort of in the background of each of those features, and  
15 the white lines are the ones that were recommended by our  
16 sanctuary advisory council.  
17

18 I think you can see, from that, that it is -- That this area has  
19 been reduced in size, and, also, of the fifteen banks that were  
20 originally proposed, one of those were not continued to be  
21 recommended by our council, and so there's fourteen additional  
22 banks, with a total of 160 square miles, and so our original  
23 proposal was 383 square miles, and this proposal by the advisory  
24 council is 160 square miles.  
25

26 What does that mean? I am going to focus in on just one, to  
27 kind of show you what I mean by this, and this is a complex that  
28 we call the Bright Bank Complex, and this was named after Dr.  
29 Tom Bright, which I showed a picture of earlier, and many of  
30 these features are named after the researchers that did the  
31 original studies back in the 1970s and 1980s, many of which were  
32 associated with Texas A&M University, but this is Bright Bank.  
33

34 There is a lot going on here, and so I will just try to orient  
35 you to this. The bigger box that is kind of the thicker line,  
36 that is kind of a yellow line, that's actually the line of the  
37 existing habitat area of particular concern, the HAPC, that was  
38 designated in 2006.  
39

40 The purple line is the line that we proposed in our 2016  
41 expansion proposal. As you can see, we tried to follow the  
42 existing HAPC lines, where we thought it was appropriate, but we  
43 recognize also that the box approach doesn't sometimes  
44 incorporate areas of sandy bottom that there was not specific  
45 areas that were associated with those kinds of communities that  
46 we were highly interested in, and so we modified that. That was  
47 our -- The purple line was our proposal.  
48

1 The areas in sort of bright lime green, those are the existing  
2 no-activity zones established by MMS and BOEM, and then you can  
3 also see the black line, which is the recommendation from our  
4 Sanctuary Advisory Council, and just, also for reference, these  
5 kind of reddish areas, those areas are areas that we believe fit  
6 the definition of the potentially-sensitive biological features  
7 that BOEM references in their lease stipulations for oil and  
8 gas. That shows where the existing coral and other biological  
9 communities are associated with them, and you can see there is a  
10 lot of those outside of the no-activity zones, but, like I  
11 mentioned, the oil and gas operators are required to avoid those  
12 areas regardless.

13  
14 I'm going to kind of focus in a little bit more, just on Bright  
15 Bank, so you can see it a little bit better, and so the no-  
16 activity zone is that area in green, and that was the area that  
17 the Gulf Council, if you recall, recommended originally in their  
18 comments after the release of the plan to allow -- To put the  
19 strict fishing, in this case, prohibitions -- Make them apply  
20 only within the no-activity zone, in this case that lime green  
21 zone, and that areas outside the no-activity zone would still be  
22 open for historical fishing practices.

23  
24 Now, the advisory council came with their recommendation, what  
25 they did, and this was because of a lot of input, and also just  
26 from the enforcement aspect. The no-activity zones are based on  
27 a depth contour, and so they're very irregular, and, as you  
28 know, and I'm sure that you've heard this from enforcement  
29 components, that they need designated lines on a map that can be  
30 easily deciphered by a user, by someone out on the water, and  
31 they like boxes, squares, usually.

32  
33 We pushed back on that, of course, and we believe that polygons  
34 are appropriate, especially in this day and age, with the  
35 sophisticated navigation instrumentation, but, in this case, the  
36 black line is what essentially -- We took the no-activity zone  
37 and drew a polygon around it, but, as you can see, there are  
38 some areas that are outside of the no-activity zone that would  
39 still be inside of the sanctuary boundary. I just wanted to  
40 make that distinction.

41  
42 I will show you just a couple of other examples, just so you can  
43 see a couple of cases. Here's another, and this is a bank  
44 complex that we call the Bouma Bank Complex, and there actually  
45 are four different banks associated with this. again, those  
46 square boxes are the existing HAPC boundaries that were  
47 established back in 2006, and the green, again, is the no-  
48 activity zone, and the black lines are the recommendations from

1 our Sanctuary Advisory Council to be the new National Marine  
2 Sanctuary boundary lines.

3  
4 Again, these are polygons that were -- I think we attempted to  
5 draw lines very close to the no-activity zones, but, in some  
6 cases, they're a little bit larger than those areas.

7  
8 There is also some -- I will show you just one more example.  
9 This is McGrail Bank. McGrail Bank is actually one of those  
10 coral HAPCs that do have regulations that were established back  
11 in 2006 that do not allow bottom-tending gear or anchoring by  
12 fishing vessels, and that's because of a coral reef, a true  
13 coral reef, that occurs on that bottom lime green area that is  
14 quite significant, but, again, our advisory council drew a line  
15 that is the black line on this, and the reason I'm showing you  
16 this one is this came up with kind of a very kind of strange  
17 boundary, and so that long, skinny finger, and there's a small  
18 area on the lower-right-hand corner.

19  
20 This has been raised by the people at NOAA Enforcement that  
21 those types of boundaries are very difficult to enforce, and so  
22 I will just mention that, but this is the advisory council's  
23 recommendation for McGrail Bank.

24  
25 Unfortunately, I can't say yet that the advisory council  
26 recommendation is our new preferred alternative, although it is,  
27 but now what is happening is that we have taken all of this  
28 information, and we are in the process of proposing a new rule,  
29 and we're going into the rulemaking process, and what we will  
30 do, hopefully within the next sixty days, is be publishing a  
31 proposed rule that will put forward a new revised preferred  
32 alternative, and I will say that it will be very, very close to  
33 what our Sanctuary Advisory Council recommended, and we will  
34 then be going out for public comment on that rule.

35  
36 Hopefully, depending on the issues that come up during that  
37 public comment period, and the issues that are raised, we will  
38 then be able to move to the final rule and final environmental  
39 impact statement.

40  
41 Now, we did come to the Gulf Council after our Sanctuary  
42 Advisory Council recommendation, and we presented the advisory  
43 council recommendation to the Full Council, and that did result  
44 in a communication from the council that essentially says, if we  
45 do go forward with our advisory council's recommendations, in  
46 terms of the boundary, that the original tiered approach, where  
47 you would have an area that was just associated with the no-  
48 activity zone that would apply to the stricter fishing

1 regulations and then areas outside that zone would be open for  
2 historical fishing practices --

3  
4 Because these new boundaries, the recommended boundaries, are so  
5 tightly associated with those no-activity zones, that it didn't  
6 really make sense to apply that tiered approach and that the  
7 Gulf Council was comfortable with allowing the full suite of  
8 regulations in the Flower Garden Banks National Marine Sanctuary  
9 be applied to the full boundaries if we went along with our  
10 advisory council's recommendations. That is, essentially, where  
11 that stands with the Gulf Council right now.

12  
13 As I mentioned, we are in the process right now of trying to get  
14 the proposed rule out in the Federal Register to be published,  
15 and we hope that will happen this fall. It has gone through our  
16 internal review within NOAA and the Department of Commerce  
17 already, and it is out for review before it's finally published.

18  
19 There will be a sixty-day public comment period after it's  
20 published, and we are planning to hold at least two physical  
21 public meetings, at least one in Houston and one in the New  
22 Orleans area, and then we will, of course, look at the comment,  
23 and this will also include re-engaging with the Gulf Council,  
24 and then we would go to final publication of the rule and the  
25 final environmental impact statement hopefully in the spring of  
26 next year.

27  
28 That is essentially where it stands. I will say that there's a  
29 few things that we're going to be specifically asking for  
30 additional comment when we publish the rule, and so, right now,  
31 we are not proposing any changes to regulations that would be  
32 applied in these new areas, and so all the suite of regulations  
33 that currently apply in the Flower Garden Banks, the ones that I  
34 described about anchoring, about disturbance to the seafloor,  
35 about fishing only with hook-and-line would apply to all of  
36 these areas, but, because of some public comment that we  
37 received, we are specifically asking for additional information,  
38 or additional comment, on these areas that I have up here now.

39  
40 One has to do with spearfishing. We had a recommendation, both  
41 from the Gulf Council and our advisory council to allow an  
42 exemption for the use of spearfishing gear in the expanded area,  
43 not in the existing Flower Garden Banks area, but in the  
44 expansion area.

45  
46 A little bit of twist on this is that our council recommended  
47 that spearfishing gear only be allowed to be used in a  
48 freediving mode only, and so not with scuba gear, and it's

1 interesting. The primary people that we heard from that  
2 spearfish out here are not actually going for bottom fish. They  
3 are not going for snapper and grouper. They are actually going  
4 for pelagics, for wahoo and amberjack and stuff like that, which  
5 is interesting, but the council -- The Gulf Council recommended  
6 an exemption for spearfishing gear, but they did not distinguish  
7 between freediving and scuba diving, and so there is both issues  
8 that we will be requesting comment on.

9  
10 We also got a request from the Highly Migratory Species group of  
11 NOAA to allow for an exemption for pelagic longline gear, and so  
12 that will also be highlighted in the proposed rule, and we're  
13 requesting more information on that, because we did not get a  
14 lot of public comment on that, but, since we did get this input  
15 from our sister agency in NOAA, we feel that we need to explore  
16 that one further.

17  
18 There is also a proposal to allow for the possession of  
19 spearfishing gear in the existing sanctuary, and that's a  
20 situation that our rules right now prohibit the possession of  
21 any kind of fishing gear, except for conventional hook-and-line,  
22 inside the boundary, and so, if a group was out and they wanted  
23 to do a variety of activities, go spearfishing out on the  
24 platform and then do hook-and-line fishing somewhere else, they  
25 couldn't even enter the Flower Garden Banks Sanctuary, and  
26 that's caused problems, and it hasn't been a big problem, but it  
27 is an issue for some people, and so it's been recommended to  
28 look at that as well.

29  
30 That's essentially where it is. Hopefully, we will see the  
31 release of the proposed rule within the -- Like I say, within  
32 the next couple of months, and then we will take it from there,  
33 and so that's essentially the status of the expansion proposal  
34 for the Flower Garden Banks National Marine Sanctuary.

35  
36 **CHAIRMAN KILGOUR:** Thanks, G.P. Does anyone have any comments  
37 or discussion? Scott.

38  
39 **MR. HICKMAN:** That was a good, fairly quick explanation, G.P.,  
40 and thank you. I was in the back of the room, and I don't know  
41 if you covered it or not, but one of the things I would like to  
42 say is it's, being part of the process and being part of the  
43 council at the Flower Garden Banks, it was a very transparent,  
44 stakeholder-driven process. The pelagic fishermen that shoot  
45 the wahoo and stuff, they had their concerns heard, and it's  
46 working through the process.

47  
48 Those twenty-one meetings were brutal, to say the least, and



1 there was a lot of compromises met. Did you talk about the  
2 President's Executive Order, President Trump's Executive Order?

3

4 **MR. SCHMAHL:** I did not.

5

6 **MR. HICKMAN:** You left that out?

7

8 **MR. SCHMAHL:** Yes.

9

10 **MR. HICKMAN:** That was something else as we were starting this  
11 process, is President Trump had an Executive Order evaluating  
12 these expansions and these national monuments, and, actually, I  
13 got the honor to go up in front of the Senate Transportation  
14 Science Committee and give testimony on this process.

15

16 Oil and gas had a lot of issues, and everybody had lots of  
17 issues, and we got through it, and we've got a great product,  
18 and we're real proud of the work, and we look forward to  
19 protecting more of these special areas and keeping these  
20 historic fishermen back in the areas that they've been fishing  
21 in, plus protecting these corals, and so we appreciate  
22 everything the agency has done and everything all the fishermen  
23 have done.

24

25 **MR. PERRET:** With all the horrible stuff we've been reading and  
26 hearing about the Gulf going to hell with B.P. and oil and  
27 spillway openings, I was quite pleased to hear, in your  
28 introductory remarks, that the Flower Gardens are in, quote,  
29 unquote, quite good health. What do you attribute that to, with  
30 the corals worldwide in decline, yet the Flower Garden Banks are  
31 in quite good health, and how do you attribute that? Good  
32 management by the agency? That's number one.

33

34 **MR. SCHMAHL:** I would like to say that that's the main reason,  
35 because I think it's because of the isolation of it. Like I  
36 said, it's a hundred miles offshore, and it's relatively deep.  
37 The shallowest part is about sixty feet deep, and it is sort of  
38 bathed by the waters that come off of the blue current that come  
39 up into the eastern Gulf of Mexico, and then there's a series of  
40 spinoff eddies that track west, bringing this nice kind of  
41 clear, very low-nutrient waters to kind of bathe these areas.

42

43 I think the biggest thing is we're outside of that -- For the  
44 most part, we're outside of the area of coastal runoff from the  
45 things that are really causing problems, like the dead zone,  
46 that are typically associated with the runoff that's coming out  
47 through the river systems and the nutrients that are loading  
48 into the northern part of the Gulf of Mexico, but this is --

1 It's diluted by the time it gets out to the offshore areas, and  
2 the fact that, because it's hard to get to, and so we don't get  
3 a lot of visitation, and so there's that aspect of it, too.

4  
5 Just as an example, I used to work in the Florida Keys, and the  
6 reefs of the Florida Keys get tens of thousands, hundreds of  
7 thousands, of people on each individual reef every year. We  
8 estimate we get about 2,500 or 3,000 divers, and so there's that  
9 aspect too, but I think that's the main reason that it's still  
10 in good health.

11  
12 **MR. PERRET:** I have four or five questions for you. Saying  
13 that, you've got mineral exploration in that entire area, and so  
14 it is coexisting, I guess. You showed one slide of damage by  
15 anchors from large ships, and have there been any enforcement  
16 citations for that kind of destruction?

17  
18 **MR. SCHMAHL:** There have been in the Flower Garden Banks  
19 Sanctuary, and not by those kinds of large ships, but we have  
20 had anchoring violations that have occurred inside the  
21 sanctuary. The problem is that, these other reefs and banks,  
22 there is no regulation that prohibits that.

23  
24 **MR. PERRET:** I am talking about where it's currently in  
25 existence, the no anchoring. Has there been any enforcement  
26 action taken against anchoring?

27  
28 **MR. SCHMAHL:** Yes, there has been.

29  
30 **MR. PERRET:** Okay. The preferred alternative that would add  
31 twenty-nine or so more areas, what is the estimated cost of  
32 that?

33  
34 **MR. SCHMAHL:** The cost for management?

35  
36 **MR. PERRET:** The cost of implementation and the entire cost.  
37 What's that going to cost the taxpayers of the United States of  
38 America?

39  
40 **MR. SCHMAHL:** That becomes sort of a sliding valuation kind of  
41 question. Right now, we're saying that, right now, we can  
42 provide a level of management and oversight to these areas  
43 without an additional increase to our budget.

44  
45 **MR. PERRET:** You know, and I know, that's not practical. You  
46 put all these regulations, and, if you don't have more dollars  
47 to enforce them, how are you going to ever make anything out of  
48 it, I mean, if you're having problems with anchoring, and you go

1 say no anchoring, but you've got no enforcement?  
2

3 **MR. SCHMAHL:** It kind of depends on -- Sometimes people say that  
4 there's no value of just making a paper park and just putting a  
5 line on a map, but, in fact, I believe there is a lot of value  
6 of putting a line on a map. When it comes to shipping, when it  
7 comes to international shipping, you create a no-anchor zone,  
8 and those -- That is part of their insurance and liability  
9 situation. They will not anchor there. You don't need like a  
10 guy in a little boat to say that you can't anchor here.

11  
12 **MR. PERRET:** How do you attribute that guy who had his anchor in  
13 your area when you showed the slide?  
14

15 **MR. SCHMAHL:** That's outside of the -- That's a bank that's  
16 outside of the existing sanctuary. The same goes with oil and  
17 gas. Now these areas are more restricted for oil and gas, and  
18 that becomes part of the review process, and, therefore, these  
19 areas are more well protected, just because that line is there,  
20 because it's a process, and nobody is going to run out and sneak  
21 in an oil platform.  
22

23 I think the type of enforcement you're talking about, things  
24 like poaching and stuff, using spearfishing gear where they're  
25 not supposed to, and those are extremely difficult to enforce  
26 even in the best situations, and I would say, unless we get more  
27 money, that kind of enforcement, you're correct, will not  
28 happen.  
29

30 **MR. PERRET:** Scott, I would echo a lot of what you said about  
31 your advisory panel being transparent and so on and so forth.  
32 Something for the Gulf Council to think about, as well as Scott  
33 and you, is it could be advantageous to have a council staff  
34 person or member, and Morgan is going to tell me that's going to  
35 happen, sit on that, but my question is, do the state regulatory  
36 agencies have a presence on your advisory panel?  
37

38 **MR. SCHMAHL:** Historically, no, because one thing is that these  
39 areas, the existing sanctuary, is entirely in federal waters,  
40 and so there's no direct state jurisdiction in the existing  
41 sanctuary area. We just recently actually added a member from  
42 the Texas Parks and Wildlife, because there was an existing oil  
43 and gas platform that was decommissioned that was inside the  
44 boundary of the sanctuary, and that is now managed by TPWD, and,  
45 because now they have jurisdiction, really, in our sanctuary, we  
46 have added them to the sanctuary.  
47

48 **MR. PERRET:** Do you have to go through coastal zone management

1 approval for any of your activities? If so, the state's coastal  
2 zone can say yea or nay, and that's why I wonder about state  
3 agency representation.

4  
5 **MR. SCHMAHL:** We do. We send -- Like this regulatory package  
6 will go to the affected states for review under their coastal  
7 management program, and there's a little bit of question about  
8 whether we have to do that, but we do that.

9  
10 **MR. PERRET:** I've got just one more. Fishermen are the most  
11 ingenious people I know, and, in your areas, you allow  
12 historical fishery practices. Fishermen are always  
13 experimenting. What happens if a new fishery, not a historical  
14 fishery, is to develop? Is that going to be allowed?

15  
16 **MR. SCHMAHL:** I need to clarify that. Right now, the way we are  
17 proposing it is that, within the entire sanctuary boundaries,  
18 and these are reduced from what we originally proposed, the only  
19 types of fishing gear that would be allowed is conventional  
20 hook-and-line gear, and so, as long as this new fishery used  
21 what would still fall under that use of conventional hook-and-  
22 line, it would be allowed.

23  
24 **MR. PERRET:** Not in those areas. In the areas where you still  
25 allow shrimping and longlining and all of that. If Scott  
26 developed a piece of gear to catch a heretofore unknown fishery,  
27 and the stock is there, and there's a market for it, would that  
28 type of new fishery be allowed?

29  
30 **MR. SCHMAHL:** Again, I need to clarify that that was -- When we  
31 had those larger boundaries proposed, and we were considering  
32 like a zoning thing, that there would be smaller areas that only  
33 hook-and-line would be allowed and then, outside those areas,  
34 historical fishing practices would be allowed. Now that we've  
35 reduced the size of those boundaries, we are no longer proposing  
36 that, and so historical fishing practices would not be allowed  
37 in the boundaries that we are now coming forward with, which are  
38 our Sanctuary-Advisory-Council-proposed boundaries, and so, no,  
39 they would not be allowed.

40  
41 **CHAIRMAN KILGOUR:** Corky, I want to step in. I was the staff  
42 member that sat in on a lot of the working group, and not all of  
43 them, because they were from 6:00 to 9:00 at night, but I sat in  
44 on as many as I could, and so I brought all of this information  
45 to the Gulf Council.

46  
47 The Gulf Council made recommendations to adopt the sanctuary-  
48 wide regulations out to the boundaries, because, most of the

1 time, the difference between the no-activity zone and the  
2 proposed boundary was less than a kilometer. Not all of the  
3 time, but most of the time, and so that tiered approach didn't  
4 make sense anymore, and so the Gulf Council adopted just to have  
5 sanctuary-wide boundaries to the extent of the boundary of the  
6 sanctuary, and so, in the case of new fishing gear, my  
7 understanding is that wouldn't be allowed if they had sanctuary-  
8 wide regulations, and, if there was new fishing gear that was  
9 outside of the sanctuary, that would have to go to the Gulf  
10 Council to be approved or disapproved, based on those standard  
11 procedures.

12  
13 **MR. PERRET:** But, from what I'm hearing, you're recommending  
14 that the Gulf Council have a staff member on the advisory panel?

15  
16 **CHAIRMAN KILGOUR:** I do recommend that, and I think the Gulf  
17 Council, in the original letter to the sanctuary, in the 2016  
18 draft EIS, requested that a Gulf Council staff member help -- Be  
19 present in the development of the boundaries, and so that wasn't  
20 an official item, but I did attend as many as I could, and I was  
21 filled in as much as staff could fill me in.

22  
23 **MR. PERRET:** Thank you. Thank you, George. Thank you, Scott.

24  
25 **MR. HICKMAN:** Corky, to answer one of your other questions too,  
26 on the law enforcement side of it, dealing with the IUU fishing  
27 coming out of Mexico into the south Texas waters and the human  
28 trafficking problems and the drug trafficking problems that  
29 we're having off of Texas right now, the Trump administration  
30 has allocated some monies, to where Galveston is going to get  
31 two new fast-attack cutters.

32  
33 The Coast Guard has told us that, in this patrol areas that  
34 they're going to be increasing with Home and Defense, they will  
35 also -- Falling under that mission will be patrolling these  
36 areas at the Flower Garden Banks and the expansion areas, and  
37 so, how many they're going to do, I don't know, but they're  
38 saying that they're going to be allocating resources to patrol  
39 all of these areas, and so it's good to have those new assets in  
40 Galveston.

41  
42 **MS. KRUEGER:** My understanding is this is in the final comment  
43 period right now?

44  
45 **MR. SCHMAHL:** It's not open for comment yet. We're trying to  
46 get the -- We have to actually publish the rule in the Federal  
47 Register.

48

1 **MS. KRUEGER:** Okay, and so my question is what percent were the  
2 NOAA-preferred alternatives selected and sent to NOAA? Of the  
3 preferred alternatives, can you give like a guesstimate of what  
4 percent were the preferred, versus 1, 2, 3, and 4 Alternatives?  
5

6 **MR. SCHMAHL:** Essentially, what we're working with is the  
7 preferred -- It's a modification of the preferred alternative,  
8 and so that was Alternative 3, which was the mid-range one, and  
9 it does not include any of those areas to the east of the area  
10 that was originally described, and is that what you meant? It's  
11 basically, like I mentioned, all of the banks that were proposed  
12 in our preferred alternative in 2016, with the exception of one,  
13 is also included in the Sanctuary Advisory Council  
14 recommendation that we are going forward with in the proposed  
15 rule.  
16

17 **MS. KRUEGER:** Yes, that's what I was asking, is were basically  
18 the preferred alternatives selected the majority of the time  
19 after public comment, and, granted, there's still final review  
20 going forward.  
21

22 **MR. SCHMAHL:** The short answer is yes. Almost all of them were,  
23 but it's just the boundary configurations themselves have been  
24 modified.  
25

26 **MR. DELANEY:** Morgan, as you know, we have very precise shrimp  
27 fishing effort data generated by the deployment of electronic  
28 logbooks on most of our vessels, and, as you know, the Shrimp AP  
29 and the Gulf Council rely on that data for our consideration of  
30 these coral protection areas, habitat areas of particular  
31 concern, the Flower Garden Banks, et cetera, and many other  
32 management actions with regard to the shrimp fishery.  
33

34 Maybe this is a question for Mr. Schmahl or someone else in the  
35 room, but did the Sanctuary Advisory Council consider or use the  
36 shrimp fishing effort data that I'm referring to in the drawing  
37 of their revised boundaries for the sanctuary? Thank you.  
38

39 **MR. SCHMAHL:** I can answer that, and the answer is, yes, we  
40 absolutely did. I didn't mention this before, but, in the  
41 original comments from the Gulf Council in 2016, it included  
42 information about shrimp effort using electronic logbook data,  
43 and there were -- In fact, for the most part, these areas are  
44 typically avoided by the shrimp industry to begin with, just  
45 because of the nature of the seafloor, but I think there were  
46 three banks that there were some historical shrimping effort in  
47 the very edges of them, and, in all of those three cases, we  
48 modified the boundaries so that those areas are now excluded

1 from consideration.

2

3 **MR. DELANEY:** Excellent. Thank you very much.

4

5 **CHAIRMAN KILGOUR:** Paul.

6

7 **MR. SAMMARCO:** I would just like to say that I support the  
8 sanctuary's proposal to expand the sanctuary in the way they  
9 have noted, particularly in your Alternative 3, and I think you  
10 said that was your preferred one, was Alternative 3.

11

12 Our research group, including the Flower Garden Banks group,  
13 spent years collecting data from these banks and years analyzing  
14 the data, and, if they were -- If these areas were moonscapes,  
15 believe me, I would tell you, and I would say do what you want  
16 with them, the same as my driveway, but they're not. They are  
17 very rich areas, and the northern Gulf of Mexico is in a  
18 particularly enviable position, in that it has the Flower Garden  
19 Banks, which are in very good shape, as G.P. says. They are  
20 amongst the best, really, in the world.

21

22 We've lost 50 percent of our reefs worldwide, something like  
23 that, and these banks, although they may not be, most of them,  
24 true coral reefs, are very rich and have a lot of corals of  
25 various sorts, and they will act, as time progresses, as a  
26 refuge for other corals to survive some other things that we're  
27 going through at the moment, and so I support the proposal.

28

29 **MR. LASSEIGNE:** On enforcement, how many citations have been  
30 given, and are they visual citations, or are they using  
31 transponders, or what is the method of doing a fine, and how  
32 many have been done, and have any fishermen been involved,  
33 besides anchors?

34

35 **MR. SCHMAHL:** Unfortunately, I don't have the numbers off the  
36 top of my head, but I will tell you that the number is very low.  
37 I have been the Sanctuary Superintendent for twenty years now,  
38 and I can -- There's probably only been a dozen violations that  
39 have occurred, that they have pursued, since I have been there.  
40 Anchoring has been the primary one, and possession of  
41 unauthorized fishing gear has been another. I will say, for the  
42 most part, those are visual observations by Coast Guard patrols  
43 that were out there at the time.

44

45 We do get information from visitors out there. In particular,  
46 there's a recreational dive company that is out there like  
47 pretty much every day during the summer, and they will report  
48 violations, if they see them, and then we can follow-up on them.

1  
2 I know, at least in a couple of cases, that the violations were  
3 pursued based on transponder data, basically that you're not  
4 allowed to anchor, and so, if a vessel is sitting there for  
5 hours, you can assume that they were anchored, and you can  
6 investigate it, and, in other cases, shrimping for example --  
7 Shrimping gear is an unauthorized gear in the sanctuary, and  
8 there were situations where shrimpers were coming in, and they  
9 weren't shrimping in the area, but they were using the mooring  
10 buoys, just to tie up to, just for convenience for overnight  
11 kind of thing, and, technically, that's a violation, because  
12 they have unauthorized gear aboard. You can have it if you're  
13 just passing through, but you can't stop, and so I know, at  
14 least in one case, there was an enforcement action taken because  
15 of that.

16  
17 **MS. BOSARGE:** I'm only going to comment just because I don't  
18 think the council is going to -- I don't know that this is  
19 coming back before the council, and I guess we can have a  
20 discussion on that, but a few things popped into my head, and so  
21 I thought I would throw it out there while you're here.

22  
23 First, I just wanted to commend you on the boundary adjustments.  
24 That was really important to us, as the shrimp industry, and  
25 then also the commercial fishermen on the council, the council  
26 in general, and you managed to pare Alternative 3 down from an  
27 increase of 326 square miles to an increase of I think you said  
28 like 160 square miles, and so essentially half, and so that  
29 leaves a lot of bottom and fishing grounds there open, and we  
30 really, really appreciate that. I know that wasn't easy, and so  
31 I just wanted to commend you for that. Thank you.

32  
33 The one thing that popped into my head had to do with what you  
34 just touched on, that I guess I didn't think about it until I  
35 really saw the map, where, if you could turn to that map for  
36 Alternative 3, the preferred alternative, which I think you've  
37 pared it down a little from there, but it doesn't matter.  
38 That's close enough.

39  
40 Now we're going to have a lot of areas that are off limits,  
41 little areas that are off limits, but what I can foresee  
42 happening -- Say we're shrimping over to the west somewhere, the  
43 Flower Garden Banks, and not in the Flower Garden Banks, and  
44 we're shrimping outside, somewhere over there, and we say, all  
45 right, we're going to shrimp a little farther to the east  
46 somewhere, and so, when we start running, more than likely,  
47 we're going to run across those areas.

48



1 We're not shrimping, but we have shrimp on the boat, which is  
2 prohibited, and we have gear on the boat that is prohibited, but  
3 we're just transiting, and that's all we're doing, but, the way  
4 the regulations are worded, like you said, we're going to be in  
5 violation.

6  
7 That's from the shrimping perspective, but I can see the same  
8 thing from the reef fish guys' perspective, and, in their case,  
9 it's even worse, because what happens in their case is they have  
10 a VMS on the boat, right, and so say they're a bottom longline  
11 boat, and there is not that many of them, and so enforcement is  
12 very familiar with the boat and all of that, that they're  
13 traditional bottom longline and blah, blah, blah.

14  
15 Say they're over there somewhere to the west and they go to move  
16 somewhere to the east and they are transiting across. Because  
17 they have that VMS, law enforcement never has to go out there  
18 and see them. They say, well, that's a bottom longline boat,  
19 and they open a case on that poor guy, and he's essentially  
20 guilty until proven innocent, and I say that because I've had it  
21 happen to us before.

22  
23 I think maybe -- I am hoping that the council will be able to  
24 give you some feedback on maybe how to address that, so that we  
25 can make sure that people that are playing by the rules are  
26 innocent and don't get punished, like what you were talking  
27 about with the mooring buoys, because, the way the regulations  
28 are worded right now, I think that's exactly what will happen,  
29 and we don't have a leg to stand on, really, for enforcement  
30 purposes.

31  
32 **MR. SCHMAHL:** I do want to clarify that. Our regulations  
33 actually do provide for transit without interruption, and that's  
34 the wording, and so you can have prohibited gear on your vessel  
35 as long as you are moving through and not stopping. The  
36 enforcement happened because the vessel did stop, and they were  
37 using our mooring buoys just as an overnight stop, and so, in  
38 that case -- That was the case. You can transit through the  
39 area with prohibited gear onboard as long as you don't stop.

40  
41 **CHAIRMAN KILGOUR:** Before I take your question, I just kind of  
42 want to summarize what I understand is this, and that is what  
43 the Shrimp AP saw today is the revision of the document that you  
44 saw in 2016, which reduces the boundaries so that they more  
45 closely mimic those no-activity zones.

46  
47 The Gulf Council has made the recommendation to adopt those  
48 sanctuary-wide regulations within those new SAC-preferred

1 boundaries, which would extend just slightly past the no-  
2 activity zones, and those regulations include traditional hook-  
3 and-line gear as the only allowable gear, but that also includes  
4 bandit rigs.

5  
6 In the letter from the Gulf Council in 2018 regarding those, I  
7 think it was requested that more information about the effects  
8 of bandit rig gears, particularly the weights that they use to  
9 get the hooks to the bottom, be investigated, but, as of now,  
10 that would still be traditional fishing.

11  
12 What my request from the Shrimp AP and the Coral AP and the  
13 Coral SSC is, if you have any recommendations for the Gulf  
14 Council on this new preferred alternative, which shrinks the  
15 boundaries, but extends the regulations to those shrunken  
16 boundaries, now would be the time to make motions and to provide  
17 input and including I heard a transit provision was a concern,  
18 but G.P. just clarified that, but, if you still have concerns,  
19 this would be the time to make those recommendations to the  
20 council. Did I summarize that well enough for you, G.P.?

21  
22 **MR. SCHMAHL:** Yes, that is correct.

23  
24 **MR. PERRET:** To be perfectly clear, if a vessel with, quote,  
25 unquote, prohibited gear is transiting the area, they are not in  
26 violation?

27  
28 **MR. SCHMAHL:** That is correct, yes.

29  
30 **MR. SAMMARCO:** Just a quick question, technical question. I  
31 seem to remember, from our last meeting, isn't there some sort  
32 of monitoring gear either onboard or that's used, and I don't  
33 know where it's used, which shows gear up or gear down for a  
34 vessel, or is that only in some vessels? I remember this being  
35 a -- Is that telemetered, or is it onboard, or --

36  
37 **MS. BOSARGE:** We do have electronic logbooks onboard, but  
38 they're not real time, if that's what you're thinking. Now, the  
39 reef fish guys have VMS onboard, and that shows movement, and  
40 then there is an formula, or a function, that, once a year,  
41 takes all those datapoints and essentially says, all right, at  
42 what point was the boat trawling, or at what point was it  
43 transiting, but those are only shown in aggregate and not shown  
44 individually.

45  
46 If I can follow-up, Morgan, G.P., I just would like to see the  
47 wording one day of the transit provision, simply because we have  
48 different transit provisions for different things, and I just

1 want to see if there's any wording about the gear, because, if  
2 you think about it, when we're trawling, it's constant movement,  
3 and so I'm sure there's got to be more to that transit provision  
4 than just constant movement, and I just -- We need to make sure  
5 that we're aware of what it is and that it's feasible for us.

6  
7 **MR. SCHMAHL:** I will say that there is two regulations. One is  
8 the use of any fishing gear except for conventional hook-and-  
9 line is prohibited, and so, if they were actually trawling in  
10 the sanctuary, that would be a clear violation. The other  
11 prohibition is possession of gear, but that reads -- This is  
12 actually just a summary, but possessing, and then, in  
13 parentheses, except while passing through the sanctuary without  
14 interruption, any fishing gear, device, equipment, or means,  
15 except conventional hook-and-line gear.

16  
17 I will send you that and highlight the actual wording from the  
18 regulations, but it is -- It's very clear that you can pass  
19 through the sanctuary with prohibited gear onboard if you're not  
20 using it.

21  
22 **MR. HICKMAN:** Leann, we found this out a couple of years ago  
23 with the Flower Garden Banks. All of our VMSs on our boats, and  
24 now it's similar on the charter boats, they pinged us once an  
25 hour, but, when we would get around these areas, like  
26 sanctuaries and these other things, they run the rate of -- The  
27 law enforcement people that are looking at all of this stuff,  
28 they will run the rate of the ping up to like once a minute or  
29 once every five minutes, to see exactly what that boat is doing.

30  
31 They can dial it up and down right there at the law enforcement  
32 center to see what's going on. Shane Cantrell was running one  
33 of our boats, and it had some scientists onboard, and he  
34 declared out a scientific trip, under a Letter of Authorization  
35 through NOAA, and he forget to the tell the sanctuary people  
36 that he was going in the sanctuary to take this scientific  
37 thing, and, sure enough, my wife got a call saying, hey, one of  
38 your boats is in the sanctuary doing science work and why  
39 weren't we notified, and they turned the rate up, and they could  
40 see exactly what he was doing, and they follow this stuff pretty  
41 close.

42  
43 **MR. WILLIAMS:** I think, at some point, you might want to look at  
44 what we went through in the coral group also with the South  
45 Atlantic and the expansion of the Oculina Bank. We have a  
46 transit permission through there, and a lot of it is based on  
47 speed, and that will tell you whether you're trawling or  
48 steaming across that closed area.

1  
2 The only difference is they are required to have VMS, and they  
3 don't necessarily use the electronic logbook, but I am certainly  
4 not suggesting that we use VMS in the Gulf of Mexico, because  
5 that's a whole different area, because you've got so much  
6 Oculina closure that you need to run through there, but not  
7 necessarily with the Flower Garden Banks.

8  
9 It's small, and you'll be transiting, and you're certainly not  
10 going to be working there anyway, because it's coral, but the  
11 point is that you might want to look at what we have in the  
12 Oculina Bank area for the transit system, and you might be able  
13 to use some of that. Thank you.

14  
15 **EXECUTIVE DIRECTOR SIMMONS:** I was just going to mention that  
16 this is on the agenda for October. G.P. is coming to the  
17 council meeting, and he is going to provide an update, and so,  
18 as Morgan mentioned, if you have recommendations, either by  
19 standing and different APs, or together, as a consensus  
20 recommendation, it would be great if you could put some motions  
21 down for the council to consider.

22  
23 I think, at the time we wrote the scope of work, we didn't  
24 realize, or weren't thinking, that this body had not seen those  
25 changes and it had just gone to the council, and so we apologize  
26 for that, but I think these recommendations would be important  
27 to send to the council regarding these changes.

28  
29 **CHAIRMAN KILGOUR:** Sandra.

30  
31 **DR. BROOKE:** Thanks for bringing that up, John. That was a  
32 solution that we came up with, but I think it is predicated on  
33 having VMS onboard, because there's no way of assessing that any  
34 other way, but it's certainly something to consider. G.P.,  
35 could you clarify the scuba rules, as they stand at the moment,  
36 for spearfishing? Is spearfishing allowed on scuba for reef  
37 fish at the moment?

38  
39 **MR. SCHMAHL:** No, it is not. Spearfishing, the possession or  
40 use of spearfishing gear, is not allowed in the current  
41 sanctuary regulations, regardless of whether it's on scuba or  
42 not.

43  
44 **DR. BROOKE:** Thank you, and is this being considered then, if I  
45 remember from your presentation, the use of spearfishing --  
46 Sorry. Is scuba gear being considered for spearfishing for reef  
47 fish at all? I'm not sure why scuba and spearfishing came up if  
48 it isn't.

1  
2 **MR. SCHMAHL:** It is being considered. I guess we're doing this  
3 in a slightly different way than usual. We are proposing a rule  
4 that would apply the existing regulations, and so, therefore,  
5 spearfishing would not be allowed, but we are requesting  
6 additional comment on that issue, because of the comments that  
7 we received from our advisory council and from the Gulf Council.  
8 How we deal with that, I'm not quite sure yet, but, yes, it is  
9 sort of back on the table.

10  
11 **MR. HICKMAN:** Our advisory council worked on this for a while,  
12 and we actually -- I think our first recommendation was non-  
13 scuba-assisted spearfishing. There is a growing sport of guys  
14 that are extreme sportspeople, and a lot of them are marathon,  
15 triathlete-type people that travel around and jump out of a boat  
16 in the middle of the ocean and chum and have these giant  
17 spearguns, and they have these huge flippers, and they will dive  
18 down thirty feet and shoot wahoo, and we have this big  
19 aggregation of wahoo on these banks every winter.

20  
21 People come from all over the country to go out there and do  
22 this pelagic spearfishing, and they've got sharks trying to --  
23 It's crazy, but they love it, and it's a growing sport. It's an  
24 important recreational activity, and it was something we wanted  
25 to let them continue to do, and it was a historical kind of  
26 thing, and so that's why it came to be.

27  
28 **DR. BROOKE:** Just a comment that chumming sharks, lots of crazy  
29 people in the water, and scuba diving recreational people seems  
30 like an unhappy combination.

31  
32 **MR. HICKMAN:** They really like it, and the GoPro footage is  
33 pretty interesting, to say the least.

34  
35 **CHAIRMAN KILGOUR:** Okay. Seeing no more raised hands -- Gary.

36  
37 **MR. GRAHAM:** I really want to echo what Leann said. That bottom  
38 that was inshore of the Flower Gardens was an extremely  
39 important shrimping area, and it's becoming even more important  
40 with our need to produce bigger shrimp, and that area holds big  
41 shrimp, and it would have been really, really a blow to us to  
42 have lost that bottom, and I really appreciate you guys  
43 considering that. That was very important, and there were a lot  
44 of -- There still are a lot of fishermen that are worried about  
45 this in Texas, and I want to thank you all for looking at that  
46 and considering it.

47  
48 **MR. HICKMAN:** Gary, those boats are still out there. If you

1 look at the AIS information, currently, I guarantee you there's  
2 five or six boats in there right now, as we speak, and, for our  
3 charter boat fleet out of Galveston, where we catch a lot of our  
4 blackfin tuna and some of those species, the go-to place is  
5 those shrimp boats, inshore of the East and West Garden, and  
6 that's where we catch those fish, and that's where we run those  
7 trips, and so it's kind of a symbiotic relationship with the  
8 shrimpers. If they would have gotten pushed out of there, there  
9 would have gone our daytrip blackfin fishery for our charter  
10 boat fleet.

11  
12 **CHAIRMAN KILGOUR:** Corky.

13  
14 **MR. PERRET:** Are we open for motions? Obviously, there is some  
15 confusion about what can or cannot be with prohibited gear and  
16 transiting an area, and I just -- To get it on the record, I  
17 would like to make a motion that we request the official -- Is  
18 it a proposed regulation now, or there are existing regulations  
19 in the -- **I move that the NOAA Sanctuary agency provide us with  
20 the exact language on transiting an area and what is or what is  
21 not allowed, insofar as prohibited fishing gear.**

22  
23 **AP MEMBER:** I second that motion.

24  
25 **CHAIRMAN KILGOUR:** Okay. We have a motion that's been seconded.  
26 Is there any discussion on the motion? I have a proposal on  
27 that motion. Perhaps, if it passes, we ask G.P. to send that to  
28 the group and we take a break and then come back and discuss it,  
29 and would that work for everybody?

30  
31 **MR. PERRET:** You are running the show. Whatever you like.

32  
33 **CHAIRMAN KILGOUR:** Would that work for you, Corky?

34  
35 **MR. PERRET:** Yes. Thank you.

36  
37 **CHAIRMAN KILGOUR:** Is that a Shrimp motion, or is that for  
38 everyone? Does the Coral AP want to weigh-in on this motion?

39  
40 **MR. HICKMAN:** Yes.

41  
42 **CHAIRMAN KILGOUR:** Coral SSC?

43  
44 **DR. BROOKE:** Yes, that's fine.

45  
46 **CHAIRMAN KILGOUR:** Okay. Is there any discussion on the motion?

47  
48 **MR. SCHMAHL:** Actually, I have it right here, and I could email

1 it out to you right this moment, and is that what you're asking?  
2 I can read it to you as well, now that I have found the actual  
3 language, rather than a summary, but --

4  
5 **MR. PERRET:** I hope the language will take care of all of our  
6 concerns, but I am not sure just what it says or does not say.

7  
8 **CHAIRMAN KILGOUR:** Why don't we vote on this motion and take a  
9 break. **Does anyone oppose this motion? The motion passes.**

10  
11 Let's take a break. G.P., can you send that to either Natasha  
12 or Camilla or somebody on the council staff, so they can send it  
13 to everybody? That way, we all have it in front of us, because  
14 I'm better with visual than hearing. Thanks. We will also put  
15 it on the screen. Perfect. Let's take a fifteen-minute break.

16  
17 (Whereupon, a brief recess was taken.)

18  
19 **CHAIRMAN KILGOUR:** If everyone can come back to the table, staff  
20 is going to put the regulatory language up on the board. Is  
21 this what you were requesting, Corky? This is the language:  
22 Possessing or using within the sanctuary, except possessing  
23 while passing without interruption through it or for valid law  
24 enforcement purposes, any fishing gear, device, equipment, or  
25 means except conventional hook-and-line gear.

26  
27 **MR. PERRET:** Well, being a poor, dumb fisherman, it's as clear  
28 as mud to me. The way it's written is extremely confusing. Why  
29 would a commercial boat with, quote, unquote, prohibited gear be  
30 involved with valid law enforcement purposes? Why is law  
31 enforcement thrown into fishing gear?

32  
33 **CHAIRMAN KILGOUR:** G.P., I will let you take a swing at that.

34  
35 **MR. SCHMAHL:** That's a really good question. I don't know that  
36 this is the original regulations. I don't know.

37  
38 **MR. PERRET:** I might be the only one having a problem with it,  
39 but it's extremely difficult to understand, in my opinion, the  
40 way it's written.

41  
42 **MR. SCHMAHL:** I will also clarify that this is in a section, and  
43 this is Section 922. It's 15 CFR 922.122, and these are  
44 prohibited activities. Then it lists all the things that are  
45 prohibited. It's prohibited to anchor, and it's prohibited to  
46 possess coral and things like that, and then it comes to this  
47 one, and this is prohibited to possess or use within the  
48 sanctuary any fishing gear, device, equipment, except for

1 conventional hook-and-line gear.  
2  
3 That is the basic one, but it does have that exemption of except  
4 possessing while passing without interruption through it or for  
5 valid law enforcement purposes, and I don't know that -- Unless,  
6 for some reason, law enforcement would be using gear for  
7 purposes other than fishing, using it for law enforcement  
8 purposes, but I don't understand what that would be. We have a  
9 lot of exemptions that exempt law enforcement activities and  
10 exempts military activities.

11  
12 **MR. PERRET:** So you're telling me, if I've got commercial shrimp  
13 gear onboard my vessel, and I am passing through one of these  
14 areas without interruption, that I am not violating your  
15 regulation?

16  
17 **MR. SCHMAHL:** Yes, that is correct.

18  
19 **MR. PERRET:** Okay.

20  
21 **CHAIRMAN KILGOUR:** Scott, did you want to say something?

22  
23 **MR. HICKMAN:** I don't think I've ever even seen this regulation,  
24 but I will say, just from reading it straight through, as a dumb  
25 fisherman, I look at it as drive through there and don't stop  
26 with that gear onboard, and, if you do stop, damned sure don't  
27 put it in the water, unless it's hook-and-line gear.

28  
29 **CHAIRMAN KILGOUR:** Leann.

30  
31 **MS. BOSARGE:** I think, with the motion that was passed,  
32 hopefully the council will take a look at it, because,  
33 essentially, using the gear, that means fishing with the gear,  
34 and so then it becomes a question of how does the sanctuary  
35 define fishing, because, for law enforcement purposes, for the  
36 shrimp fleet anyway, that's defined a lot of different ways.

37  
38 For some places, we have to deck the doors. For other places,  
39 we've got to take bag straps out, and, in other areas, we've got  
40 to disconnect gear, and so there's a lot of different  
41 definitions. Some of it, we can just get the gear out of the  
42 water, like Scott said, but there's a lot of different  
43 definitions, and so hopefully the council maybe will be able to  
44 clear that up, I hope.

45  
46 **CHAIRMAN KILGOUR:** It sounds like something they did in Coral  
47 Amendment 9. Harris.

48



1 **MR. LASSEIGNE:** It says passing without interruption. Well,  
2 sometimes you have to stop to change oil, and sometimes you  
3 break a jumper shaft, and you can't do anything about that, and  
4 you've got to get towed, and there are reasons sometimes when  
5 you stop, and you're definitely not going to put your nets in  
6 the water, because coral reefs are like razor blades, and you're  
7 going to ruin everything and lose your gear, and so sometimes  
8 you have to stop, for whatever reason it is.

9  
10 **CHAIRMAN KILGOUR:** Sandra, and then I'm going to request that,  
11 if there's specific motions on the Flower Garden Banks, that we  
12 make them, because we're starting to run behind time, and so we  
13 need to get caught up on the agenda. Sandra.

14  
15 **DR. BROOKE:** I appreciate the legitimate definitions of fishing,  
16 and that's something that we've wrestled with the Oculina Banks  
17 as well, gear-in-and-gear-out and whatever, but, I mean, this is  
18 -- We all recognize that there are exceptions, but these areas  
19 are really tiny, and so you've got to be really unlikely to lose  
20 a drive shaft in the middle of one of these little banks, and so  
21 I think we have to make the assumption that these regulations  
22 are under normal operating circumstances and just go with that.  
23 If you have a problem and you have to stop, then you explain it  
24 to law enforcement, and I guess that's -- I don't know how else  
25 we can get around this and not allow people to be open to  
26 prosecution for fishing inside the sanctuaries.

27  
28 **CHAIRMAN KILGOUR:** Matt, if you're brief.

29  
30 **DR. FREEMAN:** I am not a lawyer, but I will pretend like I'm  
31 playing one on TV right now. Reading a few sections down on  
32 this, it seems to pertain to that. It says that the  
33 prohibitions, including this part right here, do not apply to  
34 activities necessary to respond to emergencies threatening life,  
35 property, or the environment, and so it appears that there is  
36 some stuff built in, in terms of what you were asking about.

37  
38 **CHAIRMAN KILGOUR:** Does the Shrimp AP or Coral AP or Coral SSC  
39 want to make any motions with regard to the Flower Garden Banks  
40 National Marine Sanctuary expansion document? I believe it's  
41 coming back before the council in October, and so I will open  
42 the floor to those motions right now.

43  
44 **MR. SAMMARCO:** G.P., this particular regulation, does this exist  
45 already on the books, or is this proposed to be on the books?

46  
47 **MR. SCHMAHL:** This exists already on the books for the existing  
48 sanctuary, but, as I mentioned, we are proposing to apply these

1 same regulations in the expanded part of the sanctuary.

2  
3 **CHAIRMAN KILGOUR:** Okay. Seeing as there are no motions, let's  
4 move on to the update on Coral Amendment 9. Lauren Waters is  
5 going to give us an update from NMFS.

6  
7 **UPDATE ON THE IMPLEMENTATION STATUS OF CORAL 9**

8  
9 **MS. LAUREN WATERS:** Good morning, everyone, and apologies for  
10 the slight change in the agenda, that this is coming second.  
11 The update, I am at least excited to say, is that Coral  
12 Amendment 9, the proposed rule package, will be going up to NOAA  
13 Headquarters this week, and so it will start the rulemaking  
14 process.

15  
16 As a reminder, when the council took final action on this last  
17 year, shortly thereafter, there was a request by the council  
18 that the Highly Migratory Species group backstop the rules in  
19 their portion of our rules and regulations, and so that took  
20 some coordination this past fall with them, with that group, in  
21 order to do that rulemaking process together, and so that was,  
22 in part, part of the delay in seeing this through, but, at this  
23 time, it is going up to Headquarters this week, and so  
24 hopefully, in the next couple of weeks, you all will be seeing  
25 at least some kind of notice from the Federal Register.

26  
27 **CHAIRMAN KILGOUR:** As an interested party, would it be possible  
28 for you to send a link to the proposed rule when it's published,  
29 or somebody on the council staff to send it to the Coral  
30 Advisory Panel, at least, when it's published? Is that  
31 possible?

32  
33 **MS. WATERS:** I can say at least that we will -- As we always do,  
34 NOAA Fisheries will put out a Fishery Bulletin when that notice  
35 publishes, and then, at that time, I know normally the council  
36 mimics those.

37  
38 **MR. SCHMAHL:** I just had a question. I wasn't familiar with the  
39 terminology used about the highly migratory species and  
40 backstopping the rule, and could you explain what that is?

41  
42 **MS. WATERS:** No problem. Essentially, it's almost like  
43 mimicking the same rules and regulations, and so, in Coral 9,  
44 the council put forward that they wanted to put some fishing  
45 regulations of no bottom-tending gear, and so they wanted to  
46 make sure that the Highly Migratory Species group was also  
47 looking at their fishermen and some of that.

1 **CHAIRMAN KILGOUR:** Are there any questions for Lauren? Do you  
2 have more?

3  
4 **MS. WATERS:** I have one more thing that I do want -- That way,  
5 there is no confusion later. When you do see the notice in the  
6 next couple of weeks, the proposed rule, that might not be the  
7 actual proposed rule. It might just be the notice that NOAA has  
8 received it. We have had some delays recently in the proposed  
9 rules actually going forward once they're up in Headquarters,  
10 and so I just wanted to make sure that there wasn't extra  
11 confusion in a couple of weeks.

12  
13 **MR. HICKMAN:** It sounds like it will free up a little time now,  
14 and maybe we can get started on Coral Amendment 10.

15  
16 **MS. WATERS:** It's the council's pleasure.

17  
18 **CHAIRMAN KILGOUR:** All right. Thank you very much. Next on the  
19 agenda is the Florida Keys National Marine Sanctuary Expansion  
20 and Ms. Dieveney.

21  
22 **FLORIDA KEYS NATIONAL MARINE SANCTUARY EXPANSION**

23  
24 **DR. MENDEZ-FERRER:** Before we begin with the presentation from  
25 the Keys Sanctuary, I do want to remind the members that we will  
26 have a summarized presentation given by the Florida Keys  
27 National Marine Sanctuary Superintendent at the October council  
28 meeting, and, during that meeting, we will also be discussing  
29 any recommendations and comments that are discussed during this  
30 meeting, and so, if you have any motions -- We will wait until  
31 after she is done with her presentation, and then we'll proceed  
32 to discuss.

33  
34 **MS. DIEVENEY:** Good morning. I would like to introduce my  
35 colleague, Steve Werndli. He wasn't here when we did  
36 introductions, but he's here to support in the presentation and  
37 any questions that you may have, and so thank you for having us,  
38 and we have presented to the council and various APs throughout  
39 our process to review our management plan and regulations, and  
40 this is the first presentation that we are giving to the Gulf of  
41 Mexico Fishery Management Council following public release of  
42 our document, and so all of this is now open for public comment.

43  
44 This is our initiation with our process, the 304(a)(5) process,  
45 with the council that you've gone through with the Flower Garden  
46 Banks National Marine Sanctuary.

47  
48 The restoration blueprint is what we are referring to our draft

1 environmental impact statement that is out for public comment  
2 now that has proposals for update sanctuary boundary, sanctuary-  
3 wide regulations, marine zones, management plan, and marine-  
4 zone-specific regulations, and I'm going to walk through a  
5 little bit of background on the sanctuary impacts and status of  
6 sanctuary resources and then the specific actions that are  
7 before the council for consultation, and then I will give some  
8 context of the larger plan, so that you have that bigger context  
9 when considering your action and proposal.

10  
11 The Florida Keys National Marine Sanctuary was established by an  
12 act of Congress in 1990, and, in 1997, the first regulations,  
13 marine zones, and management plan were implemented, and I'm  
14 missing some things that show up on mine, but, in 2001, there  
15 was a modification to add the Tortugas Ecological Reserve, and  
16 those are the two green zones out in the Tortugas region, and so  
17 those were added through a separate process, additional  
18 community and public input, a working group process to add  
19 those.

20  
21 In 2007, we updated the management plan, which are the non-  
22 regulatory programmatic activities that the sanctuary  
23 undertakes, and so it's been since 1997 that we have done a  
24 comprehensive review of the Florida Keys National Marine  
25 Sanctuary, the boundary, regulations, marine zones, and so it's  
26 a big document, and there's lots in it, and I hope today that I  
27 can provide a little bit of clarity of how you can review and  
28 respond to it.

29  
30 To give a little bit of background, as many of you probably  
31 know, the Florida Keys is a really popular area, the local  
32 community, tourism, boating, diving and snorkeling, commercial  
33 fishing, recreational fishing, and it is a playground for the  
34 community in the Florida Keys, and so a lot of the economy is  
35 dependent upon being able to access and use these resources and  
36 having healthy coral reef, seagrass, and water quality in the  
37 Florida Keys.

38  
39 This just gives a high-level summary of the amount of the  
40 economy that is dependent upon a healthy marine environment,  
41 \$4.7 billion, and these are Tourism Development Council numbers  
42 from 2018, and we receive 5.5 million visitors annually, and  
43 approximately 60 percent of the Monroe County economy is  
44 dependent upon the marine environment and a healthy marine  
45 environment.

46  
47 A healthy marine environment, what are the key resources in the  
48 Florida Keys? We do a status report, and this is a program that

1 sanctuaries do system-wide. Periodically, we do an assessment  
2 of the condition of sanctuary resources, looking at living  
3 marine resources, habitats, water quality, and, in the case of  
4 the Florida Keys, and this isn't the same across the same across  
5 all sanctuaries, but, in the case of the Florida Keys, we also  
6 look at our maritime heritage resources and what is the  
7 condition of these resources and what are potential impacts or  
8 threats to these resources, what are we doing to address those  
9 impacts and resources.

10  
11 This Florida Keys condition report came out in 2011, and, for  
12 the most part, the trends were on the fair to poor, with many of  
13 the trends of these resources declining, either staying static  
14 or declining, and, to give a few specific examples, declines in  
15 coral reef ecosystems, and you're going to hear some  
16 presentations later this afternoon specifically about some of  
17 the more recent impacts to coral reefs in the Florida Keys and  
18 throughout the Florida reef tract, but the coral reefs in the  
19 sanctuary are not doing so well.

20  
21 Impacts of coral disease, bleaching, poor water quality,  
22 changing ocean conditions, marine debris, and this coral cover  
23 number, 6.22 percent, is prior to the more recent impacts from  
24 Hurricane Irma and the stony coral tissue loss disease, and so  
25 our coral cover has declined a lot in the Florida Keys.

26  
27 Other important resources are seagrass resources. About 50  
28 percent of the sanctuary has seagrass resources, and they are  
29 important for fisheries, for juvenile fisheries, for bird  
30 nesting, or not nesting necessarily, but foraging and the like,  
31 and they are impacted by vessel damage, water quality, et  
32 cetera. The statistic at the bottom is more than 56,000 acres  
33 of seagrass have scarring damage, and this is a study that was  
34 done on behalf of Monroe County looking at prop scarring damage,  
35 a comparison from I think it was 1990 to 2016, I believe, this  
36 study of the impact of seagrass.

37  
38 One of the things that we'll talk about later is some of our  
39 marine zones are put in place intended to protect the seagrass  
40 resources and manage vessel activities in those areas to protect  
41 the seagrass resources.

42  
43 In addition to the specific impacts that I gave you, this is  
44 just a timeline. The condition report came out in 2011, and  
45 that's the last time we did a comprehensive assessment of the  
46 resources of the sanctuary, and, since that time, we have had  
47 two years of warm water, mass bleaching events, drought, and  
48 elevated salinity, that has impacted some of the seagrass

1 resources, particularly in Florida Bay, harmful algal blooms,  
2 sponge die-off, Hurricane Irma impacts throughout the Florida  
3 Keys, sargassum strandings, more recently, and a coral disease  
4 outbreak that's been working its way through the Florida reef  
5 tract since about 2014, and so lots of impacts in the natural  
6 ecosystem in the Florida Keys.

7  
8 Other issues that we have in the Florida Keys are population  
9 growth, increased uses of resources. As I noted, this is a  
10 popular area, and there is lots of tourism and lots of use in  
11 the area, invasive species, fishing pressure, coastal  
12 development, marine debris, climate change, and ocean  
13 acidification.

14  
15 All of these elements are affecting the natural habitats and  
16 natural resources in the Florida Keys, and so why create a  
17 blueprint? The restoration blueprint, as I noted, is our draft  
18 environmental impact statement, which outlines proposed  
19 management actions to address some of these threats, allow  
20 sustainable uses, support the economy, and plan for the future  
21 to manage these resources for the long term and protect the  
22 resources while also allowing sustainable uses.

23  
24 This effort, as I noted, the release of the Florida Keys  
25 condition report in 2011 really kicked off this effort with our  
26 Sanctuary Advisory Council. They saw the status of these  
27 ecosystems and these resources and noted that let's do an  
28 analysis, let's do a review, of how we are managing these  
29 resources and what we need to do to improve our management, to  
30 improve these resources.

31  
32 Our Sanctuary Advisory Council, much like the Flower Garden  
33 Banks, led this process, and we have twenty members on that  
34 volunteer Sanctuary Advisory Council and twenty alternates, and  
35 so forty in all, and they're all pretty well engaged and  
36 involved. Shelly Krueger is one of our Sanctuary Advisory  
37 Council alternates, and she represents the research and  
38 monitoring seat, and our advisory council, throughout this  
39 process -- They kicked this process off in 2012, and, through  
40 about two-and-a-half years, led this review.

41  
42 There have been over seventy public meetings and lots of public  
43 comment that they heard, that then they translated into  
44 recommendations to the sanctuary staff to review, analyze, and  
45 develop these proposals.

46  
47 This slide is just a high-level summary of some of the Sanctuary  
48 Advisory Council goals for this process, and it involves two

1 components, the natural ecological elements and the goals there  
2 of protecting the habitats, protecting large contiguous habitats  
3 that serve the entire life cycle for species, improving and  
4 maintaining the condition of habitats, including all the  
5 habitats, and so deep reefs, patch reefs, nearshore reefs,  
6 seagrass habitats, hardbottom habitats, and increase the  
7 abundance and condition of selected key species.

8  
9 They also had goals around the use elements and the economic  
10 elements, and so minimize conflicts among uses, prevent heavy  
11 concentrations of uses, provide undisturbed research and  
12 monitoring sites, and the overall goal is really to achieve a  
13 vibrant ecosystem and economy.

14  
15 Our advisory council also established three community working  
16 groups, and so these working groups were a mechanism that the  
17 advisory council could get a lot more input from the community,  
18 and these working groups met over a series of -- Some of them  
19 met over the series of a year, and, for one of the working  
20 groups, they met over a series of close to two years, and these  
21 three working groups were really looking at the marine zone  
22 components of our management plan and regulations.

23  
24 The Shallow-Water Wildlife and Habitat Protection Working Group  
25 was looking at marine zones that are targeted to protect  
26 shallow-water and dependent wildlife, and these are an existing  
27 zone type, and they are referred to as wildlife management  
28 areas, and I will go into details of those later.

29  
30 The second working group, the Coral Reef Ecosystem Restoration  
31 Working Group, this was a working group that was really charged  
32 with potentially identifying areas to protect as a new zone type  
33 to facilitate active coral reef ecosystem restoration, and so  
34 where might it make sense to actively restore coral reef  
35 ecosystems, and those two working groups met over a seven-month  
36 period and provided recommendations to our advisory council that  
37 then were transferred to the sanctuary.

38  
39 The final working group, Ecosystem Protection: Ecological  
40 Reserves, Sanctuary Preservations, and Wildlife Management, this  
41 working group met for close to two years, and they had the  
42 charge to really look at other of our existing marine zone  
43 types, sanctuary preservation areas, ecological reserves, and  
44 special use areas, and these are more protective zone types, and  
45 they were charged with looking at those existing zones, are they  
46 working, do they make sense, should we modify them, and/or are  
47 there new areas to protect with this type of zone type  
48 restrictions and protections, and I will be going through each

1 of these zone types and how they show up in the proposal, and so  
2 you will get more details.

3  
4 Throughout the process, as the Sanctuary Advisory Council and  
5 these working groups were working, the agency was also working  
6 with our other federal and state agency partners and making sure  
7 that we were keeping our key partners informed, making sure that  
8 information of note that they had to inform the process was a  
9 part of the process, and as well, going forward, now that we've  
10 released the plan, we do have consultation and coordination  
11 requirements with many of these agencies, and so the top  
12 category there, Florida state agencies, about 60 percent of the  
13 Florida Keys National Marine Sanctuary is in state waters, and  
14 so we have, and will continue, to work very closely with our  
15 state partners on this.

16  
17 NOAA Fisheries, we've been very involved with them throughout  
18 the process, as well as the two councils, and we have the South  
19 Atlantic Fishery Management Council and the Gulf of Mexico  
20 Fishery Management Council jurisdiction that overlaps within the  
21 sanctuary, and then, finally, agency partners, the Department of  
22 Interior, Navy, and the U.S. Coast Guard, just to name a few.

23  
24 Just to note, really quickly, that the Department of Interior --  
25 The U.S. Fish and Wildlife Service, there are four National  
26 Wildlife Refuges that overlap with the National Marine  
27 Sanctuary, and so they are an official cooperating agency on  
28 this DEIS, and many of the marine zones are within their  
29 jurisdiction, protecting their trust resources, migratory birds,  
30 sea turtles, and the like.

31  
32 Now I am going to turn to the consultation opportunity that the  
33 Gulf of Mexico Fishery Management Council has and highlight some  
34 of the key elements that are within your jurisdiction, and so,  
35 first off, I just wanted to touch on the National Marine  
36 Sanctuaries Act.

37  
38 This is the purposes and policies element, and so it outlines  
39 what -- For the nation, the system of National Marine  
40 Sanctuaries, what our purposes and policies are. It's to  
41 identify, designate, and manage the sanctuary system, strengthen  
42 the system, enhance public awareness, enhance understanding of  
43 the system and ecosystem processes, facilitate compatible human  
44 uses, and strengthen global protection of marine resources, and  
45 so that's the overarching purposes and policies.

46  
47 Then Section 304(a)(5) is the specific element that outlines the  
48 opportunity we have with our relevant fishery management



1 councils, in this case the Gulf of Mexico and South Atlantic,  
2 that, when we are designating or implementing management in the  
3 sanctuary, there is an opportunity for the relevant regional  
4 fishery management councils to prepare draft regulations for  
5 fishing activities.

6  
7 The council -- With that responsibility comes two things. one  
8 is making sure that any draft regulations are aligned with and  
9 meet the goals of the overall management plan process, and so  
10 that's referring back to the high-level goals and objectives  
11 that our Sanctuary Advisory Council developed for that, aligning  
12 anything with those goals and objectives, and, if the council  
13 chooses to draft fishing regulations, making sure that the  
14 National Standards of the Magnuson-Stevens Act is used as  
15 guidance and the like, and you've done this with the Flower  
16 Garden Banks, but the same opportunity is now before you for the  
17 Florida Keys National Marine Sanctuary.

18  
19 Our proposed action, and hopefully this will be clear, is we  
20 have four alternatives in our proposed action, no action and a  
21 range of reasonable alternatives. Alternative 3 is the agency's  
22 preferred out for public comment, and primarily what we will use  
23 as the proposal for consultation, but I am going to highlight  
24 some things in the other alternatives that might be of interest  
25 to you.

26  
27 In each of the alternatives, there are five components, and so  
28 management plan, which is the non-regulatory activities, and  
29 these are the activities that sanctuary staff implement on a  
30 day-to-day basis, our mooring buoy program, our research  
31 program, working with our enforcement partners, and Steve is the  
32 lead on coordinating our enforcement activities, and so those  
33 day-to-day operations of the sanctuary, and that's in the  
34 management plan section.

35  
36 Boundary expansions, and so overall sanctuary boundary  
37 expansion, and we do have two proposals there. Then sanctuary-  
38 wide regulations, and these are the regulations that apply  
39 throughout the entire sanctuary, and then the last two  
40 components are interrelated, marine zones and marine-zone-  
41 specific regulations, and so proposals to update and add new  
42 marine zones as well as what are the actual regulations in those  
43 marine zones.

44  
45 The items specific to you that will be of interest to you is  
46 sanctuary boundary, and this is the proposed sanctuary boundary.  
47 Included on this slide, and I need to edit the title there, but,  
48 included on this slide, it has both Alternative 2, 3, and 4, and

1 so the proposal for the sanctuary boundary includes a proposal  
2 to extend -- The red is the existing boundary, extending out to  
3 the east, to align our existing sanctuary boundary with the area  
4 to be avoided, and this is an area that we have regulated since  
5 the sanctuary was established, and it prohibits vessels over  
6 fifty meters or tank vessels, and that was part of the existing  
7 act establishing the sanctuary, because there were a few large  
8 vessel groundings that impacted the coral reef ecosystem, and so  
9 the area to be avoided really has been in place since the 1990s  
10 to protect that reef offshore, and our proposal is to extend the  
11 existing boundary to align with that regulatory boundary.

12  
13 In the Tortugas region, the proposal is to extend the sanctuary  
14 boundary to encompass the Ecological Reserve South, the Tortugas  
15 Ecological Reserve South, and those are in our preferred  
16 alternative.

17  
18 In Alternative 4 is a proposal to include Pulley Ridge, and this  
19 is the -- It would align with the existing and the proposed  
20 expansion that your council has worked through for Coral  
21 Amendment 9.

22  
23 **CHAIRMAN KILGOUR:** Beth, is it okay if you take questions during  
24 the presentation? Leann, did you have a question?

25  
26 **MS. BOSARGE:** I did have a quick question before you go any  
27 further, so we'll understand. You said that new area that is  
28 enclosed by the blue lines would have sanctuary-wide  
29 regulations, and you're going to touch on one sanctuary-wide  
30 regulation, and will you get specific, like G.P. did, where he  
31 said, as far as fishing is concerned, what is prohibited and  
32 what can't happen?

33  
34 **MS. DIEVENY:** We can.

35  
36 **MS. BOSARGE:** Okay. Well, that will help us understand what it  
37 means to us.

38  
39 **MS. DIEVENY:** Yes, and we can also provide our existing  
40 regulations, during lunch or following this meeting, because  
41 what's in the presentation is our proposed changes and not our  
42 existing, and so, yes, but, as Leann notes, in these proposed  
43 expansion areas, it would be sanctuary-wide regulations that  
44 would apply.

45  
46 Moving to sanctuary-wide regulations, these are, again,  
47 throughout the entire sanctuary, and these are the sanctuary-  
48 wide regulations that are proposed to either be updated or new,

1 and the top list are included in Alternatives 2, 3, and 4, and  
2 the bottom two that are in the box are included only in  
3 Alternative 4, and Alternative 4 is our most protective, and so  
4 this list is just a high-level summary of those that are  
5 proposed to be updated or new within the entire sanctuary, and  
6 there are two that I wanted to highlight specific for your  
7 purposes.

8  
9 The first is a prohibition on fish feeding, and our current  
10 regulation is, one, we do not explicitly regulate fish feeding  
11 unless a discharge has occurred or destruction, loss, or injury  
12 to sanctuary resources has occurred. The State of Florida does  
13 prohibit fish feeding in State of Florida waters, and so our  
14 proposal is to extend and strengthen slightly the state's  
15 regulation to prohibit fishing, and so our proposed update is to  
16 propose the feeding of fish, sharks, or other marine species  
17 from any vessel and/or while diving, and, on the bottom, I note  
18 that this proposal does not affect the current exception for  
19 discharge of fish, fish parts, chumming materials, or bait used  
20 or produced incidental to and while conducting traditional  
21 fishing activity in the sanctuary. That's a proposed update new  
22 regulation in the sanctuary that would apply sanctuary-wide.

23  
24 The second, this is only included in Alternative 4, our most  
25 protective regulation, and our current regulation prohibits  
26 harvesting or possessing any live rock within the sanctuary,  
27 except as authorized by permit for aquaculture issued by either  
28 the National Marine Fisheries Service or authorized by  
29 applicable state authority.

30  
31 Live rock aquaculture does take place in the sanctuary, in both  
32 state and federal waters. In our most protective alternative,  
33 only Alternative 4, the proposed change is to require sanctuary  
34 authorization for existing and future live rock aquaculture, and  
35 what this does is allows the sanctuary a little bit more  
36 involvement in the process, and it allows us to put conditions  
37 on this activity in the sanctuary, so it is compatible with  
38 resource protections and other activities.

39  
40 Just to note, this is only included in Alternative 4. In our  
41 other alternatives, we do have a management plan activity  
42 specific to this, which is really to strengthen our relationship  
43 with our National Marine Fisheries Service and state partners to  
44 work much more closely on these activities. Those are the two  
45 of the proposed update or new sanctuary-wide regulations that we  
46 thought were of interest or relevant to this body.

47  
48 With that, I will move on to marine zone boundaries and

1 regulations. As I have noted, the sanctuary has used marine  
2 zones as a management tool since 1997. We have different types,  
3 individual types, of marine zones that provide different levels  
4 of protection and therefore allow or restrict different  
5 activities. The restoration blueprint proposes new zones to  
6 address persistent threats to resource health, protect a range  
7 of habitats, and also facilitate restoration.

8  
9 Just because we do have several different marine zones and they  
10 can be confusing, to just have a summary here, sanctuary  
11 preservation areas are an existing zone type. This zone type  
12 manages activities to separate conflicting use and protect  
13 habitats. These are generally along the reef tract, smaller  
14 zones that separate conflicting activities, generally fishing,  
15 from diving and snorkeling.

16  
17 The regulations prohibit discharge, fishing, touching or  
18 anchoring on coral, and so these are marine zones that are no  
19 take, and there are exceptions in this marine zone type that we  
20 are proposing to eliminate, and I will get to those, but the  
21 exceptions allow bait fishing permits in these marine zones and,  
22 in four of the nineteen, allows catch-and-release fishing by  
23 trolling, and so our proposal is to eliminate those two  
24 exceptions to provide clarity of this zone type being no take,  
25 no fishing, and separate conflicting use.

26  
27 **MR. HICKMAN:** Thanks, Beth. We have had this discussion on the  
28 Western Dry Rocks, and I've got a lot of people that are  
29 concerned about that area, because it's a huge spawning  
30 aggregation site for mutton snapper, and I reached out to NOAA  
31 Law Enforcement and wanted more of a legal reading on what they  
32 thought trolling was, what their legal interpretation was, and  
33 it was basically the boat was moving, and so there is no way to  
34 -- In the western Gulf, we like to motor fish, or bump troll,  
35 what they call it, and we may have two lines off the back, and  
36 we'll have two or three weighted lines going down.

37  
38 Under the current scenario, by still including trolling, which  
39 could be a quarter mile an hour with the motor gear in gear  
40 every once in a while, basically holding up, you don't -- It's  
41 really not fixing anything, as far as the fishing effort there,  
42 or what a lot of people are concerned about is this other part  
43 of the spawning aggregation of mutton snappers.

44  
45 We've got the ones at Riley's that are protected, and then,  
46 right over here, you've got this other part of the population  
47 that's not, and I've seen pictures of sixty boats at a time  
48 fishing on the Western Dry Rocks when the spawning aggregation

1 are there, and, as we all know -- If I've got a duck hunting  
2 business, I don't hunt ducks in the summertime when they are  
3 nesting in Canada. I need ducks to come back south.

4  
5 It's a very important fishery, and this isn't going to really  
6 help that spawning aggregation of fish, and so, if there is --  
7 Have you all had discussions about having like a minimum  
8 trolling speed? I know John here was talking about that, as far  
9 as troll boats going through sanctuaries, where they set a  
10 minimum trolling speed, instead of just having this open-ended  
11 trolling thing inside this, because I don't see this actually  
12 helping the fishery.

13  
14 **MS. DIEVENEY:** I will get to the specific marine zones, and  
15 Western Dry Rocks is one that I haven't highlighted specifically  
16 for your consultation purposes, but I will be talking about it,  
17 and that is something that we welcome public comment on for our  
18 range of alternatives in that area, and trolling, as you note,  
19 is one of the proposals in that area, but I will be talking  
20 about that a little bit later.

21  
22 The second zone type, just to highlight, is existing zones,  
23 ecological reserves and special use areas. The proposal is to  
24 combine those two zone types to just have one called  
25 conservation areas, and these are our most protective zone type,  
26 and the regulation, the current regulation, in these areas is  
27 transit only without a valid sanctuary permit, and the proposal  
28 is to make no change to that existing regulation, but there are  
29 new areas proposed as this zone type.

30  
31 Wildlife management areas, these are generally small and  
32 nearshore and protect wildlife and minimize disturbances and  
33 shallow-water habitats, and they generally -- The regulations  
34 vary depending upon the area and what the resource protection  
35 needs and goals are, but, generally, they restrict vessel  
36 activity, and so they might be no-motor, and they might be idle  
37 speed with no wake, and they might be no-anchor, and they might  
38 be no-entry. Did you have a question?

39  
40 **MR. PERRET:** I think you clarified it. You're saying idle with  
41 no wake, but then you say no motor.

42  
43 **MS. DIEVENEY:** These are the regulation options that could apply  
44 in these areas, and so wildlife management areas, while we've  
45 tried to be consistent across the other zones of, if it's a  
46 sanctuary preservation area, you can do this, and you cannot do  
47 this. In a conservation area, you can do this, and you cannot  
48 do this. To be clear for communicating and compliance and

1 enforcement, wildlife management areas, it's a little bit more  
2 difficult, because those are really designed and intended for  
3 specific resource protection goals, and so we wanted to align  
4 the regulations with those goals.

5  
6 **MR. PERRET:** But you could be most restrictive and go with no  
7 entry at all.

8  
9 **MS. DIEVENEY:** We could, yes.

10  
11 **MS. BOSARGE:** Morgan, and I should have done this before we  
12 started the presentation, and I apologize, Miss Beth, but, the  
13 last time that we -- I think it was actually when the Florida  
14 Keys -- When you all presented a few years ago to us, and we  
15 invited some grouper snapper longline fishermen from the eastern  
16 Gulf to come to the meeting, and we reached out to those  
17 fishermen again at this meeting, and I know we do have at least  
18 one of them in the audience, and so I just wanted to -- Because  
19 they are not represented very well on our Reef Fish AP and on  
20 our other APs, and so we invited them, and it's down in their  
21 neck of the woods, sort of, or it's at least a meeting in  
22 Florida, and so they are present, and so I hope, if they have a  
23 question, when we get to something that may be relative to their  
24 fishery, if we have time, we'll be able to recognize them, I  
25 hope.

26  
27 **MS. DIEVENEY:** This just, again, is a summary of the zone types,  
28 their goals, and regulations. Specific marine zones within the  
29 Gulf of Mexico Fishery Management Council jurisdiction, in the  
30 Tortugas region, the proposal, and this is Alternative 3, which  
31 is our preferred, the existing Tortugas Ecological Reserve  
32 North, there would be no changes to that area, the spatial  
33 protections, or the regulations applied.

34  
35 Tortugas Ecological Reserve South, the proposal is to extend  
36 that boundary one mile to the west, to capture additional area,  
37 additional habitat, known to support multi-fish spawning  
38 aggregation activity, and so that is a proposed spatial change,  
39 one mile to the west, with the same regulations, transit only,  
40 without a valid sanctuary permit.

41  
42 A proposed new zone in the Tortugas region is that yellow zone  
43 with the hash markings, and that is a proposed new sanctuary  
44 preservation area. It is intended to protect fish transiting  
45 between the Dry Tortugas National Park Research Natural Area and  
46 Riley's Hump to spawn. The proposal, as a sanctuary  
47 preservation area, is that this is no take and, in addition, no  
48 anchor. That is our preferred alternative for the Tortugas

1 region, which is, I believe, of interest to this council.

2  
3 I am going to show you -- The next slide shows you the  
4 difference across the alternatives, and so the first panel is  
5 Alternative 1 with the existing Tortugas Ecological Reserve  
6 North and South with no boundary expansion, and the red box  
7 there, just to note, is an existing Tortugas Bank no-anchor  
8 zone, and it's no anchor for vessels over fifty meters.

9  
10 Alternative 2 and 3 is what I just walked through on the  
11 previous slide, and the only change in Alternative 4 is that  
12 Tortugas corridor then becomes the most protective, transit  
13 only. This is the proposal for public comment in the Tortugas  
14 region.

15  
16 **CHAIRMAN KILGOUR:** I am trying to remember in my own head, but  
17 that dark green is the state portion of -- There's like a light  
18 green in Alternatives 2 and 3, and then the dark --

19  
20 **MS. DIEVENEY:** Like the oblong shape, that is Dry Tortugas  
21 National Park.

22  
23 **CHAIRMAN KILGOUR:** National park, and the state boundary is the  
24 white-dotted line?

25  
26 **MS. DIEVENEY:** Yes.

27  
28 **CHAIRMAN KILGOUR:** Okay. I just wanted to make sure that I had  
29 it all in my head right.

30  
31 **MS. DIEVENEY:** Yes. We included this, and, looking closer at  
32 the Gulf Council jurisdiction map, I don't believe this is  
33 within your jurisdiction, but I just wanted to include this, and  
34 so this is a proposed new zone in the Marquesas region, and you  
35 see, in Alternative 1, there is no marine zone to the west of  
36 the Marquesas Islands.

37  
38 In Alternatives 2 and 3, that is a large square, approximately I  
39 think ten square miles, as idle speed with no wake, and so a  
40 wildlife management area, idle speed no wake, to protect an area  
41 known to be internationally important sea turtle foraging  
42 habitat. In our most protective, it would be transit only, idle  
43 speed no wake, and so the intent of this marine zone is to  
44 protect seagrass habitats known to support sea turtle foraging.

45  
46 **MS. BOSARGE:** Sorry, but I'm going to have to ask the question.  
47 Can you go back one slide? This is why I was asking about  
48 sanctuary-wide regulations, because this gets really confusing

1 when you look at this. Can you dumb it down to shrimping for  
2 me? Let's just focus on one thing. Alternative 1, versus 2, 3,  
3 and 4, where can we shrimp and where can we not?  
4

5 **MS. DIEVENEY:** The activity for fishing is restricted in the Dry  
6 Tortugas National Park, and Tortugas North Ecological Reserve  
7 and Tortugas South Ecological Reserve and the Tortugas corridor.  
8 The existing ecological reserves, expanding Tortugas South one  
9 mile to the west would be new area restricted, proposed to be  
10 restricted, and then the Tortugas corridor would be proposed as  
11 a no-take area.  
12

13 **AP MEMBER:** You're going to have to get a pointer.  
14

15 **MS. DIEVENEY:** I have one, but it's not on all the --  
16

17 **DR. MENDEZ-FERRER:** I don't know if this is a discussion that we  
18 should have now or after Beth is done with her presentation, but  
19 council staff have made some kind of maps with -- We overlaid  
20 these polygons with the shrimping efforts and with a little  
21 table at the bottom that we can have a discussion of like where  
22 can we fish and which areas are transit only, and so we can  
23 decide if we want to kind of take a quick look at those later  
24 and let her finish her presentation and then have that  
25 discussion later on.  
26

27 **CHAIRMAN KILGOUR:** In light of that, should we let Beth finish  
28 the presentation, and then I see lunch is here, and we can take  
29 a lunch break and then have this discussion with the fishing --  
30 Do you have the fishing information also overlaid on those  
31 polygons?  
32

33 **DR. MENDEZ-FERRER:** Yes.  
34

35 **CHAIRMAN KILGOUR:** Okay. Let's let you keep going.  
36

37 **MS. DIEVENEY:** Those are what staff pulled out as the elements  
38 of interest within the jurisdiction of the Gulf of Mexico  
39 Fishery Management Council for consultation. I just wanted to  
40 put this up. We are here today meeting with you guys, and we'll  
41 be back on October 2 to meet with the Reef Fish AP. As Carrie  
42 noted, we will be presenting on October 21 at the Full Council  
43 meeting, and we are also doing a similar session with the South  
44 Atlantic Fishery Management Council.  
45

46 Also, I have on here that we'll be doing briefings and  
47 discussions with the Florida Fish and Wildlife Conservation  
48 Commission. Public comment opened through January 31, and we



1 did that extended public comment both for the community in the  
2 Florida Keys, but also because that allows us to have public  
3 comment open past two meetings with the council.

4  
5 Now I am going to go through the rest of the plan and the  
6 proposals in the rest of the plan, just so you have that larger  
7 context.

8  
9 As I noted, there is a management plan component in all of the  
10 alternatives. This is the same proposed management plan in all  
11 of the alternatives, and so there is no difference across the  
12 alternatives in the management plan, and I just highlight here  
13 high-level goals for the management plan. Within each of these,  
14 there are a series of objectives and activities.

15  
16 Some of the activities are working with our National Marine  
17 Fisheries Service colleagues to take action to protect ESA-  
18 listed coral species, to develop a coral restoration plan, to  
19 enhance our enforcement capacity and relationships with our  
20 enforcement partners, increasing our team ocean, which is our  
21 on-the-water interpretation, working with boaters to educate  
22 them of the regulations and provide them information.

23  
24 Our Blue Star dive snorkel operators and fishing guides, this is  
25 a program that's been in place for some time to enhance our  
26 stewardship ethic with local operators and how they educate and  
27 work with their clients, and so lots of activities in the  
28 management plan elements that we hope we get public comment on  
29 for what is good and what to strengthen additional activities.

30  
31 Sanctuary boundary, I have pretty much walked through this.  
32 this is Alternative 2 and 3, which is our preferred, which is to  
33 extend to that regulatory boundary of the area to be avoided and  
34 to encompass the Tortugas region.

35  
36 Alternative 4, the only difference there is the proposal to  
37 include Pulley Ridge as a distinct unit and sanctuary-wide  
38 regulations would apply, and I failed to note this earlier, but  
39 the only additional regulation that we have in the proposal is  
40 no anchoring of all vessels, to protect the benthic habitat  
41 there.

42  
43 Sanctuary-wide regulations, again, these apply throughout the  
44 sanctuary, and the first one is limit discharge from cruise  
45 ships and sanctuaries, and we have an existing exemption that  
46 allows cruise ships to discharge certain materials, and the  
47 proposal is to eliminate that, that they would not be able to  
48 discharge within the sanctuary waters.

1  
2 Increasing the number of days allowed for an emergency  
3 regulation, this is an existing sanctuary-wide regulation that  
4 we can implement an emergency regulation for sixty days with one  
5 sixty-day extension. We have used this on two separate  
6 occasions, for a coral disease event and for a coral restoration  
7 activity, and the proposal is to extend that to 180 days, with  
8 one 180-day extension, to give a little bit more flexibility and  
9 response time for the agency and partners.

10  
11 **MS. KRUEGER:** Could you go back one slide? The Pulley Ridge  
12 area, just to clarify, that's already a habitat area of  
13 particular concern through the Gulf Council, and the only change  
14 would be that this would prohibit anchoring by like freighters  
15 and things like that?

16  
17 **MS. DIEVENNEY:** Yes.

18  
19 **MS. KRUEGER:** Okay.

20  
21 **MS. DIEVENNEY:** Specific to our maritime cultural resources, the  
22 proposal that we permit activities to survey and inventory  
23 research and transfer maritime cultural resources. The proposal  
24 here is really just to align our regulations with how our state  
25 partners regulate historical resource permitting, and so there  
26 would be one permit category for archeological research across  
27 all waters of the sanctuary, state, and federal.

28  
29 A proposed new regulation gives sanctuary the ability to address  
30 impact from derelict or deserted vessels. Currently, the only  
31 way we can regulate this is through if a discharge has occurred  
32 or if impact to sanctuary resources, and so just giving us a  
33 little bit more authority to address this threat and impact to  
34 sanctuary resources.

35  
36 Prohibit fish feeding, I have already noted, and mooring buoy  
37 restrictions, and so we provide mooring buoys throughout the  
38 sanctuary, both in areas that are closed to fishing and areas  
39 open to fishing, and our proposal here is to provide large  
40 vessel mooring buoys. There are several large vessels that  
41 operate in the Florida Keys and transit through the Florida  
42 Keys, and trying to protect both the hardware of these mooring  
43 buoys as well as the benthic habitat, where that hardware is  
44 implemented, creating large vessel mooring buoys that those  
45 large vessels would have to use.

46  
47 I noted already Alternative 4, requiring Florida Keys National  
48 Marine Sanctuary authorization for live rock aquaculture, and,

1 finally, a proposed update to an existing sanctuary-wide  
2 regulation that prohibits -- It limits boat speed within 100  
3 yards of residential shorelines to idle speed no wake, and the  
4 proposal is expand this to all shorelines and make it slow  
5 speed, which aligns the regulations with a state regulation.

6  
7 Marine zone boundaries, I have already given you the background  
8 on the marine zones that we have in the sanctuary, and I am just  
9 going to highlight some of the preferred alternative of each of  
10 the marine zone types.

11  
12 Sanctuary preservation area, it's an existing marine zone type,  
13 and it manages uses and separates conflicting uses, and we also  
14 provide mooring buoys in these zones, to provide additional  
15 protections for the benthic habitat. Existing regulations are  
16 prohibit discharge, fishing, touching or anchoring on coral.

17  
18 The existing regulations are on the left side, and the  
19 proposals, which I have already touched on, is to eliminate the  
20 two exceptions, eliminate the bait fishing exception. In  
21 sanctuary preservation areas, we issue permits to allow bait  
22 fish collection in these areas, and, in four of these areas, we  
23 allow catch and release trolling fishing, and so the proposal is  
24 to eliminate those exceptions and to have consistent regulations  
25 in all of these marine zones. The proposal is also to add idle  
26 speed no wake, as well as no anchor, to provide additional  
27 protections for the benthic habitat.

28  
29 Starting in the Upper Keys, Turtle Rocks is a new proposed area.  
30 It's proposed to protect patch reef habitats in the Upper Keys,  
31 which are not well represented in our current marine zoning  
32 scheme.

33  
34 Carysfort is an existing sanctuary preservation area, and the  
35 proposal extends that to offshore slightly, to the ninety-foot  
36 contour, to protect additional deep-reef habitat that is not  
37 well represented in our current marine zoning scheme. In our  
38 preferred alternative, Carysfort is also included, and you note  
39 it's in purple. It's included as a proposed limited entry area  
40 for commercial operators, and they would have to be Blue Star  
41 operators. Blue Star operators are those that have voluntarily  
42 taken courses and are committed to educating their public, their  
43 clients, about the resources and better reef etiquette when in  
44 the water.

45  
46 The other areas to highlight in this area are Key Largo Dry  
47 Rocks, Grecian Rocks, and North Rocks. There are two existing  
48 sanctuary preservation areas in that area, and the proposal is

1 to connect those and expand it slightly to protect additional  
2 reef habitat and ESA-listed reef species.

3  
4 Pickles Reef there is an inset, and that's a proposed new marine  
5 zone, and it's proposed to facilitate coral ecosystem  
6 restoration, and that's an existing coral nursery habitat area,  
7 and so facilitating coral restoration through protection of this  
8 area.

9  
10 In the Middle Keys, the proposals include a new proposed zone,  
11 Long Key-Tennessee Reef, and that is a proposal for a new area  
12 from Long Key State Park to the deep reef. One of the Sanctuary  
13 Advisory Council goals was to protect large, contiguous habitats  
14 in each region of the Florida Keys, and this marine zone is  
15 proposed to meet that goal.

16  
17 Turtle Shoals is another new marine zone in the Middle Keys  
18 proposed to protect patch reef habitats, again an under-  
19 represented habitat type in the current marine zoning scheme.  
20 The other two insets there are new marine zones, small other  
21 areas that are existing coral nursery sites proposed to  
22 facilitate coral restoration.

23  
24 In the Lower Keys, only minor changes to existing marine zones.  
25 Looe Key is proposed to be expanded to protect additional  
26 habitat in this zone type, and Western Sambo, an existing marine  
27 zone, is proposed to be extended to the deep reef ninety-foot  
28 contour, to protect deep reef and area known to support part of  
29 the lobster life cycle.

30  
31 In the Marquesas region, only a minor change here to the  
32 existing marine zones. Sand Key Sanctuary Preservation Area is  
33 another area proposed as that limited-use area for commercial  
34 operators, and, to the west, Key West Coral Demonstration  
35 Project, that's another coral nursery habitat site proposed to  
36 be protected to facilitate restoration, and we have already  
37 talked about the Tortugas region.

38  
39 This is just a summary for your reference as you look at this  
40 whole plan. It shows, for this zone type, across the  
41 alternatives, the total number of sanctuary preservation areas,  
42 total square miles, and the regulations existing and the  
43 proposed changes.

44  
45 The next zone type is conservation areas, and, as I noted, this  
46 is the most protective type. It takes two existing zones,  
47 ecological reserves and special use areas, and it makes them one  
48 conservation area. They are the most protective, transit only

1 without a valid sanctuary permit.

2  
3 There are many fewer of these marine zones in our preferred  
4 alternative. Existing, that exist currently, are Conch Reef,  
5 Tennessee Reef, Looe Key, and Eastern Sambo. The only proposed  
6 change there is that Tennessee Reef is proposed to be extended,  
7 to capture a little bit of deep-reef habitat to protect habitat  
8 that is under-represented in our current marine zoning scheme.

9  
10 Tortugas North, there is no change from existing. Tortugas  
11 South, that proposed one-mile westward extension, and then, in  
12 the Backcountry, Channel Key and Red Bay Bank, and those are  
13 proposed new conservation areas, and those areas have a  
14 combination of hard bottom, seagrass, bank reef habitats, and  
15 that's a habitat type that is not currently protected through  
16 our marine zoning scheme, and these are areas that have had a  
17 lot of monitoring activity as well as restoration activity, and  
18 so including these relatively small areas as conservation areas,  
19 transit only without a valid permit, and so that's the  
20 conservation area zone type in our preferred alternative.

21  
22 This is a summary across, again, of total zones across each of  
23 the alternatives. Alternative 4 is our most protective, and we  
24 do include more areas as this most protective zone type, and the  
25 regulations applied do not change across the alternatives.

26  
27 Wildlife management areas, as I noted, are generally small,  
28 nearshore, shallow water. They protect wildlife and the  
29 habitats that they need. The regulations are distinct to each  
30 zone for those, the purpose and goals of that zone, but the list  
31 there is what could be applied, and here is just one example of  
32 a wildlife management area in 1998, and this was prior to  
33 establishment, and, in 2014, after this area had been managed as  
34 a no-motor zone for that time, just to show how this zone type  
35 is intended to be used, and it could facilitate habitat  
36 restoration, and so this is an existing, Tavernier Key, no-motor  
37 zone.

38  
39 In the Middle Keys, the proposed marine zones in Alternative 3 -  
40 - I will draw your attention to Alligator Reef. This is a  
41 proposed new wildlife management area, and it actually overlaps  
42 with an existing fishery management plan no-lobster-trap area,  
43 and the working group really looked at all of those fishery  
44 management plan no-lobster-trap areas and identified this as the  
45 largest area. They proposed this as no anchoring, and so to  
46 provide additional habitat protections for the coral species  
47 that are present there.

48

1 The other areas in the Backcountry, Moser Channel and Gulfside  
2 Banks, those were discussed at length with the community working  
3 group, and there are heavy impacts by vessels, and these are  
4 shallow areas near the intercoastal waterway, and how can we  
5 protect the habitats there, and the proposal is idle speed no  
6 wake.

7  
8 In the Marquesas region, the Marquesas turtle zone, we've  
9 already talked about, and idle speed no wake in our preferred  
10 alternative, and then, in the Boca Grande & Woman Key area,  
11 minor expansions to existing marine zones, and these are areas  
12 known to support turtle nesting and other bird habitat, and so  
13 minor changes to those existing zones, and also some no-anchor  
14 areas proposed in that area.

15  
16 Western Dry Rocks is the area that Scott noted earlier, and this  
17 is a proposed new zone, and it's within state waters. It is a  
18 known multi-fish spawning aggregation, and the proposal in our  
19 preferred is to create a zone there and make it trolling only,  
20 intending to protect the habitats and the fish spawning  
21 activity.

22  
23 This is a summary across this zone type. This is the largest  
24 number of marine zones in our existing plan and in the  
25 alternatives, is this zone type, and the regulations that apply,  
26 or could be applied, in these areas are highlighted there at the  
27 bottom.

28  
29 The final marine zone type, just to highlight, is we have marine  
30 zones that are called existing management areas, and these are  
31 zones that were already in place when the sanctuary was  
32 designated in 1990, and so this is Key Largo -- It was Key Largo  
33 National Marine Sanctuary and Looe Key National Marine  
34 Sanctuary, and those were encompassed into the Florida Keys  
35 National Marine Sanctuary as the Key Largo and Looe Key existing  
36 management areas, and, as well, the four National Wildlife  
37 Refuges that overlap with our jurisdiction.

38  
39 The proposal for Looe Key is the area in Looe Key has three  
40 different zone types in its existing management. The large box  
41 around is the existing management area, and the yellow box is  
42 sanctuary preservation area, and the green is a special use  
43 research-only area, and so there is a myriad of different  
44 regulations that apply in this area, and our attempt to try and  
45 simplify -- Provide additional protections and simplify this  
46 area and the regulations applied, and you see Alternative 2 and  
47 3. The entire area is proposed as no-anchor, and we extend the  
48 Looe Key Sanctuary Preservation Area, and, in Alternative 4, we

1 have a three-panel existing management area, sanctuary  
2 preservation area, and conservation area. Across that three-  
3 panel, the regulations become more protective.

4  
5 This is Key Largo management area, and there is no spatial  
6 change being proposed in this area. The only proposed change is  
7 to make this area no anchor, to provide additional protections  
8 for the habitat. This is the summary table across this zone  
9 type, and included in here is the National Wildlife Refuge and  
10 regulations that apply there.

11  
12 I just wanted to highlight a few marine zones, highlight across  
13 the alternatives, just to show how the differences across  
14 Alternative 1, no action, to Alternative 4, the most protective,  
15 show up in the document.

16  
17 In the Upper Keys, Carysfort is an existing sanctuary  
18 preservation area. In Alternative 2, it extends to protect  
19 deep-reef habitat. In Alternative 3, it's proposed as a  
20 limited-entry area for commercial operators, to be Blue Star  
21 only, and, in Alternative 4, this is proposed as one of those  
22 large, contiguous habitat areas that the advisory council  
23 requested we analyze in each of the regions. In all of these,  
24 it maintains sanctuary preservation area, separating conflicting  
25 uses, and it is a no-take area.

26  
27 This is the Long Key-Tennessee Reef area in the Middle Keys, and  
28 so, existing, there is Tennessee Reef Special Use Area, and it's  
29 a research-only area. In Alternative 2, that area is a proposed  
30 conservation area, extending to protect deep-reef habitat, and  
31 so just a small extension to the ninety-foot contour. In  
32 Alternative 3, it is proposed to be expanded from the shoreline  
33 at the state park to the deep reef, as a sanctuary preservation  
34 area, and, in Alternative 4, the most protective, the  
35 conservation area, transit only.

36  
37 Revisiting Tortugas, we've already touched on this a few times,  
38 but this is just showing how the protection changes, or is  
39 proposed to change, across the alternatives.

40  
41 Western Dry Rocks, again, we have talked about this, the  
42 proposed. In current, the no action, there is no marine zone  
43 there. In Alternatives 2 and 3, it's proposed as a wildlife  
44 management area to protect the species that occur there and the  
45 habitats there, trolling only, and, in Alternative 4, a  
46 conservation area, and so transit only in that area.

47  
48 We have already talked about the Marquesas, and then, just

1 lastly, in the proposals, we do use anchoring as a management  
2 tool to provide additional habitat protection, and so, in the  
3 proposals, all of the sanctuary preservation areas, existing and  
4 proposed new, include a proposed no-anchor restriction, to  
5 provide additional protections to habitat. We do provide  
6 mooring buoys in these areas for access.

7  
8 In the existing management areas, Looe Key and Key Largo, those  
9 are also proposed as no-anchor areas, and I highlight the  
10 Tortugas no-anchor zone, and that does not change, and, in  
11 Pulley Ridge, Alternative 4, if that were to be included, the  
12 proposal is that that area be no anchor.

13  
14 **CHAIRMAN KILGOUR:** I want to highlight one thing, since we hit  
15 Pulley Ridge one more time. There is an exemption for bottom  
16 longliners in the expansion of Pulley Ridge, and so I just want  
17 to make that clear, that adding this as a sanctuary would remove  
18 that exemption, is my understanding, and is that correct?

19  
20 **MS. DIEVENEY:** No. Do you want to touch on that, Steve?

21  
22 **MR. STEVE WERNDLI:** The regulation proposed in that area would  
23 be our sanctuary-wide general regulations, which would not  
24 prohibit longlining. The prohibition that may impact them would  
25 be the no anchoring, and so, if they need to anchor while they  
26 were out there, there would not be able to anchor.

27  
28 **MS. DIEVENEY:** We have existing sanctuary-wide regulations that  
29 allow traditional fishing activity. Just a real quick summary,  
30 no action, our existing sanctuary boundary, in red. That's  
31 overlaid with all of the marine zones that exist, and so that's  
32 why it looks a little bit busy, including the area to be  
33 avoided, which is in black, and the sanctuary-wide regulations  
34 would remain the same as they were implemented in 1997, and  
35 there are a total of fifty-seven marine zones currently, and the  
36 management plan that was updated in 2007 would apply and would  
37 not change.

38  
39 Alternative 2 is a step up from that, really looking at how we  
40 can manage this area and also what regulations apply to target  
41 reducing conflicting and concentrated uses. The sanctuary  
42 boundary has a proposed expansion to 4,541 square miles, the  
43 area to be avoided, Tortugas, sanctuary-wide regulations. The  
44 proposal is to update three existing sanctuary-wide and proposes  
45 four new marine zones, for a total of ninety-six proposed, and  
46 there would be a revised management plan.

47  
48 Alternative 3, which is our preferred, has the same proposed



1 sanctuary boundary expansion as in Alternative 2, and the same  
2 proposed sanctuary-wide regulations as in Alternative 2, and the  
3 total marine zones are ninety-eight, and the same revised  
4 management plan.

5  
6 Alternative 4, really the intent here is to move towards the  
7 advisory council's goal of protecting large, contiguous  
8 habitats, and you see that I have circled them in white in the  
9 Upper Keys, Middle Keys, Lower Keys, and then in the Tortugas  
10 region. We do update five existing sanctuary-wide regulations,  
11 proposed four new total marine zones, ninety-eight, and a  
12 revised management plan.

13  
14 This is just a high-level summary of the preferred. This is  
15 where you can access the document,  
16 [floridakeys.noaa.gov/blueprint](http://floridakeys.noaa.gov/blueprint), and, on that page, you can find  
17 static maps of every single marine zone that is proposed, either  
18 modified or new, and there is a static map that shows the  
19 differences between no action and the three action alternatives,  
20 and then there is also an interactive map tool on that page that  
21 you can go in and actually turn on and off and zoom in and out  
22 for areas that you are most interested in looking at.

23  
24 Finally, we are going to, as part of our public comment period,  
25 in addition to all the consultation we're doing with the various  
26 agencies, we are hosting several public information sessions in  
27 the Florida Keys, Lower Keys, Middle Keys, Upper Keys, and then  
28 in Miami and Coral Gables and Fort Myers. We will do  
29 information sessions as well at those two meetings, and we will  
30 take oral public comment, and then, at our upcoming Sanctuary  
31 Advisory Council meetings, October 15 in Key West and December  
32 10 in Key Largo, we will be engaging our advisory council in  
33 discussion, but also allow sufficient time, hopefully sufficient  
34 time, for public comment, for oral public comment.

35  
36 At any of these sessions, we'll be taking written public  
37 comment, but oral public comment really focused at our advisory  
38 council meetings, so our advisory council members can hear from  
39 the public as well, and, just in case you have constituents,  
40 friends, or colleagues down there, those meetings will be  
41 shifted from 1:00 to 9:00, so that we can accommodate people  
42 during the day and after the workday, and I think that's it.

43  
44 **CHAIRMAN KILGOUR:** Thank you, Beth. I have a running list of  
45 questions, as I'm sure most of us do, and so why don't we take  
46 until 12:30 to go grab some lunch and come back, and we'll just  
47 work through lunch, and that way you can take a bit of a  
48 breather before you're in the hot seat again. Does that work

1 for everyone? Is 12:30 okay, or do you need a little bit more  
2 time?

3  
4 **DR. MENDEZ-FERRER:** In case you want to take a look at the maps  
5 overlaying some of these polygons with the shrimping effort, you  
6 can go onto our website, and, on our meeting page, there is a  
7 link under Agenda Item VIII(a), and it says "shrimping effort in  
8 the lower Florida Keys region". You can open that, and you will  
9 see four maps, which is each one of the alternatives, showing  
10 the shrimping efforts in the area, and we can go over that  
11 during the discussion.

12  
13 (Whereupon, the meeting recessed for lunch on September 16,  
14 2019.)

15  
16 - - -

17  
18 September 16, 2019

19  
20 MONDAY AFTERNOON SESSION

21  
22 - - -

23  
24 The Joint Special Coral Scientific and Statistical Committee and  
25 Coral and Shrimp Advisory Panels of the Gulf of Mexico Fishery  
26 Management Council reconvened at the Gulf Council Office on  
27 Monday afternoon, September 16, 2019, and was called to order by  
28 Chairman Morgan Kilgour.

29  
30 **CHAIRMAN KILGOUR:** Before lunch, I know there were questions,  
31 but I don't have a running list of who is first, and so --  
32 Natasha wanted to go over something really quickly.

33  
34 **DR. MENDEZ-FERRER:** In a moment, I will be showing you the  
35 overlay of the maps with the shrimping effort, and I kind of  
36 wanted to go over them with you, to kind of explain what we did,  
37 and maybe we can use them to better guide the discussions and  
38 see which areas will be closed for shrimping and what's going on  
39 and so on.

40  
41 **CHAIRMAN KILGOUR:** Do you think we should do that before we ask  
42 questions?

43  
44 **DR. MENDEZ-FERRER:** Yes.

45  
46 **CHAIRMAN KILGOUR:** Okay. Camilla, do you think you could --

47  
48 **MR. PERRET:** Can we ask questions?

1  
2 **CHAIRMAN KILGOUR:** Sure. In the meantime, go ahead.

3  
4 **MR. PERRET:** Beth, are you guys ready for a few questions or  
5 comments? I am reading your executive summary, and I quote, the  
6 south Florida ecosystem has been extensively altered through  
7 development of drainage canals completed to facilitate coastal  
8 development, agriculture, flood control, on and on and on and  
9 on.

10  
11 In one of the earlier slides, you showed the things that have  
12 impacted Florida, south Florida, from 2011 on, bleach and red  
13 tide and all these good things, bad things, I guess, and, as  
14 brief as you can be, how will expanding the area with Preferred  
15 Alternative 3 to some 4,541 square miles, improve what I see as  
16 the degradation that's been taking place due to development, et  
17 cetera, et cetera, et cetera.

18  
19 **MS. DIEVENEY:** I will start and let my colleague respond for  
20 anything that I miss or mischaracterize, but those activities  
21 are included in our proposed updated management plan, and so a  
22 lot of those, what you're referring to, the water quality issues  
23 out of south Florida, impacts from the partnership with the  
24 South Florida Ecosystem Restoration Task Force, a lot of those  
25 are outside of our existing authority or jurisdiction, and so,  
26 in the management plan, there are activities to strengthen and  
27 facilitate that partnership and bring our issues more to the  
28 fore with South Florida Ecosystem Restoration Task Force,  
29 strengthen -- We have an existing water quality protection  
30 program that was established as part of the Florida Keys  
31 National Marine Sanctuary Protection Act, and it's administered  
32 by Florida DEP and U.S. EPA, and so strengthening how that body  
33 works and what they do, and so those activities are identified  
34 in our management plan actions.

35  
36 **MR. PERRET:** By making the area larger, you're just going to  
37 have a -- Let's face it. People are moving to Florida. That  
38 slide you showed with all the boats, it's going to get worse.  
39 Probably one of the biggest industries in Florida is  
40 development. I fly into south Florida, different parts of  
41 Florida, and we had a President, years ago, that we're going to  
42 have no more loss of wetlands or something, and I see it still  
43 happening every day, any time I get in an airplane all over the  
44 country.

45  
46 We've got to face it. We're going to have people that want to  
47 live on the water, and I live on the water, and I'm part of the  
48 problem, and, granted, we want to do what we can to maintain as

1 best what we have.

2  
3 Like, in Louisiana, there is major plans for plumbing changes,  
4 diversions, and that's going to, in some cases, impact fisheries  
5 tremendously, but yet the powers-to-be seems to think that's the  
6 thing to do to save coastal Louisiana, just like your proposal  
7 for this with south Florida, but it just seems to me that,  
8 unless you address the real issue, making an area larger is not  
9 going to solve your problem, but thank you.

10  
11 **MR. WERNDLI:** To add on to what Beth was saying, part of the  
12 intent with the zoning and the expansion is to increase  
13 protections of those habitats in those areas, so that they can  
14 become more resilient, so that we can focus on protecting areas  
15 where we're working on restoration of coral reefs and seagrass  
16 areas, so that we can offer protection to the small part of the  
17 gigantic ocean that we actually have jurisdictional control over  
18 and that we can actually make an impact to in helping make those  
19 resources more resilient to the things that we don't necessarily  
20 have control over, like the water quality problems and things  
21 that are outside of the jurisdiction that impact inside.

22  
23 **CHAIRMAN KILGOUR:** Just to note that Natasha did want to go  
24 through the four different alternatives with the shrimping  
25 effort overlaid on the background, and so, once we get through  
26 Paul and Scott, then I'm going to have her go through those four  
27 alternatives, and then we can return.

28  
29 **MR. SAMMARCO:** I had four points or questions or comments or  
30 whatever they are that I wanted to go through with you. You  
31 have named multiple stressors that you have on those reefs  
32 there, and they are formidable, and you're addressing them in  
33 your management plan, which is great. There is one that the  
34 data have come in over the years, and I would say over the past  
35 twenty years, on and off, and I was just wondering whether the  
36 sanctuary has the authority to address them, and that's sub-  
37 terranean nutrient enrichment on the reefs, through well  
38 injection of sewage.

39  
40 It's been brought up by several investigators that a lot of the  
41 sewage nutrients are going down through the Pleistocene reef  
42 under the lagoon and coming out on the reefs, which is not too  
43 good for the animals and plants. Well, the plants probably love  
44 it, but not for the animals. Do you know what -- I see sewage  
45 plants being built, and I think there's less of it now, but how  
46 is that figuring into your plan, or can you address it?

47  
48 **MS. DIEVENY:** Again, similar to the previous question, this is

1 within the Florida Keys, and so the Water Quality Protection  
2 Program, as I noted, was established as part of the act that  
3 established the sanctuary, and that's one of the main elements  
4 that that committee had worked on since its inception, was  
5 sewerage the Florida Keys and looking at the canal water quality  
6 and addressing that, and I do know, and Shelley actually, I  
7 think, sits on that Water Quality Protection Program, and so I  
8 don't track it in the details, but I do know that those issues  
9 of deep and shallow well injections have come up before that  
10 committee, and, as I noted, our management plan activities have  
11 -- Identifying the Water Quality Protection Program as a partner  
12 moving forward, and they are a partner, and strengthening that,  
13 and strengthening how that council works, going forward, and so  
14 not explicitly, but, yes, through that avenue.

15  
16 **MR. SAMMARCO:** That's very encouraging to know. One of the  
17 other things was you were talking about Pulley Ridge on and off,  
18 and I think that -- Pulley Ridge always seems to be a poor  
19 sister in the program, for some reason or other, and in sort of  
20 your program, and I think every program, but John Reed and our  
21 esteemed Sandra Brooke has done a lot of work and have a heap of  
22 data on this, and I think they've shown it's a pretty rich area  
23 as well. Is there some reason or other that it hasn't been  
24 included in your main group, or it has tended to be just put in  
25 Alternative 4, but it has not been included in your main group?

26  
27 **MS. DIEVENNEY:** The decision there is really in light of the  
28 protections that are proposed through Gulf of Mexico Fishery  
29 Management Council. It's an existing habitat area of particular  
30 concern, and the proposal to expand that already exists, and so,  
31 in our most protective alternative, that's where we propose to  
32 include additional protections in that area, and so it is  
33 included in the suite of proposals, but it is in only  
34 Alternative 4, the most protective.

35  
36 **MR. SAMMARCO:** The only other thing I wanted to do is commend  
37 you on your recommendation for sanctuary expansion. Good luck.

38  
39 **MS. DIEVENNEY:** Thank you.

40  
41 **MR. HICKMAN:** Thanks, Beth. In fact, going through the DEIS  
42 briefly over the last week or so, and then getting to hear the  
43 presentation, it really clarifies a lot of things, and you did a  
44 good job with that. Knowing that, basically, this whole region  
45 that is going through this expansion's business is that of a  
46 healthy marine ecosystem, and you can go back to somebody like  
47 Corky that was back around when they put salt in the water, and  
48 you can now look at this and realize that it probably even come

1 close to doing enough with this expansion and the challenges  
2 that you face.

3  
4 In 1997, my wife and I took the kids to Looe Key National Marine  
5 Sanctuary, and we were just blown away by the beauty of the  
6 place and the amount of marine life, and we had a Gulf Council  
7 meeting in Key West a couple of years ago, and I stayed in the  
8 bars most of the time, and the council meeting, and my wife took  
9 the kids down to Looe Key, and she came back in tears with the  
10 state of what has become with that reef and the lack of marine  
11 life and everything else, and so things are happening fast,  
12 going bad fast, and that is your eco-engine, your environmental  
13 and economic engine there, and it needs to be taken care of, and  
14 I don't think you all have gone far enough.

15  
16 If you could squeeze more in there, it would probably be good,  
17 because I hate to say that this actually looks like a band-aid  
18 right now with how the water quality issues, issues like SCLTD  
19 coral disease and some of the other things that are going on,  
20 but good job, and the presentation was very good, and I  
21 appreciate it.

22  
23 **MS. DIEVENEY:** Thank you.

24  
25 **CHAIRMAN KILGOUR:** Okay. Let's turn it over to Natasha, so she  
26 can walk us through this with some fishing effort on the  
27 background, and then we'll do some more questions.

28  
29 **DR. MENDEZ-FERRER:** If you have seen the documents that I  
30 emailed you during the lunchbreak, which can also be downloaded  
31 from our council website, the document has four pages, and each  
32 one has its own map for each one of the alternatives,  
33 Alternatives 1 through 4, that Beth just went through.

34  
35 In this, the thing that's consistent at least in all four maps  
36 is that the green, like the lime green color that we will see in  
37 the map, is the Gulf Council jurisdiction, and the dashed-gray  
38 lines, that's the state-water boundaries, and, if I can scroll  
39 down here, this has been summarized in a little table under each  
40 one of the maps.

41  
42 If you look at this blotch that is right here, these are the  
43 shrimp data, and these are data that were aggregated based on  
44 the ELBs. To kind of give you an idea of the data, the darker  
45 colors suggest that those are areas that are seeing more active  
46 shrimping, and so more shrimping is going on in these really  
47 dark brown areas, versus suggested lower shrimping in the areas  
48 that are kind of like the lighter yellow.

1  
2 In this first map, as you can see, the blue line around here,  
3 that is the current sanctuary boundary, and the green ones in  
4 Alternative 1 -- These are ecological reserves for the Tortugas,  
5 and, like Beth mentioned earlier, these would be now called  
6 conservation areas for Alternatives 2, 3, and 4.

7  
8 Each one of these polygons has its own little regulations, which  
9 have been summarized in a small table under the map, and I do  
10 have to mention that Map Number 4, which I will scroll to, there  
11 is an error on the fishing regulations for the Pulley Ridge  
12 area.

13  
14 In this map, we separated the polygons. If you remember from  
15 the presentation, this was all a gray area, and so the salmon  
16 color right here is the Pulley Ridge HAPC, which already has  
17 some fishing regulations, and, basically, the summary is no  
18 bottom-tending gear. Then, for Coral 9, which would be this  
19 little square over here, what we would need to change, and this  
20 will be modified for the next council meeting and the next Reef  
21 Fish AP discussions, is that longline is allowed, if I'm  
22 correct. Okay. Bottom longline is allowed.

23  
24 Hopefully these maps can help you kind of see where shrimping is  
25 happening and how this changes with each one of the alternatives  
26 and it can help guide the discussions this afternoon.

27  
28 These shrimp data are from 2004 to 2013, and they are the same  
29 data that were used when creating the Coral 9 polygon, and we  
30 plan on updating these maps to aggregate all the data from 2004  
31 to 2017, and those can be presented at a later time.

32  
33 I also have an open ArcMap, if we wanted to, later on, do some  
34 on and off with the polygons, and so however we think this  
35 discussion will be more fruitful for you, and let me know, and  
36 we can figure it out with the available technology.

37  
38 **CHAIRMAN KILGOUR:** Okay. I just have one comment on these maps.  
39 For me, it would be really, really helpful to have a static  
40 boundary of existing areas in the Florida Keys National Marine  
41 Sanctuary and then a different boundary for the new areas,  
42 because, right now, there is so much going on, and especially  
43 with like the south Tortugas area. You don't see that it's  
44 actually being pushed out by about a mile in this map, and  
45 that's something that I think would be really relevant for  
46 people, seeing what the differences are, and so that would be  
47 one comment.

48

1 Then another comment is the shrimp fishing effort, if I recall,  
2 and I might be wrong on this, but, if you were to decrease the  
3 scale just a little bit, you will filter out -- One to fifty-one  
4 isn't very informative to me, because, if there's fifty-one  
5 points in a particular spot, that means there is shrimping  
6 there, but if you make it just the first box a little bit  
7 smaller, like one to ten, then that's generally an indication  
8 that they're not shrimping there, and so that would be my --  
9 That's me giving some suggestions, just based on the fact that I  
10 look at this and I can't really tell what's new, because I don't  
11 know what is existing and the differences there, and so now I'm  
12 done, and I'm off my soapbox, and does anybody -- Leann, did you  
13 have your hand up?

14  
15 **MS. BOSARGE:** Thanks, and I was going to highlight a couple of  
16 those things, and you can just stop on whatever map you want to  
17 stop on. Where is the rest of the shrimp effort? I already  
18 know the answer to this, but there's people on the webinar that  
19 haven't had this conversation yet, and people in the room that  
20 haven't, and so that's only part of our shrimp effort, and so  
21 that's question number one, is where is the shrimp effort, the  
22 rest of it? It pertains to what we're talking about, which is  
23 the sanctuary expansion, because that's not the only place that  
24 we shrimp around the sanctuary.

25  
26 Then number two, and this has always puzzled me, and I think I'm  
27 getting closer to understanding it, but, even if you say one to  
28 ten and make some of those boxes a different color, that does  
29 not jive with what we have just on our handful of boats on our  
30 historical trawl data, and so it always has frustrated me that  
31 we put these numbers, and we say that's not heavily shrimped and  
32 this is heavily shrimped, because we don't have a census of the  
33 entire fleet with these ELBs on them.

34  
35 We only have a small subset, maybe a third of the fleet. Of  
36 that small subset, some of those boats may be boats from Texas  
37 that never go to the Keys to shrimp, right? You don't know how  
38 many -- I call this the pink shrimp fishery. You don't know how  
39 many boats you have, and we're from Mississippi, and so you  
40 don't have to be from Florida to shrimp in this fishery.

41  
42 You have a lot of Alabama and Mississippi boats that travel  
43 there every year and shrimp, and we have no idea how to actually  
44 extrapolate that and say what's heavily fished and what's not,  
45 because you don't know how many pink shrimp boats you actually  
46 have this recorder on. If you've got it on one or two, then  
47 this is not an accurate representation, to say, oh, there was  
48 only one to fifty-one tows.



1  
2 The other thing is, even if it's on one or two, I cannot figure  
3 why it looks that way, why it's not shown as more heavily  
4 fished, because, when we brought our tracks, and you can pull it  
5 up, and you can see that same area, and you can see where we've  
6 been over it a million times, and so why is it only showing  
7 that? What does that point represent? Is it the entire tow or  
8 just one ping or all the pings throughout the tow, so you can  
9 see the whole track? What do those points represent?

10  
11 I know I am putting Natasha on the spot with that, and so I know  
12 that we also have Dr. Benny Gallaway in the audience, and so  
13 whoever wants to answer it, whoever you think would be best.

14  
15 **CHAIRMAN KILGOUR:** I will take a first stab at it, since I do  
16 know that this information is supposed to represent every ten  
17 minutes of a tow, of an active fishing tow. It's come to my  
18 understanding that we got -- I requested new data before I left  
19 here, and it didn't jive with the numbers here, and so this is  
20 the summation of the twenty-two-million points in the entire  
21 Gulf of Mexico, which, to me, sounds about right, maybe.

22  
23 When we got the new data though, it went down by at least a  
24 factor of ten, and I couldn't figure it out, and so it's my  
25 understanding that perhaps the new information, which is, I'm  
26 guessing, why you didn't include it here, is the first point of  
27 every tow and not the entire tow, and so that means that this  
28 probably needs to be re-investigated, to make sure that this is  
29 every ten minutes of an active tow, but it was my understanding,  
30 when I got this data, because it had gone through the algorithm  
31 of active fishing, that this should represent actual fishing  
32 points of the -- So the entire tow.

33  
34 **MS. BOSARGE:** So another way -- If you get all the points, that  
35 will address part of it, but it still won't address the fact  
36 that nothing is extrapolated to the entire fleet, and it would  
37 be my suggestion that, as we continue to look at these, it  
38 should just be shrimp effort in general, and I don't know that  
39 you need to say this is heavily shrimped or not heavily  
40 shrimped, because I really don't think there's been an  
41 extrapolation done to truly give us that answer.

42  
43 **MR. HICKMAN:** I would like to hear from Dr. Gallaway. I mean,  
44 how do they choose which boats get the ELBs, and some don't, and  
45 is there a percentage of people that do the pink shrimping  
46 versus -- I would just like to hear Benny's idea on that, all of  
47 this that's going down.

48

1 **DR. GALLAWAY:** The way vessels are selected is the landings are  
2 stratified by port, and then they're stratified random within --  
3 The stratification being the landings by port, and so the  
4 largest ports that have the largest landings will have a higher  
5 proportion of the fleet, and so it's not directed at answering a  
6 specific question for a generalized area. It's made for  
7 extrapolating overall, based on what I just defined, and so  
8 that's how they're selected, stratified random, based on  
9 landings.

10  
11 Then, within port, it's landings within ports is how the vessels  
12 get picked, and so you want a proportion of the shrimpers that  
13 have high landings down to proportional to ones that have few  
14 landings. It would be very good for extrapolating total effort,  
15 which is what the program was designed to do. It's for  
16 evaluating shrimping intensity in a given area, and you need to  
17 take the data that you have for that area and do all the points,  
18 the way Morgan did originally.

19  
20 **AP MEMBER:** Benny, one question. The boats that come down from  
21 North Carolina and South Carolina and Georgia to fish the Keys,  
22 any ELBs on those?

23  
24 **DR. GALLAWAY:** No. It's a Gulf of Mexico program, and a lot of  
25 our Gulf -- Well, a lot of our Gulf, but some of our Gulf  
26 fishermen, some of our boats, fish this area, as you guys do,  
27 and I don't know whether you all have an ELB or not.

28  
29 **AP MEMBER:** We do.

30  
31 **DR. GALLAWAY:** Then other vessels fish up the east coast, but we  
32 don't have a reciprocal program in the east coast, where they  
33 come down here.

34  
35 **AP MEMBER:** So that effort would be missing.

36  
37 **DR. GALLAWAY:** That effort would be missing. That is correct.

38  
39 **CHAIRMAN KILGOUR:** As a follow-up, those shrimping vessels that  
40 are in the South Atlantic, do they have VMS on them?

41  
42 **DR. GALLAWAY:** I don't know.

43  
44 **CHAIRMAN KILGOUR:** This data has been cut so that only Gulf of  
45 Mexico -- If they have an ELB, the data, I'm sure we have, but  
46 we just -- Because it was so large, I cut it to just the Gulf of  
47 Mexico jurisdiction, but we have that data, I'm sure, that can  
48 go -- But, as Benny just said, that's in the South Atlantic's

1 jurisdiction, and so it would only be Gulf vessels that went  
2 that way, and it wouldn't include anything coming down from the  
3 South Atlantic side that never entered the Gulf. Harris.

4  
5 **MR. LASSEIGNE:** Could you define the ELB or also transponders,  
6 and, also, how many transponders are electronic equipment is  
7 used in this compared to the number of licensed vessels in the  
8 Gulf? Could you make a comparison? Would that give you an idea  
9 of how many are involved and how many are left out?

10  
11 **DR. GALLAWAY:** I don't know if I really understand the question,  
12 but I will speak to it. These data were based on what we call  
13 an electronic logbook, which had a memory chip, which a device  
14 was placed on the vessel, and it recorded the position. It had  
15 a GPS, and it recorded its position every ten minutes.

16  
17 The program after -- I think 2013 may have been a transition  
18 year, when some of the -- When both units were going. When NMFS  
19 took over the program, they elected to do what's called a CELB,  
20 a cellular ELB, where you didn't have to have port agents, where  
21 the device, when it went by a tower, could download its  
22 information, which is great. It saves a lot of money on port  
23 agents, but then you have multiple downloads in a single trip,  
24 and so it takes a lot more effort to reconcile that you're not  
25 getting duplicate records and that sort of thing.

26  
27 That proportion that are operating with the new ELBs is still,  
28 fractionally, fairly large, and I think it's 30 to 40 percent of  
29 the fleet. It used to be, and I assume it still is. What  
30 proportion -- Those data were all electronic logbooks, as I have  
31 defined. The new data include a mixture of both, and, in recent  
32 years, it's all the cellular electronic logbooks, which actually  
33 still have a memory chip, and so, if you wanted to compare one-  
34 to-one, you can go get the memory chips and compare it to the  
35 downloads, but anyway. I'm always fishing for new work.

36  
37 **AP MEMBER:** 40 to 50 percent of the fleet?

38  
39 **DR. GALLAWAY:** 30 to 40 percent of the Gulf fleet. It's based  
40 on vessels representing 30 to 40 percent of the fleet stratified  
41 by the highest landing ports, which may or may not have fished  
42 this area. Some do and some don't, and I would have to look.  
43 You would have to have confidential information to be able to  
44 sort who was who.

45  
46 **MR. HICKMAN:** The only thing I know about shrimping is just from  
47 what I watch at the boat dock or what Benny Gallaway has told me  
48 when we've been fishing, and so this kind of makes sense, but,

1 in the Florida Keys, you've got -- The guys fish on both sides.  
2 They are right there in the middle. They've got Gulf permits,  
3 and then they've got South Atlantic permits, and so charter  
4 boats fish on both sides.

5  
6 I would imagine these guys that come down from the South  
7 Atlantic are not going to say, okay, we're just going to stop  
8 right here. They probably have dual-permitted boats too that  
9 don't have -- Because their ports are on the southeast, and so  
10 they're not going to be required to be in this program, and so  
11 they probably fish on the Gulf side and the South Atlantic side,  
12 and is there quite a few dual-permitted shrimping boats, like  
13 there is charter boats?

14  
15 **DR. GALLAWAY:** I am not qualified to answer that. I'm sure some  
16 of these folks could, but that's not my area.

17  
18 **MS. BOSARGE:** All of ours are dually-permitted, yes, but the  
19 problem is, like you said, is that, if it's ported, if it's a  
20 boat that's typically ported in the South Atlantic, you're not  
21 going to see their effort on here, and so you miss -- There is  
22 just multiple layers of effort that is missed on here, and there  
23 is no extrapolation, and that's why I suggested that don't  
24 color-code these points anymore and just put them on there.  
25 That's shrimp effort, and that's the best that we have to go by,  
26 and that tells you where we're at.

27  
28 **MR. BOSARGE:** Morgan, I would ask -- I don't know the young  
29 lady's name here, but if she could possibly pull up one of the  
30 graphs that we had at our last meeting, and can you put that up?  
31 It gives a little better picture of some of our concerns, that  
32 is the shrimp industry's concerns, and most of our concerns with  
33 this expansion are on what we call the south side, on the  
34 Atlantic side, and it shows the -- It's on page 5.

35  
36 If you look at this effort compared to what we're looking at  
37 with what you presented, this has got that south side effort in  
38 it, where we don't have any effort. In other words, that's  
39 where our concerns are at, mostly on that south side.

40  
41 **CHAIRMAN KILGOUR:** I hear all of these concerns, and I can  
42 guarantee you that the staff here have these data, and so  
43 perhaps there could be some type of thing, like a motion, that  
44 would ask staff to include this information when this is  
45 presented to the council. That might be the best way of making  
46 sure that this information is included when the sanctuary is  
47 discussed at the next council meeting, because I know that these  
48 data are here in-house, having made these maps.

1  
2 **MR. BOSARGE:** Well, and just -- What you see presented to us  
3 today, if you didn't know any better, you would think there was  
4 no effort at all on that south side, and so some of these areas  
5 that you're proposing closing have traditional fishing effort in  
6 those areas.

7  
8 **DR. GALLAWAY:** I believe some of the newer data also show some  
9 of that effort that you're pointing out on that south side as  
10 well, but the newer data don't include all of the points, and  
11 so, with that caveat, I will --

12  
13 **MR. BOSARGE:** So it's just the start point of the tow?

14  
15 **DR. GALLAWAY:** That is correct.

16  
17 **CHAIRMAN KILGOUR:** Steve, did I hear a motion to ask staff to  
18 include both sides of the sanctuary? Is that what I heard?

19  
20 **MR. BOSARGE:** Yes, ma'am. **So moved.**

21  
22 **MR. PERRET:** The Shrimp AP, I think all the members have  
23 concerns about the amount of effort that is not being included  
24 in this, and, echoing what Steve's motion is, yes, I totally  
25 concur, but ask the Gulf Council to have staff prepare graphs  
26 with all accessible shrimp effort data that is available.

27  
28 **CHAIRMAN KILGOUR:** Just so -- I am trying to divest myself of  
29 the fact that I was knee-deep in this not too long ago, but this  
30 is a different map, in that it only shows the points. Would the  
31 Shrimp AP be more comfortable with just having the points data  
32 shown and not the summarized, basically, heat map that was in  
33 the other map, because they can extend that heat map to the  
34 South Atlantic side as well, and that data do exist. I just cut  
35 it to the Gulf side for purposes of Coral Amendment 9. We have  
36 it, but I just made it so that it was more feasible.

37  
38 **MR. BOSARGE:** I guess I don't understand the reasoning for  
39 wanting the heat map, like you say. In other words, could you  
40 give me an example of why you would want to see --

41  
42 **CHAIRMAN KILGOUR:** The reason why I did it that way is because  
43 some of these points only -- Like, first of all, we had to  
44 concatenate things into boxes, so that we could manage the data.  
45 Right now, you're talking about twenty-two-million points that  
46 take -- It takes like ten or fifteen minutes, sometimes, for  
47 this to load on your computer, because it's so intense in the  
48 number of points, and so that was a way to make it manageable,

1 but another thing is, in some of those boxes, there might only  
2 be one point from 2004 to 2013, and that indicated to me that  
3 that possibly wasn't a box that was really shrimped.

4  
5 I mean, we saw it in Coral Amendment 9. In really deep waters,  
6 we would have one point show up, because the vessel was going  
7 the perfect speed for the algorithm to spit it out as a  
8 shrimping point, when, obviously, you weren't out in 3,000 feet  
9 of water shrimping. Well, you could be, but not one point. You  
10 would have a couple. That was a way to make the data more  
11 manageable and to kind of filter out false positives, if that  
12 makes sense.

13  
14 **MR. PERRET:** I second Mr. Bosarge's motion, by the way.

15  
16 **MR. BOSARGE:** Thank you, Mr. Perret. I agree with you, in that  
17 I think that it would be better just to show points, and,  
18 getting back to some of what Benny was talking about and the  
19 distribution of ELBs across the fleet, if you look at the larger  
20 ports with the larger landings, that's going to be that  
21 Matagorda, Victoria, Palacios, and am I correct, Benny?  
22 Brownsville. I think those are some of the larger ports for  
23 landings. I guess the point I'm trying to make is there's not a  
24 lot of that fleet that does pink shrimping, and so do you see  
25 what I'm saying?

26  
27 **DR. GALLAWAY:** Yes, and I don't know if those are the largest.  
28 Those are large ports, but I don't know where the largest  
29 landings are, and I haven't looked at it recently, but your  
30 premise is correct that the way the vessels were chosen would  
31 not necessarily provide a good reflection of the vessels that  
32 targeted pink shrimp.

33  
34 **AP MEMBER:** I think, John, you've got some photos here of the  
35 points, shrimping points?

36  
37 **MR. WILLIAMS:** No, they're the entire Gulf.

38  
39 **AP MEMBER:** Well, it's an example of these dot points, and maybe  
40 we could pass that around, so that people see what this looks  
41 like, because we're talking about it, and some of us know what  
42 it looks like from the last meeting, but some people haven't  
43 seen it at all.

44  
45 **DR. GALLAWAY:** I would like to comment on that. I mean, that  
46 sounds like a good idea. Keep in mind that those maps reflect  
47 the start of a tow, and what Morgan is talking about is those  
48 points are supplemented by ten to twenty more points associated

1 with that tow, which will show a much higher density, but those  
2 are good maps for what they are, but they don't show all the  
3 effort.

4  
5 **MR. HICKMAN:** I've got a question for Beth. When you all used  
6 the NCOS process, I believe you said when you were evaluating  
7 lines and areas, which shrimp boat data did they input into the  
8 model for NCOS on the shrimp effort?

9  
10 **MS. DIEVENEY:** I can't 100 percent certain say, but I believe  
11 it's this data that is on the maps that Natasha made.

12  
13 **AP MEMBER:** Someone mentioned that the Gulf of Mexico was a  
14 large body of water, but, through the years, I have seen it  
15 start to shrink. You have the 200-mile limit, and so you limit  
16 the American vessels where they can go fishing, and you also  
17 have the fifty-fathom curve, and, inside the fifty-fathom curve  
18 is where you have a lot of the activity, I would say maybe 80 or  
19 90 percent, or maybe even higher.

20  
21 Every time a boat sinks, that's another hang, where you can't  
22 fish or you've got to kind of move around the hang. Pipelines,  
23 there is tons and miles and miles of pipeline in the Gulf of  
24 Mexico, and you also have manmade reefs. Every time they put  
25 down a manmade reef, there you go. You're losing a little bit  
26 of territory.

27  
28 Now you're talking about closed areas to shrimping, where they  
29 normally shrimp and historically shrimp, and then you're closing  
30 the areas, and so a lot of the Gulf of Mexico, where we could  
31 shrimp, is shrinking. They're even talking about putting out  
32 windmills out in the Gulf of Mexico, and that hasn't  
33 materialized, but they are talking about it. Why are the  
34 shrimpers concerned? Because, to us, the Gulf is shrinking, as  
35 far as the area where we can fish.

36  
37 **CHAIRMAN KILGOUR:** As the Chair, I'm not supposed to make  
38 motions, but I sent Camilla a strawman for you guys to -- If  
39 this is the motion that you wanted to make to include all of the  
40 information, so that we could at least discuss it and move on to  
41 the next item. Steve, did you have something to say?

42  
43 **MR. BOSARGE:** No, I'm with you, and we have a motion, and we  
44 have a second, and do we want to -- **I made your motion,**  
45 **basically.**

46  
47 **MR. HICKMAN:** This kind of makes sense, because, all of your  
48 landings and your trip tickets, you've got to put the area that

1 you're in, and so you would be -- Your pink shrimp landings in  
2 the Keys, you could extrapolate that, and you would have to  
3 reach out to the Science Center, but they should have shrimp,  
4 pink shrimp, landings just for the Keys area, and you could  
5 cross-reference that with the ELB data, with the boats, and that  
6 would probably get you somewhere. I don't know how easy or hard  
7 that would be, but --

8  
9 **DR. MENDEZ-FERRER:** That all sounds like it makes sense. I am  
10 very sure that I will -- We will take a look at the data, and we  
11 will talk to the appropriate people and ask all the right  
12 questions, so that the council can make the recommendations.

13  
14 **CHAIRMAN KILGOUR:** I would venture to guess that perhaps any of  
15 the VMS information that we have, that the council staff have,  
16 should also be included for the council's consideration at the  
17 next meeting, and I'm not going to make a formal motion, but I  
18 am going to just put that plug out there.

19  
20 We have a motion on the board, and is there any more discussion  
21 on this motion? Does this motion say what you want it to say,  
22 Steve? Benny.

23  
24 **DR. GALLAWAY:** I wanted to say, before I leave, that the maps go  
25 up to 2017 now, and they include the new data, and I would like  
26 to express special appreciation to the NMFS Galveston staff, who  
27 took time out of their workweek to provide those data to us.  
28 Generating these maps is not part of their job and is not  
29 necessary for estimating effort. These are special products  
30 that -- They went way out of their way to give us the data, and  
31 they should be thanked for that.

32  
33 Also, I would like to thank the American Shrimp Processors  
34 Association, which provided the funding to enable us to acquire  
35 and map the data, and these things that seem like simple  
36 requests, with the database now being two-thirds or three-times  
37 larger than it was when we stopped doing this, it is a big job,  
38 and so make sure you thank them, and I thank them for sure,  
39 because they have been great people to work with, and so thank  
40 you.

41  
42 **MR. BOSARGE:** I am good with the motion.

43  
44 **CHAIRMAN KILGOUR:** All right. Is the seconder good with the  
45 motion, Corky?

46  
47 **MR. PERRET:** Absolutely.

48



1 **CHAIRMAN KILGOUR:** Okay. Is there any more discussion on this  
2 motion? Does the Coral AP or the Coral SSC want to be part of  
3 this motion, or is this a Shrimp AP motion specifically? Coral  
4 SSC, is this motion okay with you, or do you want this to be  
5 from the Shrimp AP?  
6  
7 **MR. SAMMARCO:** A rewording.  
8  
9 **CHAIRMAN KILGOUR:** A rewording?  
10  
11 **MR. SAMMARCO:** Yes, and I think it should say to request that  
12 staff include all relevant information regarding shrimp effort  
13 data for the -- Including all points in the GMFMC -- In other  
14 words, it doesn't say point data, and that's what we've been  
15 talking about, is point data.  
16  
17 **CHAIRMAN KILGOUR:** I want to -- Should it say all shrimp effort  
18 point data for the Florida Keys National Marine Sanctuary and  
19 not just that in the GMFMC jurisdiction?  
20  
21 **MR. SAMMARCO:** Yes.  
22  
23 **CHAIRMAN KILGOUR:** So shrimp effort point data. Is that better?  
24  
25 **MR. SAMMARCO:** I think the phrase has to make in there, or it  
26 doesn't make any sense.  
27  
28 **CHAIRMAN KILGOUR:** Okay. So it will say "not just data in the  
29 GMFMC jurisdiction", because they want it on either side of the  
30 sanctuary. Okay. All right. Any more discussion on the  
31 motion? Is this okay? Okay. All right. Does the Coral AP  
32 want to be -- Is this a Shrimp AP motion, or is this a group  
33 motion? Is there any opposition to being part of this motion,  
34 Coral AP or Coral SSC? All right. **Any opposition to the**  
35 **motion? The motion passes.**  
36  
37 **MR. DELANEY:** Morgan, can I ask a question about these shrimp  
38 effort slides?  
39  
40 **CHAIRMAN KILGOUR:** Absolutely.  
41  
42 **MR. DELANEY:** If it's possible, could we go to the slide that  
43 shows Preferred Alternative 3, when you get a chance?  
44  
45 **DR. MENDEZ-FERRER:** Glenn, do you need me to zoom-out from this?  
46  
47 **MR. DELANEY:** Actually, right there is fine, and my question  
48 relates -- I was trying my best, and I think I can relate to I

1 think it was Morgan's point, or someone made the point, that  
2 it's difficult to compare these proposed alternatives to the  
3 status quo, but, in doing my best, comparing Alternative 3 to  
4 Alternative 1, one of the more significant changes, perhaps the  
5 most significant change, is the addition of that sort of blue  
6 box up in the northwest corner.

7  
8 That blue line is new, and my first question about that is if  
9 you could just clarify what activities are allowed and which are  
10 prohibited within that new blue box, if that was adopted as the  
11 preferred -- If that becomes the new regulation.

12  
13 **MS. DIEVENEY:** My colleague, Steve, is going to take this.

14  
15 **MR. WERNDLI:** I am going to summarize straight from our  
16 regulations that would apply in that area, and that would be our  
17 general sanctuary-wide regulations, and they can be found on our  
18 website. There is a link on the left side that says  
19 "regulations", and that will take you to a page with another  
20 link to the actual CFR language, so you can read the exact  
21 language that's in the regulations, but the general regulations  
22 that would apply in that area would prohibit mineral and  
23 hydrocarbon exploration, removal of or injury to coral and live  
24 rock, alteration of or construction on the seabed, discharge or  
25 deposit of materials or other matter.

26  
27 **MR. DELANEY:** I guess what I'm getting at is what about shrimp  
28 fishing?

29  
30 **MR. WERNDLI:** You would be allowed to shrimp fish in that area.  
31 There would be no prohibitions on fishing in that area.

32  
33 **MR. DELANEY:** So then the second question I have is, since,  
34 obviously, there's been a significant amount of shrimp effort,  
35 even with the data that you have shown here, and there is a fair  
36 amount of shrimp effort in that blue box, and, obviously, that's  
37 not coral habitat, because I can assure you that our guys don't  
38 want to trawl over coral habitat, and so what habitat is it?  
39 What is it that would cause you to expand the sanctuary boundary  
40 to an area that's obviously not coral habitat? What is the  
41 significance of that area?

42  
43 **MR. WERNDLI:** In that area specifically, the expansion of the  
44 boundary was to make it line up with the western boundary of the  
45 Tortugas South Ecological Reserve and so that we can move away  
46 from the many-sided polygons, if you will, of the status quo,  
47 the existing boundary, and to make that basically an  
48 administratively easier enforceable boundary line that would be

1 consistent with the western boundary edge of the Tortugas  
2 Ecological Reserve South.

3  
4 **MS. DIEVENEY:** Just to add on to that, it was referenced earlier  
5 that John Reed and his team, who has done a lot of work out in  
6 Pulley Ridge, part of the project with the Pulley Ridge was  
7 looking at connectivity with the Florida Keys, looking at  
8 genetic connectivity between certain fish species, coral  
9 species, and the like, and they did that research and did some  
10 work in the Tortugas Ecological Reserve North and South and  
11 outside, and so there is some data of some important benthic  
12 habitats in that area, but our proposal is to include it as  
13 sanctuary-wide regulations only.

14  
15 **MR. DELANEY:** Okay, and so it does have regulatory implications,  
16 such as making the box less of a polygon, but, with respect to  
17 shrimp fishing, you're saying it would not affect that current  
18 amount of shrimp fishing effort occurring in that area in any  
19 way?

20  
21 **MR. WERNDLI:** That is correct.

22  
23 **MR. DELANEY:** Are there any other expansions of those either  
24 green or blue boxes that I may not have picked up on between  
25 Alternative 3 as compared to status quo, Alternative 1? To me,  
26 that was the most significant, and it also looked like the green  
27 box in the southwest corner, if you will, has sort of moved more  
28 to the west, and is that correct?

29  
30 **MR. WERNDLI:** Yes, sir. That box that is in the lower-left-hand  
31 corner that's green, the Tortugas Ecological Reserve South would  
32 be -- The existing zone would be expanded one mile to the west.

33  
34 **MR. DELANEY:** Okay, and that looks like it would, as a result of  
35 that, include at least some shrimp effort in that very lower-  
36 left corner.

37  
38 **MR. WERNDLI:** Yes, sir, and the only other thing that I just  
39 thought about that would potentially affect not just the shrimp  
40 fishery, but any other vessel operations in the area of the blue  
41 box that we were talking about in that sort of northwestern  
42 corner would be the general sanctuary regulation prohibiting  
43 discharge would apply in that area, and so you would not be able  
44 to discharge -- If you are currently, you would not be able to  
45 discharge any kind of MSD device or any other fluids out of your  
46 vessel into the water in that area.

47  
48 **MR. DELANEY:** Okay, and then just one more point of

1 clarification. Within that blue box up above, shrimp fishing  
2 could continue, but, in the green, slightly-expanded box below  
3 it, to the lower left, that would be a no-fishing area?  
4

5 **MR. WERNDLI:** Yes, sir.  
6

7 **MR. DELANEY:** Thank you.  
8

9 **CHAIRMAN KILGOUR:** Just one more point of clarification for my  
10 own mind. Didn't the southern boundary of the Florida Keys get  
11 pushed down slightly, to line up with some of those -- What are  
12 they called, the areas to be avoided, or is that not the case?  
13

14 **MS. DIEVENNEY:** That is the case, and so you can't really see it  
15 on that map, but it's the area to be avoided that is to the  
16 south and east of the existing sanctuary, and, in that area, it  
17 would be proposed sanctuary-wide regulations, and so the same  
18 that we're talking about with the northern portion of the  
19 Tortugas region, sanctuary-wide regulations.  
20

21 **MR. DELANEY:** Just to be clear, would that include fishing or no  
22 fishing?  
23

24 **MR. WERNDLI:** It would allow fishing.  
25

26 **MR. DELANEY:** Thank you.  
27

28 **MS. BOSARGE:** Okay, and so I'm looking at a map, and now this is  
29 something I printed online, but it's a map of NOAA's Florida  
30 Keys National Marine Sanctuary. That box in what's called the  
31 northeast, that green box, it has that listed as Florida Keys  
32 National Marine Sanctuary Ecological Reserve.  
33

34 In your presentation, the ecological reserves/conservation areas  
35 are the most protective zone type, and it says the regulations  
36 are transit only, and am I confused? I mean, that would tell me  
37 that I can't shrimp there. All I can do is transit through  
38 there.  
39

40 **MR. WERNDLI:** That is correct. In the ecological reserves, they  
41 are no-take, transit-only zones.  
42

43 **MS. BOSARGE:** But that is an ecological reserve, you just said,  
44 and you just told us that we could shrimp there. I am confused.  
45

46 **MR. WERNDLI:** The area to the west, where he was asking the  
47 question, if you will scroll back to the Alternative 3 map,  
48 please, Natasha.

1  
2 **DR. MENDEZ-FERRER:** Leann, we're looking at Map 1 right now,  
3 right?  
4  
5 **MS. BOSARGE:** Yes.  
6  
7 **DR. MENDEZ-FERRER:** This green polygon over here is the current  
8 ecological reserve.  
9  
10 **MS. BOSARGE:** We can't shrimp there.  
11  
12 **DR. MENDEZ-FERRER:** You can't shrimp there, and, as you can see,  
13 there aren't that many points in that area. Where you can  
14 shrimp is in this area over here, and so I'm going to scroll to  
15 Map 3, which is the preferred alternative, and I am keeping my  
16 mouse in the same spot.  
17  
18 Over here is a dark blue, and so this is the area right here,  
19 and so this right here would now -- They are proposing that this  
20 green polygon over here would be called a conservation area, and  
21 it's currently called an ecological reserve, and so the Keys  
22 expansion, boundary expansion, would be to this blue polygon,  
23 and it's a little difficult to see, but, right here, what  
24 applies is the general sanctuary regulations, which he was  
25 talking about the no discharge, but yes for shrimping.  
26  
27 **MS. DIEVENEY:** The existing Tortugas North Ecological Reserve  
28 does not change in its size or area throughout all of the  
29 alternatives. What you're seeing there, expanding to the west,  
30 is the overall sanctuary boundary, where general sanctuary-wide  
31 regulations would apply, and so no change to the Tortugas  
32 Ecological Reserve North, other than the name.  
33  
34 **MR. LASSEIGNE:** You've got a lot of boxes up there. Could you  
35 use the cursor to definitely show where shrimping activity is  
36 prohibited? Is it inside the blue or the black or the red or  
37 the green or the purple or whatever?  
38  
39 **DR. MENDEZ-FERRER:** Let me try a different format. I am going  
40 to open ArcMap and see if that can help us kind of turn layers  
41 on and off and boxes on and off. Would that be okay?  
42  
43 **CHAIRMAN KILGOUR:** In the meantime, Scott, did you have a  
44 question?  
45  
46 **MR. HICKMAN:** More of a statement, but just to clarify -- Once  
47 again, I don't know a lot about pink shrimping, but, in the  
48 western Gulf, our shrimp boats, right outside of our boundary

1 and everywhere else in the western Gulf, the majority of them  
2 shrimp at night, and they sleep during the day. When they  
3 sleep, they put their anchors out.

4  
5 The areas that they have traditionally shrimped, I'm sure that  
6 they're anchoring in those areas during the day, and probably  
7 like they do in the western Gulf, and then they shrimp at night.  
8 If it's inside the sanctuary boundary, no anchoring, and you  
9 can't do that, and so you're going to have to steam back out and  
10 anchor somewhere else, or drift. I don't know if anybody has  
11 thought about that.

12  
13 **MS. DIEVENNEY:** To clarify, there are only certain areas within  
14 the sanctuary, now or proposed, that would be no anchoring.  
15 It's not the entire sanctuary, but some areas are proposed as no  
16 anchoring, but not the entire sanctuary.

17  
18 **MS. BUI:** I guess my question is what type of education are you  
19 all going to provide to fishermen, because, looking at this,  
20 we've gone back and forth with it, even though we've looked at  
21 it for the last hour or two hours, and we're still not clear  
22 about it, and so I'm not sure how fishermen will interpret it,  
23 once it comes down to them.

24  
25 **MS. DIEVENNEY:** Two things with that. As this restoration  
26 blueprint is open for public comment, we are working really hard  
27 to meet with various groups throughout the Florida Keys, and we  
28 will have informational sessions, public comment, in Miami and  
29 Fort Myers, but, as requests come in to go meet with particular  
30 groups, organizations, community groups, et cetera, we are going  
31 and making targeted presentations to help them understand and to  
32 be able to provide public comment.

33  
34 As part of whatever eventually were to go forward and to be  
35 implemented, education is one of our -- Education and outreach  
36 stewardship is one of our main goals in the management plan, and  
37 it's one of our main activities now, and so, going forward, we  
38 would identify who are the audiences, new and different  
39 audiences, that we need to reach out to. In the management  
40 plan, it's also identified to look at diverse audiences,  
41 translating materials into other languages, and so that's a plan  
42 going forward, if that helps in any way.

43  
44 **MS. BUI:** I am not too familiar with the Florida Keys, as far as  
45 like season-wise, but I know, like in my area, the time that you  
46 guys are proposing for public comments are usually during shrimp  
47 season, and so I feel like you're going to miss a lot of the  
48 fishermen that are actually out fishing, but I'm not too sure

1 how you all's fisheries are, and so if you can let me know that.

2  
3 **MS. DIEVENEY:** Yes, and that has been a concern throughout this  
4 process of when various meetings and various milestones and  
5 points in this review process, the development of  
6 recommendations, and now public comment.

7  
8 In the Florida Keys, there seems to always be some fishing  
9 constituency happening and going on, and so that's, in part, why  
10 we have identified a five-month public comment period, to try  
11 and give plenty of time for both local community members, and we  
12 also have a high number of snowbirds who come down, starting in  
13 the fall, and so identifying those individuals.

14  
15 This is a National Marine Sanctuary, and so opportunity for  
16 anyone in the United States or internationally to provide  
17 comment, but we did -- We have received feedback on that, and  
18 we're trying to expand our public comment as much as possible to  
19 meet all the different needs.

20  
21 **MR. PERRET:** So you're bringing more pressure on your sanctuary,  
22 but I guess that's inevitable. Morgan, didn't you participate  
23 in their meetings, and you would attend and advise the council?  
24 I am just wondering if the council has a representative on your  
25 advisory panel that attends the meetings?

26  
27 **MS. DIEVENEY:** The council does not explicitly have a  
28 representative on our management council. As I noted, we have  
29 twenty voting members, and they each have an alternate, and then  
30 we have ten agency representatives, and a few of those are from  
31 National Marine Fisheries Service. The Director at the Office  
32 of Law Enforcement and General Counsel are non-voting members,  
33 but, no, we do not explicitly have a Gulf of Mexico Fishery  
34 Management Council member.

35  
36 **MR. PERRET:** We have one council member here, and we have staff,  
37 and I just think it would be a good idea if staff would attend  
38 as many of your meetings as possible, to keep the council  
39 informed of the activities, and so I will just throw that out  
40 for review and consideration.

41  
42 **MS. DIEVENEY:** To facilitate that, we do, when we started  
43 through this process, livestream our meetings, and then the  
44 recording is posted after, because one of the pieces of feedback  
45 we got is we hold our meetings from about 9:00 to 5:00, and a  
46 lot of people are working and out on the water, and they can't  
47 participate, and so, in order to facilitate that participation  
48 and information exchange as much as possible, one of our

1 advisory council members helps us to livestream, and then we  
2 have our own YouTube channel that the meetings are posted after.  
3  
4 **MR. BOSARGE:** In looking at the -- Now we can see the map, the  
5 chart, and that area that's in that northwest corner, is that --  
6 In other words, it's outlined in green, and so is this a  
7 conservation area, where there will be no trawling?  
8  
9 **MR. WERNDLI:** That currently is a -- This is not allowed.  
10  
11 **MR. BOSARGE:** It's nothing new?  
12  
13 **MR. WERNDLI:** It's been there since 2001.  
14  
15 **MR. BOSARGE:** Okay, and that was the expansion you did the last  
16 time?  
17  
18 **MR. WERNDLI:** Yes, sir.  
19  
20 **MR. BOSARGE:** Okay. I recall now, and the second question is,  
21 with that one-mile expansion to the west, mainly for the reason  
22 of straightening the lines out, I mean, would there be a  
23 guarantee that, somewhere in the future -- In other words,  
24 because you have incorporated it into the sanctuary, and  
25 because, as you can see, there is a lot of trawl effort there,  
26 who is to say that, a year from now, we don't all of a sudden  
27 have regulations of, well, it's part of the sanctuary, and so,  
28 to streamline things, we're just going to say no trawling here?  
29  
30 **MR. WERNDLI:** Just to clarify, the one-mile expansion was only  
31 in the Tortugas Ecological Reserve South.  
32  
33 **MR. BOSARGE:** Correct, but, if you look at the green, it's going  
34 to be bordering it on both sides.  
35  
36 **MR. WERNDLI:** Right, and then the boundary has been extended,  
37 and there is -- We considered expanding the area of Tortugas  
38 North to the west, based on some of the data that was provided  
39 by John Reed and their groups, and we decided that we did not  
40 need to shift the boundary of the area that is closed to  
41 fishing. Can we 100 percent say that, at some point down the  
42 road, there won't be additional places designated as no-fishing  
43 areas? No.  
44  
45 **MR. BOSARGE:** But you see my point.  
46  
47 **MR. WERNDLI:** Yes, sir, I do.  
48



1 **MR. BOSARGE:** Okay.  
2  
3 **MS. DIEVENEY:** Also, just one more. The one-mile western  
4 expansion of the Tortugas Ecological Reserve South, the proposal  
5 for that is to protect additional habitat area and area known to  
6 support fish spawning aggregations in the Riley's Hump area.  
7  
8 **MR. BOSARGE:** I have to echo Corky's sentiments, in that you see  
9 the trawling that goes on in that area, and you don't have much  
10 of anything there, other than some nice, smooth shrimp bottom.  
11  
12 **MR. DELANEY:** That's what I was asking about earlier. Can you  
13 put the blue box on this slide that you're showing right now, so  
14 that people understand what the expansion is, up on the  
15 northwest side?  
16  
17 **DR. MENDEZ-FERRER:** Are you referring to Alternative 3?  
18  
19 **MR. DELANEY:** Correct.  
20  
21 **DR. MENDEZ-FERRER:** Give me one second. Bear with me.  
22  
23 **MR. RUZICKA:** One of the luxuries that we have for the Florida  
24 Keys that we don't necessarily have so much for the Gulf of  
25 Mexico is a lot of this area has been mapped, and I was  
26 wondering if you guys actually applied some of the bottom  
27 mapping -- If it has run all the way to the west here of the Dry  
28 Tortugas, so we can actually get a pretty good idea of what hard  
29 bottom is there and what soft bottoms are there. Most of it --  
30 I know that there has been some additional mapping efforts since  
31 we've last met and discussed this.  
32  
33 The main gap that we have for bottom mapping in the Keys is in  
34 the Marquesas area, but I know that there has been some  
35 additional efforts around there by John Reed and others, and so  
36 I was just wondering if you could comment on that.  
37  
38 **MS. DIEVENEY:** The unified coral reef map was used throughout  
39 this process by the advisory council, its community working  
40 groups, and the sanctuary. You are correct in that the data is  
41 limited in the Marquesas region and large portions of the  
42 Tortugas region. In the interactive map that is online, one of  
43 the layers, when you use -- I can demonstrate this later if you  
44 want, but one of the layers that you can select to turn on, and  
45 it's at the very bottom of the list, but is the unified coral  
46 reef map, so that you can overlay these proposals with what, at  
47 present, we have known data for the benthic habitat map. Does  
48 that answer your question, Rob?

1  
2 **MR. RUZICKA:** Yes, to some extent. I think it would be very  
3 valuable, in this exercise, to be able to see where some of  
4 those points lie in relation to the boundaries being proposed  
5 and where the current shrimping effort has either traditionally  
6 taken place or more recently has taken place.

7  
8 **MS. DIEVENEY:** Yes.

9  
10 **MR. DELANEY:** Morgan, can I get back to the blue box?

11  
12 **CHAIRMAN KILGOUR:** Sure. I think Natasha is working on that  
13 right now.

14  
15 **MR. DELANEY:** I see it on my screen.

16  
17 **DR. MENDEZ-FERRER:** This new blue box is the Alternative 3  
18 proposal for the sanctuary expansion. Let me know if you need  
19 me to zoom in. This is the blue box, this area right here.

20  
21 **MR. DELANEY:** Right. That's the blue box, and I think that's  
22 what Steve Bosarge was just referring to, is we've got a lot of  
23 shrimp effort in there, and, as I said before, by definition,  
24 there's not going to be coral habitat, and I was asking before  
25 what is the significance, ecological significance, of that area,  
26 and the answer seemed to be more that it wasn't so much  
27 ecological significance and it was smoothing out the borders of  
28 the polygon.

29  
30 I tend to share Steve's concern that, while shrimp effort would  
31 not be restricted in that blue box, as per this rulemaking  
32 expansion, now we're inside a box -- You know, we've taken a  
33 whole bunch of shrimp effort in a productive shrimp area and put  
34 it inside the boundaries of the sanctuary, and it only takes  
35 changing that blue line to a green line to prohibit us from  
36 accessing some productive bottom, and so, if the majority of the  
37 reason for expanding that area inside the blue box is just to  
38 make the lines neater and the polygon less contorted, that may  
39 not be enough for the shrimp industry to feel comfortable with  
40 that, because we're potentially moving in the direction of  
41 taking fishing away from us in that area. I just wanted to  
42 express that concern, and I don't know if others in the shrimp  
43 industry share that, but that was the direction that I was  
44 trying to head with that.

45  
46 **MS. DIEVENEY:** Also, in response to Rob's question, we can  
47 provide the unified habitat, coral reef habitat, map, which most  
48 of the region mapped in the Tortugas region is within the

1 Tortugas National Park. However, as I referenced, John Reed and  
2 their team has some research and data done to the west of the  
3 park that we can also provide.

4  
5 **MR. DELANEY:** Hopefully my point is clear, that we're finding  
6 ourselves inside the box, and, while fishing is allowed now, it  
7 sort of sets things up for the future, and, if there isn't  
8 significant ecological significance there, and it's only a  
9 matter of drawing prettier lines, then I don't think we're going  
10 to be comfortable with that.

11  
12 **MR. SAMMARCO:** I think this would become clearer, this issue  
13 would get cleared up, once those dot points are made available  
14 to you and you can see where indeed the shrimp trawling has been  
15 going on and where the fishing has been going on. It might be -  
16 - The area might be deficit of shrimping entirely, or it might  
17 be a really heavy area, and you just don't know until you have  
18 those data. I think that will really help you out. It will  
19 help everybody out.

20  
21 **MR. DELANEY:** The heat map shows a fair amount of effort there.

22  
23 **CHAIRMAN KILGOUR:** Right, and so I would say that this does show  
24 effort, but perhaps the Shrimp AP would like to make a  
25 recommendation to modify this, because we're talking about one  
26 vertex, right? Moving it out to the side like that makes it one  
27 nice long -- But you're talking about adding one additional  
28 point, and so, if that's something that the Shrimp AP would like  
29 to recommend, then I would suggest that a motion be made.  
30 Sandra, go for it.

31  
32 **DR. BROOKE:** To that question then, I will ask why was that area  
33 added? What is the ecological rationale for adding that  
34 northwestern box?

35  
36 **MS. DIEVENEY:** As I noted, in part, it's to protect additional  
37 habitat that was identified through the research that John Reed  
38 and his team did and to make an administrative connection of the  
39 Ecological Reserve South with the entire sanctuary, to make one  
40 contiguous sanctuary.

41  
42 **DR. BROOKE:** The data that John got, it wasn't clear that that  
43 was the rationale, and so okay. Thank you.

44  
45 **MS. DIEVENEY:** Yes.

46  
47 **MR. BOSARGE:** I guess, Morgan, the shrimp industry -- That's a  
48 good piece of bottom. **It's a piece of rock shrimp bottom that**

1 we like to work, and there's not much of that bottom around, and  
2 so I guess I want to make a motion that the Shrimp AP opposes  
3 expanding -- What did you call it? What did you name that?  
4  
5 **MS. DIEVENEY:** That area is only the -- It doesn't have a  
6 distinct name, but it is the sanctuary-wide proposed expansion  
7 in the Tortugas region.  
8  
9 **MR. BOSARGE:** The one-mile westward expansion?  
10  
11 **MS. DIEVENEY:** The one-mile westward expansion is specific to  
12 the Tortugas Ecological Reserve South.  
13  
14 **MR. DELANEY:** Steve, I think you want to focus on the blue box,  
15 and that's an expansion of the sanctuary boundaries.  
16  
17 **MR. BOSARGE:** Correct.  
18  
19 **MR. WERNDLI:** If you wanted to clarify it, Steve, you would say  
20 the boundary expansion west of the Tortugas Ecological Reserve  
21 North.  
22  
23 **MR. BOSARGE:** There you go.  
24  
25 **MS. DIEVENEY:** Thank you.  
26  
27 **CHAIRMAN KILGOUR:** I think he wants to say to modify the Florida  
28 Keys National Marine Sanctuary boundary in the area above --  
29 Where did you say?  
30  
31 **MR. WERNDLI:** To the west of Tortugas Ecological Reserve North.  
32  
33 **CHAIRMAN KILGOUR:** To align with the current Tortugas South --  
34 Well, just to basically cut off that box, right, that rectangle?  
35  
36 **MR. BOSARGE:** That's right.  
37  
38 **MR. PERRET:** It's proposed right now, and it's not in, right?  
39  
40 **AP MEMBER:** I will second it.  
41  
42 **MR. BOSARGE:** The ecological boundary west or south, and is that  
43 what you said? Tortugas South? Okay. All right.  
44  
45 **MR. HICKMAN:** In the area you're talking about the study, do  
46 they have ROV data on it that there's a bunch of habitat in  
47 there? You said that it was partially from that, and there was  
48 some habitat in there too, and you said something about

1 administrative, that it's easier to draw straight lines than  
2 polygons. If there was gear in there, and they do have ROV or  
3 multibeam-type data on it, when they went into that area, did  
4 they find gear in some of that bottom? Were there shrimp nets  
5 or anything like that?  
6

7 **MS. DIEVENEY:** I would have to look at the reports and the data,  
8 and so, no, I don't have that at my fingertips.  
9

10 **MR. HICKMAN:** Okay.  
11

12 **MR. PERRET:** Mr. Bosarge, I don't like the wording of this  
13 motion. Your motion started out being against the western  
14 expansion. The way this is written is the AP is supportive of  
15 whatever is being proposed with a modification, and I think the  
16 motion should read something to the effect that the AP is  
17 against that one-mile western expansion of the Tortugas whatever  
18 it's called. That is my opinion.  
19

20 **MR. DELANEY:** Just to be clear, Corky, it's not the one-mile  
21 that we're talking about. We're talking about the blue box,  
22 which is much more than one mile. I agree with you that it's to  
23 oppose the proposed expansion of the boundary, the sanctuary  
24 boundary, to the west in that whole blue box, is what we're  
25 discussing.  
26

27 **MR. PERRET:** Correct, but I thought it was a mile.  
28

29 **MR. DELANEY:** The description of that is --  
30

31 **MR. PERRET:** Okay. Thank you.  
32

33 **MR. BOSARGE:** We're getting there, Corky, but you're right that  
34 it was to oppose the expansion, proposed expansion.  
35

36 **MR. DELANEY:** Westward expansion would be a good way to describe  
37 it.  
38

39 **MR. WERNDLI:** You want no westward expansion beyond the western  
40 side of the Tortugas Ecological Reserve.  
41

42 **MR. PERRET:** A figure showing that would be most helpful to the  
43 council when they evaluate our motion. It would be one simple  
44 figure showing what we're against.  
45

46 **CHAIRMAN KILGOUR:** I think, Corky, for the record, would like  
47 there to be a figure to highlight this, but he doesn't  
48 necessarily want to put that in a motion.

1  
2 **MR. DELANEY:** That's better.  
3  
4 **CHAIRMAN KILGOUR:** You would have to ask the motion maker, but,  
5 Steve, would it be okay to just say to oppose the proposed  
6 western expansion of the Florida Keys National Marine Sanctuary?  
7  
8 **MR. PERRET:** He agrees.  
9  
10 **CHAIRMAN KILGOUR:** All right, and this is a Shrimp AP motion  
11 only. Sandra.  
12  
13 **DR. BROOKE:** If you say that, it includes the one-mile expansion  
14 of the southern TER, which is -- We want to keep that.  
15  
16 **CHAIRMAN KILGOUR:** The Coral SSC wants to keep that. Does the  
17 Shrimp AP want to keep that?  
18  
19 **MR. BOSARGE:** Yes, ma'am. There is no effort there. There's a  
20 very little on the very bottom corner, and we're all right with  
21 that.  
22  
23 **CHAIRMAN KILGOUR:** Do you need to add the northwestern expansion  
24 for that to be clear, and perhaps Natasha can provide a figure  
25 to go with this.  
26  
27 **DR. BROOKE:** Then delete everything after "boundary", maybe.  
28  
29 **MR. BOSARGE:** This gets really complicated, Morgan, when you're  
30 not sure on what the names of all these places are.  
31  
32 **CHAIRMAN KILGOUR:** I am with you, but I think Natasha is very  
33 clear on what you're talking about, and so just that rectangle  
34 up in the northwestern portion. It's been seconded, and I have  
35 heard from Coral AP members that we don't have enough  
36 information on the benthic layer to weigh-in on this, and does  
37 the Coral SSC want to weigh-in on this, or is this a Shrimp AP  
38 only motion?  
39  
40 **MR. SCHMAHL:** I would be hesitant, from my perspective on the  
41 SSC, to include this as a motion. I'm not sure that -- I have  
42 heard a couple of things. I heard one is that this is just flat  
43 area and just good shrimping ground, but I also heard that John  
44 Reed has identified some potential coral areas within that zone,  
45 and so I am not comfortable opposing that area without further  
46 information about those specific areas.  
47  
48 **CHAIRMAN KILGOUR:** Sandra.

1  
2 **DR. BROOKE:** I would agree with that, and something pricked up  
3 my ears, and you said rock shrimp and not pink shrimp, and rock  
4 shrimp are usually found near hard substrate.  
5  
6 **MR. BOSARGE:** Rock shrimp and pink shrimp. Large pinks and  
7 smaller rocks.  
8  
9 **DR. BROOKE:** But, again, the rock shrimp presence indicates hard  
10 substrate.  
11  
12 **MR. BOSARGE:** Correct.  
13  
14 **CHAIRMAN KILGOUR:** I am hearing from Coral AP members and Coral  
15 SSC members that we're all fine with the current boundary and  
16 that this is a Shrimp AP motion, because we don't have the  
17 information to weigh-in on this. If we had more benthic  
18 information, perhaps we would join in. Anyway, this is just a  
19 Shrimp AP motion. Is there any more discussion on this motion?  
20 Scott.  
21  
22 **MR. HICKMAN:** I just think, if you get back into it, it's great,  
23 and I'm all for protecting corals, and more habitat equals more  
24 fish, but, anytime you make a decision based because you've got  
25 a few areas of habitat, which do need to be protected, but our  
26 historic fishermen, whether they be shrimpers or longline or  
27 bandit fishermen, they know where these areas are.  
28  
29 A guy that's been fishing an area for twenty, thirty, forty  
30 years, and the people that come up behind him are taught where  
31 these areas are and not to go to them to hang up their shrimp  
32 nets. Nobody wants to lose \$10,000 worth of gear off their boat  
33 because they hung a bunch of bottom, but they know how to work  
34 the areas around the bottom to catch these shrimp that we all  
35 want to eat in the restaurants.  
36  
37 Take that into consideration on any of this kind of stuff,  
38 because we want to protect habitat, but let's not put people out  
39 of business and give America's seafood-consuming public access  
40 to those products, and so you've got to be smart about it.  
41  
42 That's why I made the question about do you have ROV footage of  
43 this area, and I would like to know if there's any shrimp nets  
44 on it, because chances are there is no shrimp nets on it. The  
45 guys that shrimp in there know what they're doing, and they're  
46 not going to hang up their nets, and, if an area is pristine,  
47 there is no reason to go in and put people out of business.  
48 That's my thoughts.

1  
2 **MR. SAMMARCO:** Just to reiterate, I think that it will be easier  
3 to deal with this issue once we all have the best data that we  
4 can get, which area the point data for shrimping in that area.  
5 It will give you the historical stuff, but recent historical  
6 stuff, 2017 or so.

7  
8 **DR. BROOKE:** Just to speak to Scott's comment, I agree with you  
9 that the guys usually know where things are, but you talk to any  
10 fisherman and they will tell you about the hang points, and so  
11 it's not a perfect system, even with our sonar these days, and  
12 the Oculina Banks is a prime example of how a system has been  
13 damaged, and so we're just applying the precautionary principle,  
14 I think.

15  
16 **AP MEMBER:** I am going to stir some stuff here, I guess. Again,  
17 I'm not sure why you're expanding the entire western boundary.  
18 Why did you expand the green box a mile and then draw the blue  
19 box to match it? I guess my point is why did you expand it for  
20 a mile? Wouldn't it be easier, on a motion, to take the entire  
21 western boundary and leave it like it is, but not expanding that  
22 extra mile? That's just more bottom being lost, unless there is  
23 coral or something in there, which I'm not sure of, and I  
24 haven't heard.

25  
26 **MS. DIEVENEY:** Again, the proposal to expand the existing  
27 Tortugas Ecological Reserve South by one mile west is to protect  
28 additional habitat type and area known to support fish spawning  
29 aggregation activity that currently use Riley's Hump, which is  
30 protected in the ecological reserve, and so it's an expansion to  
31 provide additional protections for habitat and fish spawning  
32 activity.

33  
34 **AP MEMBER:** Riley's Hump is right there around that place?

35  
36 **MS. DIEVENEY:** Yes, and so to the west by one mile to protect  
37 additional area where it's been shown that fish spawning  
38 activity takes place.

39  
40 **AP MEMBER:** Okay. Thank you.

41  
42 **AP MEMBER:** In the end, it all goes back to closing the areas to  
43 shrimping that don't need to be closed if they aren't causing a  
44 problem, and they're not in the coral reef area, and, like the  
45 gentleman said, it's all about economics, and it's our  
46 livelihood, and you all can continue to cut, cut, cut, and,  
47 before you know it, you're not going to have a shrimping  
48 industry in the United States. You're going to have foreign



1 shrimp coming across, and so you don't know how it's treated or  
2 handled.

3  
4 **MS. BOSARGE:** Can you pull up that alternative with the map  
5 again? Is there some shrimp effort in that one mile to the  
6 west? You know how I feel about minimal in the heat map at this  
7 point.

8  
9 **MR. DELANEY:** There's a little bit in there, Leann, in the  
10 lower-left corridor.

11  
12 **MS. BOSARGE:** So at the lower end and at the upper end of that  
13 box, that one-mile expansion to the west.

14  
15 **MR. DELANEY:** Look at the very lower-left corner, the green box.  
16 They moved it to the left one mile, and there's a little bit of  
17 shrimp effort right there.

18  
19 **MR. BOSARGE:** That's royal red effort.

20  
21 **MS. BOSARGE:** Well, if it's royal red effort, it's going to be a  
22 small number, but that doesn't mean that it's not heavily  
23 shrimped, and it's a fishery that has very few participants, and  
24 so it's going to be a small number, but they have very few  
25 grounds. They don't have the kind of grounds that we have. I  
26 will also mention that we don't have a royal red shrimper on the  
27 Shrimp AP, and so they don't have a representative here to speak  
28 for themselves.

29  
30 **CHAIRMAN KILGOUR:** Leann, do you think that this would be one of  
31 those areas like we had in the Pinnacles, on Viosca Knoll, where  
32 they're actually pulling up their nets, but they're still  
33 transiting? There might be language there that you can also  
34 adopt, but should we make a vote on that motion? Is everyone  
35 content with that motion? Do we need to discuss it any further?  
36 Are you comfortable with voting on the motion that was on the  
37 board? Okay.

38  
39 **Is there any opposition? The motion for the Shrimp AP is to**  
40 **oppose the proposed northwestern expansion of the Florida Keys**  
41 **National Marine Sanctuary boundary. Is there any opposition to**  
42 **the motion? The motion passes with no opposition.** Do you one  
43 to go back to that one particular box, Leann, or -- Okay.  
44 Harris.

45  
46 **MR. LASSEIGNE:** It was, I guess, about twenty minutes ago that I  
47 asked to put the cursor inside the black, blue, purple boxes and  
48 identify if they're not fishing areas for shrimpers, but that

1 wasn't done.  
2  
3 **DR. MENDEZ-FERRER:** Does this map work better for you, or do you  
4 want me to go back to the PDF? Just guide me.  
5  
6 **MR. LASSEIGNE:** That would be fine. Just show me the areas  
7 where you cannot shrimp inside the blue, green, purple.  
8  
9 **DR. MENDEZ-FERRER:** This one right here -- This is the green,  
10 but this is on the preferred alternative. Right here, this is  
11 the green. You can't shrimp there. I am going to zoom in. Can  
12 you see the green over here? This portion, this rectangle right  
13 here, is green. That is the conservation area that's being  
14 proposed in Alternative 3, which currently is an ecological  
15 reserve, and that will be expanded one mile westward.  
16  
17 **MS. BOSARGE:** That isn't the big one-mile rectangle?  
18  
19 **DR. MENDEZ-FERRER:** That is included in the one mile right  
20 there, and so there is no fishing here. It's transit only. The  
21 other conservation area, the other green box, it's this one up  
22 here going east and coming back down, and then this polygon  
23 right here is the Dry Tortugas National Park, if I'm correct,  
24 and so there's no fishing.  
25  
26 This little rectangle right here is what we just discussed in  
27 the motion to oppose that kind of expansion, but, in the  
28 preferred alternative right now, in that area, you can still  
29 shrimp.  
30  
31 **MR. PERRET:** From the green line eastward, what happens there?  
32  
33 **DR. MENDEZ-FERRER:** Right here? This is general sanctuary  
34 regulations, right?  
35  
36 **MS. DIEVENEY:** That currently exists. That is the current  
37 boundary of the National Marine Sanctuary.  
38  
39 **DR. MENDEZ-FERRER:** You are allowed to shrimp, yes.  
40  
41 **MR. SCHMAHL:** I think it's important to point out that that area  
42 -- The blue line is the National Marine Sanctuary boundary, and  
43 it's been the boundary since 1997, and there is a lot of  
44 shrimping activity in there, and there has been.  
45  
46 It's been over twenty years, and there has been no further  
47 restriction on shrimping in that area, and I totally understand  
48 that concern, that you make it a National Marine Sanctuary and

1    sometime in the future then more regulations may come into  
2    effect, but I do want to point out that it's been over twenty  
3    years and there has been no further restriction of shrimping in  
4    that area, and the shrimping is not being proposed to be  
5    restricted in this area that you're talking about opposing  
6    either.

7  
8    **MR. LASSEIGNE:**    Would it be okay to go ahead and look at the  
9    couple of other areas of concern we have? Right to the east of  
10   that -- I am trying to figure out which one -- The no-take box  
11   is the conservation area, the Riley's Hump, and is that what you  
12   said? The boundary expansion down at the bottom, the blue line  
13   at the bottom, where it connects to the bottom of the Riley's  
14   Hump box, there was a triangle in there that the only  
15   restrictions was no anchoring for large vessels.

16  
17   **DR. MENDEZ-FERRER:**  I will turn that layer on. I have it off  
18   right now.

19  
20   **MR. LASSEIGNE:**    I'm pretty sure I know the answer to the  
21   question. You're going to say that it's not --

22  
23   **DR. MENDEZ-FERRER:**  You're talking about this black polygon  
24   right here?

25  
26   **MR. LASSEIGNE:**    No, ma'am. Up there where it looks like the  
27   referee, the stripes, it goes from that point down to where -- I  
28   wish I could work your cursor. There is a no-anchor spot there,  
29   or it was before, and you have proposed taking that into the  
30   sanctuary boundary.

31  
32   **MR. WERNDLI:**    Where her cursor is right now on that red polygon  
33   is the Tortugas Bank no-anchor zone, which prohibits the  
34   anchoring of vessels over fifty meters.

35  
36   **MR. LASSEIGNE:**    This area right in here.

37  
38   **MR. WERNDLI:**    And the hashed area, which is, I believe, what  
39   you're talking about just below the red box.

40  
41   **DR. MENDEZ-FERRER:**  The area that he is referring to is this  
42   area right here with the current National Marine Sanctuary  
43   boundaries. That line goes from -- I believe, if I'm correct,  
44   it's from here, and so he's talking about this triangle that  
45   kind of connects the no-anchor west of the Tortugas down to the  
46   South Ecological Reserve.

47  
48   **MR. LASSEIGNE:**    Can you back up to your original Alternative 1

1 in your original --

2

3 **DR. MENDEZ-FERRER:** Right here?

4

5 **MR. LASSEIGNE:** You see how the boundary, the blue line, at the  
6 very bottom, the south end, see how it turns and it goes up to  
7 the northwest? In the Alternative 3, it doesn't. It comes all  
8 the way over to the Riley's Hump box, and so the boundary is  
9 changing, correct?

10

11 **DR. MENDEZ-FERRER:** Correct.

12

13 **MR. LASSEIGNE:** We have effort in that area, and I believe, if  
14 I'm correct, just by changing the boundary, it won't stop us  
15 from working there, correct?

16

17 **DR. MENDEZ-FERRER:** Correct.

18

19 **MR. LASSEIGNE:** Okay. That was one of my concerns. The other  
20 one would be, as you move on -- Maybe it would be easier if we  
21 show you some of these tracks that we have and then -- She's got  
22 it where we can put it on the screen.

23

24 This is the tracks off of one boat's computer, and so it's just  
25 a very small snapshot of what's going on, but, as you can see,  
26 that was my concern. You see the effort that is within that  
27 triangle that we were talking about, and so that won't be a  
28 problem. Then, as you move on to the east -- My question is,  
29 with you moving your boundary further to the south, is it going  
30 to stop us from working on what we call the south side? You see  
31 the effort, and I think you can see that green line, I believe,  
32 is your boundary as it is now, if I'm not mistaken.

33

34 **MR. WERNDLI:** This blue line is the boundary as it is now. This  
35 green line is the area to be avoided boundary, where the  
36 proposed boundary of the sanctuary is proposed to extend to  
37 that, and that would not -- You would still be able to shrimp  
38 there.

39

40 The area that you're referring to on the south side, on that  
41 map, that shows the shrimp effort along what is the existing  
42 boundary of the sanctuary, the green line on that chart shows  
43 the area to be avoided boundary, which the proposal is to expand  
44 the sanctuary boundary to the south to match the ATBA boundary,  
45 and that would not prohibit you from -- You would still be  
46 allowed to shrimp there.

47

48 **MS. BOSARGE:** I'm glad that you pulled this up. Now imagine

1 you're a shrimper out there on the water, and the green boundary  
2 line on the top is the northern or eastern boundary line of the  
3 sanctuary. At the bottom, instead of putting the actual  
4 sanctuary boundary line in green, for some unapparent reason,  
5 it's in blue, and, well, anybody with any commonsense looking at  
6 this map is going to think the sanctuary boundary is in green,  
7 and I'm sorry, but, when we think about sanctuaries as  
8 shrimpers, we think, wow, no, shrimpers don't go in sanctuaries  
9 and we get big tickets, big fines, and so this gets so confusing  
10 to shrimpers on the water as to where they can go and where they  
11 can't go.

12  
13 When you start expanding sanctuary boundaries and expanding and  
14 expanding, and now we're shrimping inside the sanctuary, and  
15 it's okay in some places, but it's not in other, and that's all  
16 I -- You can ask Heather in the back, and I've had this beef  
17 with her before.

18  
19 Number one, that blue line ought to be green, but I won't get on  
20 that soap box today, and I will try and take that up at another  
21 point, and that's been, I guess, our biggest concern about you  
22 expanding the sanctuary boundaries where our historical shrimp  
23 grounds are, and then we're shrimping more and more inside a  
24 sanctuary, and it just opens us up so much. There's so much  
25 risk there. It's so hard for us to even make it out, and can  
26 you imagine what it's like for law enforcement?

27  
28 The fines are not penny-ante fines for us. The minimum fine for  
29 just a warning, and not a citation, but a warning is \$1,000 to  
30 \$2,000. The maximum fine is \$96,000, and so it is a big deal  
31 when you expand these boundaries and take in our shrimp grounds,  
32 even though you tell us that we can shrimp there. It just makes  
33 everything so confusing.

34  
35 If we're shrimping right there, we're not in the coral. There  
36 is not coral there, and it's the Florida Keys. It's a coral  
37 reef sanctuary, and I just hope that you will take that into  
38 account when you think that expanding these boundaries is just a  
39 trivial thing. It's not. It makes things very confusing to us,  
40 and it puts us at risk for violations.

41  
42 **MR. BOSARGE:** I guess we as a group, as an AP, do we have any  
43 problems with expanding that southern boundary?

44  
45 **AP MEMBER:** May I make a recommendation, which is that the  
46 Florida Keys National Marine Sanctuary make up maps which are  
47 explicit for shrimping and different activities, so that there  
48 is no confusion? I don't know whether your different regions

1 are the same for the different activities or if they're  
2 different. If they are different, you should have different  
3 maps, and that might clarify things a little bit.

4  
5 **MS. DIEVENEY:** For sanctuary-wide regulations, they're the same  
6 throughout the sanctuary, regardless of region. It's the  
7 individual marine-zone-specific regulations where you're going  
8 to have additional regulations on top of sanctuary-wide.

9  
10 Steve just noted, if it might be helpful, and I think it's got  
11 to be a staff member, to pull up the interactive map, and, while  
12 this interactive map is limited on the data that it has, and it  
13 has the unified habitat coral reef map, and so it's not going to  
14 have all the shrimp data, but to just show you this mapping tool  
15 for where you can go and look and zoom in and see the difference  
16 in marine zones and the difference across alternatives and look  
17 at it that way.

18  
19 **DR. MENDEZ-FERRER:** If it would be easier, you can make me a  
20 presenter, or I can go over there to your computer and go to the  
21 browser.

22  
23 **MR. DELANEY:** Can I ask a question, while you're working on  
24 that?

25  
26 **CHAIRMAN KILGOUR:** Go ahead, Glenn.

27  
28 **MR. DELANEY:** Thanks. Well, to Steve's question, which is, if  
29 you compare Alternative 1 to Alternative 3, the very  
30 southwestern border of the sanctuary has -- Instead of heading  
31 to the northwest, it heads to the southwest to meet the corner  
32 of that ecological zone, reserve, and, again, that's an even  
33 larger area that wasn't previously included within the sanctuary  
34 boundaries.

35  
36 We can only see some of the shrimp effort that was there,  
37 because you don't have the South Atlantic jurisdiction covered  
38 there, and so there's a big chunk of water that we don't know  
39 what the effort was, but, really, the question I have is, just  
40 like that northwestern box, blue box, that is proposed to be  
41 added to the sanctuary, this southwestern area -- What was the  
42 ecological significance of that, or is this, yet again, mostly  
43 for the purposes of smoothing out the polygons?

44  
45 **MS. DIEVENEY:** The proposal is primarily to align an area that  
46 we have regulated since 1990 to protect the habitats from large  
47 vessel damage, groundings and the like, aligning that with our  
48 geographic boundary.

1  
2 **MR. DELANEY:** So you're saying that getting at large vessel  
3 traffic was the main reason for that?  
4

5 **MR. WERNDLI:** Yes, and I think you're talking about the area  
6 that we looked at that was in that expanded area between the  
7 existing sanctuary boundary and the Tortugas Ecological Reserve  
8 South.  
9

10 **MR. DELANEY:** Correct. That's a fairly large area.  
11

12 **MR. WERNDLI:** Right, and so, as Beth mentioned, part of that was  
13 expanding the existing sanctuary boundary along the southern and  
14 eastern boundary to expand out to be consistent with the area to  
15 be avoided boundary, which, Miss Leann, that would get to your  
16 point about having two different color lines, and it would just  
17 be one color now on a chart, and so along the southeastern  
18 portion of the sanctuary, and then, in that area, where you're  
19 speaking about the triangle that is east of the Tortugas  
20 Ecological Reserve South, it would be primarily to make the  
21 clean lines for the administrative boundary of the sanctuary.  
22

23 Then it would also offer protection, from the general  
24 regulations, in that large area that would be part of the  
25 sanctuary, and so no discharge would apply, and the other  
26 general regulations would apply.  
27

28 **MS. DIEVENY:** In addition, in the Tortugas region, really  
29 looking at protecting interconnected habitats. The data coming  
30 from the research in Pulley Ridge and the Florida Keys and  
31 looking at how species and the importance of connecting habitats  
32 and providing that protection, and so a little bit of that  
33 larger goal as well.  
34

35 **MR. DELANEY:** It's difficult to assess how much shrimp effort  
36 actually occurs in that area, because we don't have that data.  
37

38 **CHAIRMAN KILGOUR:** Right. I would make a recommendation that,  
39 when this is provided to the council, that there be clearly  
40 fishing, no fishing, and go area-by-area. It's going to make  
41 your presentation a little bit longer, but it will make things a  
42 lot clearer, and I would also recommend that maybe working with  
43 staff to also put that fishing information in the background,  
44 when you go area-by-area.  
45

46 That might alleviate some of the concerns, or at least some of  
47 the questions on where is fishing happening and how is this  
48 going to affect me, and I think it really does highlight, very

1 nicely, that you currently have shrimping effort in the  
2 sanctuary boundary, and so that's really great, but there's  
3 three different types of conservation areas, or three different  
4 types of areas, and you look at the map, and there's seven  
5 different colors, and I know that you're conveying a lot of  
6 information, but, really, people, I think, here want to know can  
7 I fish there or not and what can I do, can I anchor there or  
8 not, and I think that that might be helpful when you're  
9 communicating this information at the council.

10  
11 I don't know if I'm speaking out of turn or if other people  
12 agree, but I think it would be really helpful to just have it be  
13 very clear for the council that you can fish here, you can't  
14 fish here, and, also, this is -- Have, in the background, this  
15 is where the Florida Keys National Marine Sanctuary boundary is  
16 now, and don't differentiate between the Tortugas and -- Just  
17 where are the lines now and how are these getting bigger. I  
18 think that's another helpful thing.

19  
20 Is there any more discussion on this? I thought I had heard  
21 that Captain Hickman had something that he wanted to discuss.  
22 No? I really think that a lot of these questions are very  
23 valid, but they could be really easily answered if things were a  
24 little bit more clear, and I would really, really urge staff to  
25 include all of the effort, the fishing effort, they have, and  
26 not just that in the Gulf Council jurisdiction also. Rob.

27  
28 **MR. RUZICKA:** Beth and Steve, another question for you, and this  
29 is to follow-up your point, Morgan. Right now, before any of  
30 these alternatives go into effect, how much coral reef habitat  
31 is actually protected as non-extractive activities in the  
32 Florida Keys? How much of the Florida Keys National Marine  
33 Sanctuary is actually open to extractive activities right now?  
34 I think providing some of those statistics or summaries, when  
35 you make these other modifications, would help kind of  
36 crystallize what we're talking about across the entire  
37 sanctuary.

38  
39 I saw some numbers in your alternatives, but I'm not very good  
40 at math, and so it was hard for me to figure out what the  
41 percentages are, and so maybe if you could elucidate a little  
42 bit on that and then consider it for the future proposals, and  
43 that would be good.

44  
45 **MR. WERNDLI:** As of today, the existing sanctuary is 3,803  
46 square miles in size. Of that area, 5.3 percent, or a total of  
47 200 square miles, plus or minus, is zoned as no fishing. In  
48 Alternative 2, it would be just over 6 percent. Alternative 3



1 is just over 6 percent, at 6.3, and Alternative 4, as proposed,  
2 is just over 7 percent.

3  
4 **MS. DIEVENEY:** Noting that, in each of those alternatives, 2, 3,  
5 and 4, the overall area boundary is also expanded.

6  
7 **MR. WERNDLI:** So you can't directly compare the existing  
8 boundary to those other percentages, because the overall  
9 boundary area expands as well.

10  
11 **DR. BROOKE:** Not to beat this dead horse, but how much of the  
12 sanctuary is actually classified as coral reef?

13  
14 **MR. WERNDLI:** I would have to get back to you on that one. I  
15 don't have that one at my fingertips.

16  
17 **MR. BOSARGE:** Morgan, I just want to thank you for keeping it  
18 simple. From an organization standpoint, and we represent the  
19 shrimp industry, the main thing our folks want to know, whether  
20 they're members or not, is where can I work and where can I not  
21 work, and it's as simple as that. Show me where I can work, and  
22 I will work there. Show me where I can't work, and I will stay  
23 out of there. That's the main thing that they need, just to  
24 keep in simple and show us where we can work, and we'll do that.  
25 Thank you for that.

26  
27 **CHAIRMAN KILGOUR:** All right. Are there any more comments for  
28 Beth on the expansion? Okay. Do we need a ten-minute break?  
29 Let's take a ten-minute break, and then I think Rob is going to  
30 walk through coral disease with us. Let's take a ten-minute  
31 break.

32  
33 (Whereupon, a brief recess was taken.)

34  
35 **CHAIRMAN KILGOUR:** The next presentation is on stony coral  
36 tissue loss disease. Mr. Bosarge.

37  
38 **MR. BOSARGE:** Morgan, if we could -- We're meeting here as  
39 multiple groups, and there's not a lot of discussion that we get  
40 to have, but if we could back up just for a minute and make one  
41 more motion, as far as with the reserve boundaries.

42  
43 Just to clarify for the council, we're not opposed to -- We are  
44 opposed to the one boundary expansion that we talked about. The  
45 other boundary expansions, we're not opposed to, but we're not  
46 in favor of. Do you see what I'm saying? Just to try to  
47 clarify that. I know that may sound like a double-negative  
48 there, but if we could put that maybe in the form of a motion,

1 just to let the council know that we're not opposed to the --  
2 How would I say that, because we were opposed to the one  
3 boundary expansion.

4  
5 **CHAIRMAN KILGOUR:** I have a follow-up to that, because I can see  
6 that you're kind of concerned about making a motion in that  
7 form, but is the Shrimp AP Chair going to be invited to the  
8 October council meeting? Do you guys still send the AP chairs  
9 to the council meetings? Not this time? Okay.

10  
11 I was just going to say that perhaps that could be something  
12 that Natasha needs to highlight in her report to the council,  
13 but, if you wanted to make a motion, I am not going to dissuade  
14 you from that, but it's also something that you could ask  
15 Natasha to highlight in her report.

16  
17 **MR. BOSARGE:** I would like to put it in the form of a motion,  
18 that the Shrimp AP is not opposed to the southern expansions of  
19 the boundary, but we are not in favor of them.

20  
21 **CHAIRMAN KILGOUR:** Is there a second to that motion?

22  
23 **MR. BOSARGE:** Let's just say we're not in favor, and we'll take  
24 out the opposed. So we are not in favor of the southern  
25 expansions. The southern boundary expansions of the Tortugas  
26 shrimp -- Well, it's not the Tortugas, and so --

27  
28 **CHAIRMAN KILGOUR:** The motion is that the Shrimp Advisory Panel  
29 is not in favor of the Florida Keys National Marine Sanctuary  
30 expansion.

31  
32 **MR. BOSARGE:** Yes, and I've been informed to put the continuous  
33 expansion of --

34  
35 **CHAIRMAN KILGOUR:** Is there a second to the motion?

36  
37 **AP MEMBER:** I will second it.

38  
39 **MS. CAMILLA SHIREMAN:** I've got a screen that just went out.  
40 Can you repeat the motion, please?

41  
42 **MR. BOSARGE:** Do I have to?

43  
44 **CHAIRMAN KILGOUR:** That the Shrimp Advisory Panel is not in  
45 favor of the Florida Keys National Marine Sanctuary expansion.  
46 Not in favor of the boundary expansion. Is southern boundary  
47 expansion what you would like?

48

1 **MR. BOSARGE:** Yes.  
2  
3 **CHAIRMAN KILGOUR:** I am not trying to recreate this motion. I'm  
4 trying to remember what you said.  
5  
6 **MR. BOSARGE:** You're doing good.  
7  
8 **CHAIRMAN KILGOUR:** The motion has been seconded. Scott.  
9  
10 **MR. HICKMAN:** This is just a Shrimp AP only motion, but I would  
11 like to know -- You know, I understand the first motion, and I  
12 got that. I mean, because you really -- The second one, it  
13 really doesn't affect your industry, and, from a habitat and  
14 ecological -- I would just like to know the rationale.  
15  
16 **MR. BOSARGE:** Well, if you look at what we did with all the  
17 habitat areas of particular concern, we tried to minimize as  
18 much on the shrimp industry as we could, and we did a really  
19 good job, and, with what we're doing now, even though it's not  
20 going to affect us at this moment, but, by moving that boundary  
21 -- All they've got to do is change a couple of rules, and now it  
22 does affect us, and so how could you be in favor of that? Do  
23 you see what I mean? Right now, there are areas that are  
24 outside of the boundary that we typically fish, and there are no  
25 restrictions.  
26  
27 By moving that boundary line and then, maybe a year from now,  
28 they say, well, we're not going to allow any more shrimping  
29 inside the boundaries of the sanctuary, and we just kind of  
30 stabbed ourselves in the back.  
31  
32 **MR. DELANEY:** Morgan, may I make a comment to that?  
33  
34 **CHAIRMAN KILGOUR:** Sure, and after you is Sandra and then Leann.  
35  
36 **MR. DELANEY:** Thank you. The thing that I was concerned about,  
37 and I think we're talking about that southwestern triangle,  
38 which is fairly sizable, and we don't see the shrimp effort on  
39 there, but, in answer to my question, as I understood it, the  
40 principle reason for that modification and expansion of the  
41 sanctuary boundary was administrative, again, to sort of smooth  
42 out the borders of the sanctuary and make it contiguous with  
43 other pieces of the sanctuary.  
44  
45 I didn't hear anything about substantial or significant  
46 ecological or habitat significance at all, and it was about,  
47 again, drawing lines, and, to Steve's point, in the history of  
48 the shrimp fishery, or any fishery in the United States, when

1 people start drawing boxes in the ocean, they usually don't turn  
2 out well for us, and so it's not just paranoia. I mean, we've  
3 got a long history of boxes turning into no-fishing zones, and  
4 they're forever forgotten and never opened up again, because  
5 there's no way to do any research inside them, and that's the  
6 litany of fishing by area management in the United States.

7  
8 I understand where Steve is coming from, and unless -- Maybe the  
9 motion can express concern about the absence of an ecological  
10 basis for that part of the expansion, because I didn't hear any.

11  
12 **MR. BOSARGE:** To kind of echo Glenn's concerns, and I've seen it  
13 on the state side more than anywhere else, this group may be  
14 perfectly fine with shrimping within the sanctuary, but, ten  
15 years from now, when this group is no longer here and it's  
16 another group, they may have a different idea, and so, by us  
17 saying it's okay to move those boundaries and it's okay to take  
18 that in, that group -- Do you see my point? In other words,  
19 this could come back to haunt you.

20  
21 **CHAIRMAN KILGOUR:** Sandra.

22  
23 **DR. BROOKE:** I do see your point, Steve. We do, and you put a  
24 line around something, and, the next thing you know, there is  
25 management there. It seems that this area that you're talking  
26 about though, specifically, not as a general rule, but just this  
27 area specifically, it didn't seem like there was any fishing in  
28 there, and Leann's point is well taken that it's not all  
29 represented, but you guys generally sort of fish in the same  
30 general areas, and so, if there's nothing down there, maybe it's  
31 not a good shrimping area, but, if it is, then we need the data  
32 to figure that out.

33  
34 Expanding the boundary makes it more simple, and you mentioned  
35 that there was a green line and a blue line, and this would  
36 simplify that, and, to your point about just one day just  
37 deciding to ban shrimping, it seems like the areas to the north,  
38 by the North TER, is where you're more heavily fishing, if you  
39 believe those heat maps, and so that should be an area of more  
40 concern than this little strip at the bottom, and we can't just  
41 flip a switch and ban shrimping. You guys would be involved in  
42 all of those conversations, and so I wonder if this really is a  
43 concern.

44  
45 **MS. BOSARGE:** I would like to chime in just for a minute, and  
46 think of this from a bigger-picture philosophical perspective.  
47 This is our second time to go through this, right? The first  
48 time was with the Flower Gardens, and, G.P., I've got to give

1 you credit. I mean, you kept working with the fishermen, and  
2 you never gave up, and I think you really have come to a place  
3 where everything is efficient and effective, and you have  
4 minimized any user conflicts as much as possible, but still  
5 protected what you wanted to protect.

6  
7 He did that by having his sanctuary boundaries mirror that  
8 bottom contour, that coral that he wanted to protect, as much as  
9 possible. He managed to reduce his footprint of closed area  
10 from 383 square miles down to 160. This expansion and this  
11 sanctuary does just the opposite. G.P. has a lot of -- I say  
12 G.P. as if it's your baby, but the Flower Gardens has a lot of  
13 boxes out there, and they could have used that same rationale,  
14 that there is connectivity between the boxes, and I'm sure that  
15 there is, and they believe that there is, but, when you connect  
16 all those boxes and take in all this area where you have fishing  
17 activity, whether it be shrimping or bottom longlining or  
18 whatever, that activity has been going on there for a century or  
19 more.

20  
21 That area is still pristine. If it's not pristine, it's not  
22 because of us. It really isn't, and, when you overlay these  
23 types of regulations and take that in, the regulations actually  
24 become burdensome for the fishermen, because now the onus is us  
25 to figure out where we can go and where we can't go. Right now,  
26 with that bottom triangle not included in the sanctuary, it's  
27 very clear to us that, yes, we can shrimp there, heck yes, and  
28 it's not in the sanctuary.

29  
30 If I had my way, I would take that northern boundary of the  
31 sanctuary and dip it in and get those shrimp tracks that are in  
32 there out of the sanctuary, and then it would be very clear to  
33 us that, oh, we can shrimp there, and that's not in the  
34 sanctuary.

35  
36 When you take in bottom that is historical shrimp grounds, you  
37 make it even more burdensome on the fishermen, and so, if you  
38 actually have it mirrored more to the bottom contour, then it  
39 makes everybody's life easier, and maybe it's not what you want,  
40 but that's the way we see it, and there is shrimping effort on  
41 that south side.

42  
43 We didn't get to get into it too much, but that was the point  
44 that I was making, that, by moving that boundary out -- Right  
45 now, we shrimp in between that area to avoid for the big ships  
46 and the actual sanctuary boundary, and we're shrimping in there,  
47 and it's confusing as heck on that map, and that's why I get mad  
48 that the bottom boundary of the sanctuary is not green and it's

1 blue, and it makes it very confusing for us, where we can be and  
2 can't be, and so there is historical shrimping effort in that  
3 area, and I think that, philosophically, is the base of this  
4 motion.

5  
6 **CHAIRMAN KILGOUR:** Corky, you said that you wanted to say  
7 something, and then Scott, and then I think we need to vote on  
8 this motion. We are starting to get behind.

9  
10 **MR. PERRET:** The easiest thing in the world is for a bunch of  
11 bureaucrats to sit in an office and look at a map and draw lines  
12 north, south, east, and west. It's easy to draw a box and let  
13 somebody worry about staying in or out of it, hopefully out, and  
14 for law enforcement to enforce it.

15  
16 Unless there is a specific reason for a particular measure, we  
17 don't need to add burden to our law enforcement people, to the  
18 fishermen that utilize the area, or maybe utilize an area, or  
19 may have been utilizing the area, and, with that, I call the  
20 question.

21  
22 **MR. HICKMAN:** Steve, I appreciate the rationale behind it, and  
23 that's what I was looking for. I just read a big article in  
24 *Sportfishing Magazine* from a well-known scientist talking about  
25 the shrimp fleet, and it was 90 percent false, and I know why  
26 you all are sensitive, and, just like the commercial and charter  
27 fishermen, and we've been picked on a lot, and I get it, and I  
28 understand it, and I appreciate your rationale.

29  
30 **CHAIRMAN KILGOUR:** Okay, and so Corky called the question. This  
31 is a Shrimp AP motion. **Any opposed to this motion? The motion**  
32 **carries.**

33  
34 Is everyone comfortable now with moving on to the stony coral  
35 tissue loss disease presentation? Steve.

36  
37 **MR. BOSARGE:** I just wanted to say thank you for letting me go  
38 back, and, Beth, you guys have done a good job, and we  
39 appreciate what you do, and there's a lot of work that goes on  
40 there, and you've got a big task ahead of you. There are  
41 definitely problems down there, and I don't think my industry is  
42 much of your problem, but you've got a lot to work on, and I  
43 don't envy you your job and your position, but thank you for  
44 what you do.

45  
46 **PRESENTATION ON STONY CORAL TISSUE LOSS DISEASE**

47  
48 **MR. RUZICKA:** My name is Rob Ruzicka, and I'm a scientist at the

1 Fish and Wildlife Research Institute, and I think this is more  
2 of a less controversial presentation here. I feel like it's  
3 more informational, and maybe some of you all have gotten  
4 reports of this, or have heard about this, or have just  
5 discussed it, those that are in the shrimping industry that are  
6 also active divers.

7  
8 There is a bit of a concern, as you will see in the  
9 presentation, about how this disease is actually spreading  
10 throughout the broader Caribbean and things that we're concerned  
11 with about it potentially getting up into the northern Gulf of  
12 Mexico as well, too.

13  
14 I have been with the coral program for ten years, over ten  
15 years, and certainly, in my time, in terms of studying coral  
16 reefs, we have seen nothing like this. I can kind of keep this  
17 informal, and, if you all have questions and want to ask  
18 questions along the way, so you can get clarification generally,  
19 and I speak to a variety of different audiences, and I will have  
20 a tendency to maybe gloss over some of the things that I take  
21 for granted about a coral disease, and so feel free to ask any  
22 questions along the way.

23  
24 We refer to this disease as stony coral tissue loss disease, and  
25 where the epicenter of this started, for those that are  
26 unfamiliar with it, was off of Miami-Dade County, and that's  
27 what that red arrow is indicating, and this started back in  
28 2014.

29  
30 There are several theories that go around with this about what  
31 actually started this disease event. In 2014 and 2015, we were  
32 undergoing a mass coral bleaching event, and there was a lot of  
33 thermal stress, and that was a primary El Nino year, in 2014 and  
34 2015, and it was actually a global event, and so there was a lot  
35 of bleaching happening globally, but also along the Florida reef  
36 tract.

37  
38 There was also, at this time, major dredging operations that  
39 were going on at Government Cut, and Government Cut is really  
40 close to where that red arrow is, and they were doing deepwater  
41 dredging there to allow Panamax vessels to start coming in to  
42 the Port of Miami at that time, and so there could have been a  
43 confluence of events that were going on there that might have  
44 jumpstarted this disease event.

45  
46 These are some of the lesions, and these are very common corals  
47 that you find on the Florida reef tract. It's just a variety of  
48 corals here, and, actually, what you see in these images are the

1 areas in the center, where the coral looks kind of grainy,  
2 that's where the mortality is occurring. As the coral dies, its  
3 appearance and its skeleton turns white, and that's what you're  
4 seeing when the tissue is removed, and so we first began to know  
5 in 2014 that, well, this doesn't look quite like coral  
6 bleaching.

7  
8 All corals turn white, a lot of times, when they die and their  
9 skeleton turns white, but getting these odd lesions in the  
10 center of the coral and the fact that it was actually moving  
11 systematically across the coral in just a few weeks, we knew  
12 that we were beginning to deal with something else.

13  
14 If you want to try to play that video, and you've probably heard  
15 a lot about coral diseases just in the past, and they are an  
16 issue, but, when we actually refer to an outbreak, this is how  
17 you can actually visualize it, and so hopefully this video will  
18 play, and this is from a very popular dive location in the  
19 Florida Keys, and this is a site called Hens and Chickens.

20  
21 This is a video that we shot, and you can see all these white  
22 corals in here, and this is just a small little coral  
23 outcropping that is probably like the size of this desk area,  
24 and so you begin to see these brain corals here with the lesions  
25 that are just starting, and you can see there is a different  
26 type of lesion on that coral there in the lower-right-hand side,  
27 where the coral is dying, and there's another lesion, and so all  
28 these corals that are in direct, immediate contact with one  
29 another are passing this disease onto it, if their actual  
30 skeletons are touching.

31  
32 Then, when you look at the top part of this, you can see all  
33 these corals that are white here, and they all either have  
34 recently died, or they're in the process of dying, and this is  
35 this whole reef structure here that you're actually looking at,  
36 and, when you see an outbreak, and you see this many corals at  
37 one time, it really is quite shocking to the eyes to see this  
38 many corals dying all at one time with these strange-appearing  
39 lesions.

40  
41 The other thing that you will notice here is a lot of these  
42 corals are really large, and these are your framework builders.  
43 Some of these corals that I just showed you in that picture,  
44 they are 200 or 300 years old, and they're dying in a matter of  
45 weeks or months. Now we can go back just to the presentation.

46  
47 That is what is so scary about this, is that we're going to lose  
48 that framework, because these large corals are actually dying in



1 this event, and so, in Florida, we're going into the sixth year  
2 of this. As I mentioned, it started in 2014, and we're getting  
3 close to 2020, and this is just a time series as --

4  
5 **AP MEMBER:** Where in the Keys was that video that you just  
6 showed?

7  
8 **MR. RUZICKA:** That was from Hens and Chickens, and so that's in  
9 the Upper Keys, and it's probably one of the most popular dive  
10 sites throughout all the Keys, and it would rival Looe Key, and  
11 it's -- Historically, we have very, very good data on it, about  
12 the coral formations there, and it has really high coral cover,  
13 20 or 25 percent, on average, and most of the corals that  
14 contribute to that cover are now gone, or just skeletons.

15  
16 **MR. HICKMAN:** Are most of the dive operators in that area now  
17 requiring that everybody bleach water their dive equipment?

18  
19 **MR. RUZICKA:** It's been recommended and advised. Many of the  
20 dive operators are sensitive to the issue, and so they won't  
21 take their dive groups to different sites, and they worry about  
22 the spread of it, and so they'll dive at the same site, maybe  
23 just a different part, part of the reef, but where we're at now,  
24 in terms of -- Let's see if this is working again.

25  
26 It's pretty much throughout the entire Florida reef tract now,  
27 and that's where I was going to go with the slide that was  
28 previous to this, is it started in Miami-Dade in 2014, and the  
29 most recent reports, from the surveillance and the  
30 reconnaissance that we've done, is it's down off of Western Dry  
31 Rocks now.

32  
33 **MR. HICKMAN:** Has your commission even had the discussion of  
34 making it a mandatory deal that they dip their equipment? I  
35 mean, in Texas, we've got a requirement now that you have to  
36 treat your trailers when you go from lake to lake, because of  
37 the invasive species. I mean, if you're going to destroy this  
38 many coral reefs in --

39  
40 **DR. BROOKE:** But you've also got to stop people touching it.  
41 People go down there and they thrash about, and they've got  
42 their hands all over everything, and so bleaching is one thing,  
43 but keeping people off the reef is another.

44  
45 **MR. RUZICKA:** The biggest concern that we had was it being  
46 transported from one reef to another, but I think, at the same  
47 time, we know that it's waterborne, and, with some of the  
48 studies and the research that has been done, we know that it can

1 be carried in the water, and so there's a natural spread that's  
2 going on there.

3  
4 I think the major concern was it leapfrogging from like one  
5 country to another or from one region, say Miami-Dade County,  
6 all the way down to the Dry Tortugas with divers, and so that's  
7 where the disinfection would come into play, is if you're going  
8 to like multiple reefs that are separated by broad geographic  
9 regions. Then people should be doing that.

10  
11 There is an informational campaign that's been put together by  
12 DEP that has those recommendations in it, that if you're  
13 traveling across different locations that you should be  
14 disinfecting your equipment, but I guess, as a statutory  
15 authority, no, that's not in place as of yet.

16  
17 **DR. BROOKE:** But isn't it going against the prevailing current?

18  
19 **MR. RUZICKA:** Yes. If we can hopefully get back, or at least --  
20 To answer your question, it started in Miami-Dade, and then it  
21 rapidly spread through Broward County and West Palm Beach, and  
22 it traveled with the prevailing currents, but, over the course  
23 of the last five years -- It first showed up in the Florida Keys  
24 in 2016, and we documented it -- Our group at FWC documented it  
25 in 2016, and it has slowly worked its way through the Florida  
26 reef track down towards Key West over the last three years, and,  
27 yes, that is against the prevailing currents.

28  
29 If anything that we've learned is where the locations of the  
30 gyres are and the countercurrent eddies that take place in the  
31 Florida Keys, and, with that waterborne transmission, it seems  
32 to be able to go against the prevailing currents, and then  
33 Hurricane Irma in 2017 threw a pretty large curveball, because  
34 we had been tracking it as it had moved westward through the  
35 Florida Keys, up until 2017. Then, when Irma came, it disrupted  
36 the entire system and basically sprinkled it like a blizzard  
37 throughout parts of the Florida reef tract that we couldn't  
38 catch up to where it was.

39  
40 **AP MEMBER:** What if bleaching does occur, and how do you solve  
41 it?

42  
43 **MR. RUZICKA:** How much longer do we have here? Coral bleaching  
44 -- Generally, the primary reason why coral bleaches is because  
45 it has undergone some type of thermal stress, generally being  
46 too hot, and that's been our major concern, and so, when the  
47 water temperatures get too hot, the symbiotic organism that  
48 lives with the coral, a little algae, is expelled, and that

1 algae that's in there gives the coral its color, and it gives  
2 the coral a lot of nutrition, and it basically helps the coral  
3 survive and live on the reef, but they don't like it when it  
4 gets too hot.

5  
6 Corals, even though they're tropical, they have a pretty narrow  
7 range of water temperatures that they actually prefer, and so,  
8 when they get too hot, they expel that algae, and, when that  
9 algae gets expelled, all you're left to see is the coral  
10 skeleton, and it turns white, and hence the word "bleaching", as  
11 the coral turns white.

12  
13 Going back to the coral bleaching, the thing that we're  
14 concerned about with -- We know, and we have plenty of evidence,  
15 scientific evidence, that sea-level temperatures are rising, and  
16 we also know that these periodic El Nino events, like in 1997  
17 and 1998 and then also in 2014 and 2015, the one that I was  
18 discussing, these frequencies of intense bleaching are happening  
19 more frequently, and so I don't -- There are ways to stop it, or  
20 at least actions that we can take to try to prevent global  
21 warming and climate change, and you hear that discussion a lot,  
22 that we know that the waters can't continue to warm, because  
23 it's going to lead to more and more coral bleaching.

24  
25 **DR. BROOKE:** But bleaching is different from this.

26  
27 **MR. RUZICKA:** Bleaching is absolutely different from this. This  
28 should not be confused with coral bleaching, even though the end  
29 result is similar and that the corals -- It's going to show the  
30 coral skeleton turning white, and that's the end result of this,  
31 but this is not related to warming sea temperatures, in that  
32 case. This is a pathogen that is consuming the coral and  
33 actually killing the coral, just like any type of infectious  
34 agent that a human could get and it would kill us.

35  
36 **AP MEMBER:** Is bleaching a stressor that can exacerbate the  
37 impact of stony coral tissue loss disease, or do warming  
38 temperatures impact or exacerbate the impact of stony coral  
39 tissue loss disease?

40  
41 **MR. RUZICKA:** Well, we have -- Generally, when you have coral  
42 diseases in the past, they coincide with warmer temperatures,  
43 and so warming temperatures will exacerbate the prevalence of  
44 coral diseases. We generally see, when we do our surveys and  
45 work on the Florida reef tract, we see the highest prevalence of  
46 coral diseases in the late summer.

47  
48 What is surprising about stony coral tissue loss is it's

1 persistent throughout the course of the year. There is never  
2 really any ebbs and flows with it, and it's persistent. It  
3 seems to have a food source in the environment with the corals,  
4 and we have not seen it necessarily kind of scale back during  
5 the wintertime, during the cooler months, when bacteria and  
6 other things in the water column are not as prevalent as they  
7 are in the summer.

8

9 **DR. BROOKE:** Do you know what the pathogen is?

10

11 **MR. RUZICKA:** We don't, and so there is plenty of -- There is  
12 research teams working on it, and so one of the things that we  
13 have been successful in trying to -- If we can hopefully get  
14 back to the presentation, but did I just totally ruin you all's  
15 computers by that PowerPoint?

16

17 One of the things that we do know, Sandra, is that some of the  
18 corals and the responses that are taking place to it, they are  
19 treating them with antibiotics down in the Keys, and so what  
20 they do is they actually mix up like clay or an epoxy, and they  
21 actually infuse that with antibiotics, and then they will  
22 actually apply that directly to the coral, and that has had some  
23 success at times, but the problem is it's not -- Well, it's  
24 certainly not scalable, but we don't know if we're treating a  
25 secondary infection, and so, once the coral begins to die, then  
26 you're preventing that other bacteria from killing it by  
27 applying that antibiotic paste or if it's the primary pathogen.  
28 That is still uncertain.

29

30 **DR. BROOKE:** Have you see any recovery in any of the corals?

31

32 **MR. RUZICKA:** Very little.

33

34 **AP MEMBER:** I have another question about stressors, but I will  
35 hold my question.

36

37 **MS. BOSARGE:** I was looking at the map of your confirmed reports  
38 with the little pins on it, and I may have missed this, and you  
39 all were all over the board in this discussion, but it almost  
40 looks like -- I mean, if you look at the prevailing currents,  
41 they are coming from South America up through the Yucatan  
42 Current, which goes up between Mexico and our islands out there,  
43 and it comes into the Gulf and makes a big loop and swings  
44 around the Florida Keys and goes up.

45

46 If you look at your reports, they kind of follow that track, and  
47 so are you doing any research down off of South America, to talk  
48 to these people about what is going on down there and what

1 they're seeing? Then I guess the following question would be  
2 you mentioned that we had some warmer waters down there, and  
3 could this be a bacteria that came from there, where there are  
4 some warmer waters?

5  
6 It normally dies before it gets here, because it can't live in  
7 the temperatures that we have here, but now it can, and,  
8 eventually, I'm going to ask you about the fish, but I will save  
9 that for a minute.

10  
11 **MR. RUZICKA:** For the most part, this stony coral tissue loss  
12 disease event has been a Florida event. We had good eyes on the  
13 epicenter, and this picture up here -- This is through 2009, and  
14 so everything -- I am going to answer your question in a long  
15 format here.

16  
17 Everything in red means that we have observed corals with these  
18 lesions or that area is -- This was actually a time series  
19 animation here, where you could actually see the red part of the  
20 Florida reef tract actually spread, and so, in the Upper Keys --  
21 It reached the Upper Keys in 2017. In the Middle Keys, it  
22 actually reached the Middle Keys in late 2017, thanks to  
23 Hurricane Irma, and then, in 2018, it reached the Lower Keys,  
24 and it's a little bit west of Key West right now, in 2019, and  
25 so there's been that slow prevail moving against the Gulf  
26 Stream.

27  
28 Now, in terms of this image right here, and so all those little  
29 red balloons are where it's been confirmed, and I think there  
30 should be one more image here, and then the orange balloons are  
31 where we have received reports of it, and we kind of have a team  
32 that actually looks at these reports, to actually try to confirm  
33 if it's the stony coral tissue loss event, but, if you look at  
34 Number 3, where it's there in Mexico, that arrived in 2017, and  
35 it also arrived in Jamaica in 2017 as well too, and so Jamaica  
36 was actually the second report that we found.

37  
38 One of the concerns has been that shipping traffic off the east  
39 coast of Florida has actually served as a vehicle to be able to  
40 transport this to some of the other locations. Up until 2017,  
41 this was primarily just a Florida event, and then, in 2017, it  
42 began to spread to other places in the Caribbean, and one of the  
43 reports that we really know is, if you look out at Number 5  
44 there, that's the United States Virgin Islands there.

45  
46 Where it was first documented and confirmed there in the  
47 Caribbean was next to the major anchorage that takes place to  
48 service a lot of the cargo and container ships that were

1 anchoring there, and sometimes these large container ships and  
2 vessels will anchor there for several days, or maybe weeks at a  
3 time, and we also know the same thing up off of Government Cut  
4 and off of Port Everglades and Fort Lauderdale.

5  
6 When those large container ships are coming into port, they can  
7 sit there for four or five days, until their number is called,  
8 and then they will offload their cargo, and then they will go  
9 back out.

10  
11 **DR. BROOKE:** Looking at that map, it's a cruise ship route, too.  
12 A lot of ships go out of Lauderdale and down to Cancun.

13  
14 **MR. RUZICKA:** That's right, and so it was very interesting, and  
15 we were very concerned, and there is a team that tries to work  
16 on ballast water messaging and then also working with the  
17 container and cruise ships. One of the things that we did find  
18 interesting, that is interesting, is cruise ships go into Key  
19 West all the time, and it followed the same pattern in Key West  
20 that it did just through the slow progression in the western  
21 movement, and so those cruise ships coming out of Fort  
22 Lauderdale or out of Miami didn't leapfrog it down to Key West,  
23 but what happens is now we're seeing this leapfrogging around  
24 the Caribbean.

25  
26 When we've seen other infectious disease agents spread through  
27 the Caribbean, they generally start in the southern part of the  
28 Caribbean, and then they work their way northward, like what  
29 you're saying, Leann, that it follows the prevailing currents  
30 and then makes its way around the Caribbean.

31  
32 In this case, it's showing up kind of randomly in these  
33 different places, and likely some of the container traffic could  
34 be an issue, and, also, the other thing to mention is, with the  
35 container ships and those large cargo freighters, their ballast  
36 water systems are not nearly as up-to-date as the cruise ship  
37 industry. The cruise ship industry, because of some of the  
38 regulations that they have to face, and because of the age of  
39 the ships -- They are much more recent, in terms of their age,  
40 and they are equipped with more modern ballast systems than some  
41 of the old container ships that are around.

42  
43 **MS. BOSARGE:** Believe it or not, I am concerned about this, and  
44 I do want to see it solved. I know that we're not usually on  
45 the same page, but I guess I'm just trying to use my  
46 commonsense. You're not seeing it in G.P.'s world, from what I  
47 can tell. You're seeing bleaching, but you're not seeing this.  
48 If you look at the loop current, there is eddies that come off

1 the loop current that get over into G.P.'s world, but the loop  
2 current itself does not get in the Flower Gardens area, but  
3 guess what does? Tons of shipping.

4  
5 Have you ever been off of Galveston or off of Southwest Pass or  
6 any of those passes down there? I mean, they're lined up, and  
7 so I guess that's -- I am just trying to think outside of the  
8 box, and I know shipping is an easy one to think that that's  
9 probably it, but, if that was it, why don't you see it in G.P.'s  
10 world? They are transiting over there and going in and out of  
11 there, too.

12  
13 **MR. RUZICKA:** Well, and I think this was part of the reason why  
14 Natasha invited me to give this presentation, was for the  
15 informational aspects about how this is actually spreading  
16 across the Caribbean.

17  
18 Our most recent knowledgebase on this, because it is a really  
19 grave concern, that somehow this does get up into the Flower  
20 Garden Banks. Because of all the problems with the  
21 presentation, I haven't talked about the corals that are  
22 extremely vulnerable to this event, but many of those coral  
23 species actually do occur and reside at the Flower Garden Banks,  
24 and so, if this was to get at the Flower Garden Banks, it would  
25 be catastrophic, because of the size of the corals that are  
26 there.

27  
28 I don't know when -- My ears perked up, G.P., when you were  
29 talking about where your anchorage is, and you've had a couple  
30 of small anchorages, but I don't know how close that is actually  
31 to the Pinnacles there and to the Flower Garden Banks, but it's  
32 certainly fortunate so far, and, now that it is just downstream  
33 of where it is in Mexico, and, also, those other points below, I  
34 should just mention that's Belize, and so it's doing the same  
35 thing off of the Mesoamerica coast, where it's working its way  
36 against the prevailing currents.

37  
38 The currents, the headwaters, of the Gulf Stream start down  
39 there, and then it turns up, like you said, in the loop current,  
40 and it's been working its way in reverse down -- It started in  
41 Mexico, and it's now going into Belize, in a similar fashion as  
42 what it did along the Florida reef tract, starting up in the  
43 northern part of the Florida reef tract and then slowly working  
44 its way westward towards Key West and towards the Dry Tortugas.  
45 We don't have this in the Dry Tortugas.

46  
47 That whole area that we just looked at for the shrimping  
48 questions, we have also been very concerned about, but there's

1 no major ship traffic that goes out to the Dry Tortugas, but,  
2 now that it is in Key West Harbor, and a lot of the vessel  
3 traffic that goes back and forth between Key West Harbor and the  
4 Dry Tortugas -- Now we're concerned that it could be more of a  
5 scare, because it's only been in Key West now for about six  
6 months.

7  
8 **MR. HICKMAN:** It's kind of striking, looking at that map, and so  
9 Houston-Galveston is the second-busiest port in the United  
10 States by tonnage, and the shipping lanes go right by the Flower  
11 Garden Banks and the other banks that are part of our expansion.  
12 We don't have it yet, thank God, but, if you look at that map,  
13 it looks like a map of a dive tourism guide. That's all the top  
14 places where people go diving.

15  
16 I just think it's weird that we've got all this shipping  
17 traffic, like the most in the Northern Hemisphere, going right  
18 next to our sanctuary every day and we don't have it, and then  
19 all of that looks like a dive map of where to go diving, and so,  
20 if it was me, I would kind of start leaning toward maybe that's  
21 how it's being transmitted.

22  
23 **MR. PERRET:** What kind of temperature changes are you talking  
24 about? You said elevated water temperatures, and just what's  
25 the change been, and what are the temperatures out at the Flower  
26 Garden Banks versus what you've got in Florida?

27  
28 **MR. RUZICKA:** A couple of comments here. First, for your  
29 comment, I mean, again, that is a concern, that potentially  
30 scuba divers could be spreading it throughout the Caribbean.  
31 One thing that I should mention on this is that, for the most  
32 part, all of these dots on the maps that you see, these are  
33 shallow-water reef locations.

34  
35 The only report that we have it coming now so far, and this is  
36 new, is from the Virgin Islands, where they do have mesophotic  
37 reefs, and so mesophotic -- When I say "mesophotic reefs", I am  
38 generally referring to reefs that are probably beyond and deeper  
39 than 100 feet, more or less than 130 feet, or maybe deeper than  
40 that.

41  
42 They have confirmed it in the Virgin Islands. One of the unique  
43 things though about the Virgin Islands and their mesophotic  
44 reefs are they are actually not that far away from their  
45 shallow-water reefs, and so the proximity to them is very, very  
46 close, and so one of the things that might help the Flower  
47 Garden Banks is the fact that it's a mesophotic reef that is not  
48 surrounded by any shallow-water reefs, and so that could help as



1 well, too.

2  
3 Now, for your water temperature, are you talking about the  
4 changes in water temperature that would lead to a bleaching  
5 event?  
6

7 **MR. PERRET:** You said one of the theories is the increase of  
8 water temperature, and so what has the increase been?  
9

10 **MR. RUZICKA:** Well, what happens during a bleaching event is you  
11 will get the seasonal increases in water temperature, and so  
12 corals maybe -- In the summer in the Florida Keys, it might get  
13 to eighty-five or eighty-six degrees, and I'll just put this in  
14 Fahrenheit, so we can all be on the same page here. At an  
15 extreme end, maybe eighty-seven.  
16

17 During that time, during 2014 and 2015, they were also seeing,  
18 in the summer -- We would get reports of like ninety-degree  
19 water temperatures, and we've actually seen water coming out of  
20 the backside of the Gulf, passing through the bridges and stuff  
21 in the Florida Keys, and then seeing it at about ninety or  
22 ninety-one degrees. If some of you remember, we had earlier  
23 temperatures like that at Alligator Reef, and that was one of  
24 the areas that was proposed as a type of modification, and so  
25 we're getting temperatures at about ninety degrees, and that's  
26 absurdly hot for a coral.  
27

28 That's about four or five degrees where they would like it, and  
29 it -- The problem is that you can have a ninety-degree  
30 temperature, but, when it's sustained over several weeks, or  
31 even a couple of months, that we begin to really have problems,  
32 and so we had those sustained hot temperatures of eighty-nine or  
33 ninety degrees back in 2014, and then we also had this dredging  
34 event that was going on, and so it could be the combination of  
35 those two factors that helped jumpstart this event.  
36

37 **AP MEMBER:** (The comment is not audible on the recording.)  
38

39 **MR. RUZICKA:** It depends on where you're actually referring to  
40 in the Gulf of Mexico. We have -- I mean, G.P. could answer for  
41 the Flower Gardens. Out here, on the West Florida Shelf, and  
42 out at the Florida Middle Grounds, you will get temperatures  
43 that range throughout the year from some our loggers, and we'll  
44 see fifty-five degrees during the winter, and then sometimes as  
45 hot as eighty-eight or eighty-nine degrees during the peak of  
46 the summer.  
47

48 There is quite a wide range, but it's more -- Even if you get

1 those eighty-eight or eighty-nine-degree bursts out here in the  
2 Gulf of Mexico, you don't have the problems from sunlight and  
3 shallow water, and it's generally modified much more quickly.  
4 What we've seen out in the Florida Keys is a blanket of hotter  
5 water like that can persist for several weeks in those shallow-  
6 water areas.

7  
8 **MR. SCHMAHL:** I will just mention that I'm looking --  
9 Unfortunately, I don't have the actual data on my computer here,  
10 but we have seen a statistically-significant increase in average  
11 water temperature over the time that we've had temperature  
12 sensors in the water, and that's since 1989.

13  
14 Unfortunately, I can't give you the exact number, but I can get  
15 it to you, and we're talking in the range of about one-degree  
16 Centigrade over that period, and it is true that sort of the  
17 bleaching threshold that's been sort of established, in general,  
18 is about that eighty-six-degree Fahrenheit, or thirty-degree  
19 Centigrade, level.

20  
21 **MR. PERRET:** Do your waters at that depth get that warm?

22  
23 **MR. SCHMAHL:** Yes. Absolutely. Luckily, for shorter periods of  
24 time, though. It happens later in the season, and then it  
25 starts cooling off earlier in the winter season, and so, for us,  
26 that's been a good thing. In the Florida Keys and shallower  
27 reefs, like Rob is talking about, it persists for longer periods  
28 of time, and you get more mortality.

29  
30 **AP MEMBER:** Just a commonsense kind of question from a  
31 fisherman, but what's the relationship between the fish and the  
32 coral? I mean, the fish are there, and they provide nutrients  
33 of some sort, I'm sure, and is there a relationship between fish  
34 and coral, and is the fish missing part of the problem with the  
35 coral not wanting to survive? Is there a relationship there?

36  
37 **MR. RUZICKA:** I mean, there certainly is a relationship in the  
38 bigger picture. In some cases, you don't have a lot of your  
39 fish if you don't have your corals. We certainly know that from  
40 -- There is plenty of evidence of that from the lobster fishery,  
41 that, once you start to have dead and dying reefs, and you don't  
42 have the living coral, those lobsters have a tendency to move  
43 away from dead corals, because the lobsters are coming in, and  
44 they use it as habitat, but, also, the things that they like to  
45 forage on and consume are actually growing within the corals,  
46 like smaller barnacles and other associated organisms, and so  
47 the lobsters come in there, and they actually consume on that  
48 when they're using that as reef habitat.

1  
2 You get this displacement, and there are certain fish that come  
3 in in the same way. They're attracted to the smaller fish, the  
4 bait fish and stuff, that are coming in and consuming things  
5 that are actually on the coral reefs, and, if those are lost as  
6 well too, then you will see that displacement of fish, where the  
7 fish are going to try to find their foraging areas and other  
8 places.

9  
10 I was going to follow-up. Unfortunately, I haven't been able to  
11 kind of go systematically through the presentation, but one of  
12 the things that we have noticed is that, actually, fish may help  
13 foster the spread of this disease, because they love necrotic  
14 and dying tissue on the coral. The smaller fishes, they come,  
15 and we have several videos of them coming in and actually  
16 feeding on the dead and decaying tissue, and they want to  
17 consume it up. It's a nice little snack for them, and then they  
18 will go bite a healthy coral, and you can just watch them follow  
19 along.

20  
21 Now, whether that bite and that injury to a healthy coral  
22 actually begins an infection, we're not sure, because we haven't  
23 studied that coral over time, but we commonly observe it, and we  
24 know that they like to eat the dying tissues, and then they will  
25 go bite healthy corals after that, and so I just wanted to  
26 answer your question, in case that's what you're asking in  
27 relation to the spread of the disease.

28  
29 **MS. BOSARGE:** My question kind of follow on that, and so you're  
30 trying to figure the relationship between the coral and the  
31 fish, to see how the fish is damaging the coral, by possibly  
32 spreading the disease. I know you've harvested some of this  
33 coral, and you have tried different antibiotics on it in a lab,  
34 and you have shown that, in the lab, it can be transferred via  
35 sterile seawater.

36  
37 In the lab, have you put those bait fish in with the coral, in  
38 that test-tube-type environment, and see if the fish die, or see  
39 if the fish get sick? I am asking it because I'm a fisheries  
40 manager, and I know what kind of problems we're having with  
41 bigger fish down there, and we really haven't been able to  
42 pinpoint what is the problem with some of the grouper species,  
43 and I would like to know if the fish get sick from the coral  
44 disease. Can it be spread from the coral to the fish?

45  
46 **MR. RUZICKA:** It's an interesting question, and I don't know the  
47 answer to that, because those trials have not been done. As far  
48 as we know, we know of no other organisms that have been

1 affected by this pathogen besides the corals. I'm talking about  
2 soft corals or talking about sponges or other invertebrates,  
3 worms and those things, and we don't have any conclusive  
4 evidence of that, and we've seen the disease now march through  
5 about 80 percent of the Florida reef tract, but no one has  
6 actually followed a fish that has consumed that dead and dying  
7 tissue and seen what its end result is.

8  
9 **MR. WILLIAMS:** Can you just say how many coral species are  
10 impacted versus how many species there are out there?

11  
12 **MR. RUZICKA:** Yes. Florida, plus or minus a few corals,  
13 depending on how you want to lump your species together, we  
14 roughly have like fifty coral species that are well documented  
15 and make up the Florida reef tract, some of those being very  
16 rare species.

17  
18 What we have confirmed is lesions on twenty coral species, and,  
19 going back to this picture, here is five representative ones.  
20 Several of these are your large framework-building ones. They  
21 can get to the size of this TV, and so we have twenty confirmed  
22 species with lesions, and I will skip ahead, just to get to the  
23 list.

24  
25 This is the list, and I apologize that this is all scientific  
26 names, for the most part, and there are some common names there,  
27 and these intermediately-susceptible and these highly-  
28 susceptible -- Many on those lists are the foundational species  
29 that actually build the reefs in the Florida Keys or build the  
30 reefs in the Flower Garden Banks or actually build the reefs out  
31 at Pulley Ridge.

32  
33 These highly-susceptible species, the ones that are on this  
34 list, when you see highly-susceptible, what this means is, if  
35 they get an infection, a large proportion of their population  
36 get an infection and they will die completely. There is no --  
37 There is very, very little survivors. The only survivors that  
38 we have for those corals are ones that actually don't get it,  
39 and that's a very small percentage of the population, and I will  
40 show some data on that.

41  
42 These intermediately-susceptible species on here, in some cases,  
43 they can get an infection, but then they can actually survive,  
44 and so it will only wind up with the coral having partial  
45 mortality, and so it will lose a leg and it will lose an arm,  
46 but the heart will still be beating, and the other half of it  
47 can go on and try to survive.

48

1 I will just go through this a little bit more, just to show you  
2 why we're so concerned and the disease is so devastating. I am  
3 not going to bore you with too many statistics at this point,  
4 but we're lucky, here in Florida, that we have some excellent  
5 programs that have been able to track this disease and  
6 understand the consequences of this disease, and what this graph  
7 is just showing you is a time series, with the years on the  
8 bottom, and, as you move across, you can see that big purple  
9 spike that jumps out at you, where the disease was hot and  
10 heavy, and this comes from southeast Florida, and so this is off  
11 of Broward, this is off of Miami-Dade, and you can see the  
12 alarming spike and the disease prevalence that was there. Go  
13 ahead, Sandra.

14  
15 **DR. BROOKE:** Going back to that previous graph, a lot of  
16 diseases do this, right, and they spike, and then they decline,  
17 and then things go on. Is that what we're seeing here, or are  
18 those numbers influenced by the fact that you've got less coral?

19  
20 **MR. RUZICKA:** That's exactly right. One of the things that we  
21 understand about this disease is, for those highly-vulnerable  
22 species that I just listed, they get the infection first, and  
23 then they're killed completely. Then those intermediately-  
24 susceptible species, the lesions last much longer, and so this  
25 is the problem with this disease event.

26  
27 Like Acropora, when it got white diseases in the past, it would  
28 kill the colony relatively quickly. What happens is, with some  
29 of these larger framework-building corals that are the size of a  
30 small car, and they take several months to die, they are just  
31 shedding disease particles throughout the water environment and  
32 then infecting other corals, but the main reason why that number  
33 drops from 2016 to 2017 is because now, at this point, all those  
34 highly-vulnerable corals are all dead, and so they can no longer  
35 be infected.

36  
37 I will show some numbers, because this one is easier to digest,  
38 and so this is from our program at FWC. The corals that are  
39 listed up there on the top, we use these four-letter acronyms of  
40 CNAT, DLAB, DSTO, and, again, these are many of your large  
41 framework-building corals, and so we have this dataset, and, if  
42 you go from the last five years, going from 2014 down to 2018,  
43 you will see the devastating effects to some of these species.

44  
45 You take that first one on the left, the CNAT, and, again, this  
46 coral can get very, very big, and we had fifteen, and this is  
47 just our data from the Upper Keys, and so this is just a smaller  
48 case study here. You can see, by the time the 2018 comes

1 rolling around, we have none of them left, and so they're  
2 actually going through local extinction up there, and you can  
3 see that.

4  
5 Also, for the MMEA, and it's in the middle of the table, we had  
6 ten or eleven, and, by 2018, for the Upper Keys, we're at zero.  
7 Some of these other ones have been reduced in half, and so you  
8 can see the losses of these corals, and this is why it's so  
9 devastating, and we've never seen anything like this, except for  
10 like on Acropora, which I mentioned, and those are your staghorn  
11 and your elkhorn corals, but we're talking two species.  
12 Instead, here, we're actually talking twenty species, with about  
13 eight or nine of them are going locally extinct on the Florida  
14 reef tract.

15  
16 This is just another number, and some of these mass bleaching  
17 events -- You can see how -- This is just to put in perspective  
18 this recent event and how devastating it is. The black circles  
19 on the bottom is southeast Florida, and so those are sites that  
20 are in Miami-Dade, Broward County, West Palm Beach, and you can  
21 see, actually, even though the coral cover is kind of low, and  
22 this is taken from still images, you can see that the coral  
23 cover is kind of low, and they were doing just fine all the way  
24 up until 2015, until this disease event took place.

25  
26 The red upside-down triangles, basically what that data shows,  
27 just in a nutshell, is just that this event is going to be as  
28 devastating as any of the other mass bleaching events that we've  
29 had that have taken place in the Florida Keys.

30  
31 We know it's waterborne, and I think it can be distributed a  
32 number of ways. Irma was a case study for that, where we had  
33 been tracking where the boundary was, for intervention purposes,  
34 in the Keys. Then Irma came along, and then it was just popping  
35 up in random places all over the reef tract, and we wouldn't  
36 have any idea. We would just get a report from someone that,  
37 yes, we're seeing lesions, and it could be fifteen or twenty  
38 miles away from the last reef that we saw it on.

39  
40 This has been proven, Leann, like you said, through waterborne  
41 treatments in the laboratory. We know that the pathogen can be  
42 carried in the water column. The persistence is a problem, like  
43 I was mentioning, those large colonies that take several months  
44 to die. They can re-infect other colonies that are there, and  
45 it just provides fuel for the forest fire, and a reef can really  
46 be under siege for several months at a time, if it has lots of  
47 those larger colonies.

48

1 Your question, John, it impacts over 50 percent of the stony  
2 coral species, and many of these that can be found at the Flower  
3 Gardens and on Pulley Ridge, and the other part that's  
4 problematic here is that you can see that most of these colonies  
5 that are highly vulnerable -- It winds up in complete tissue  
6 loss, and so you can see this pillar coral here, and you can see  
7 the time series over the course of about a year-and-a-half,  
8 where this coral gets infected in May of 2014, and then, in  
9 2015, it's half dead, and, by the time that 2016 rolls around,  
10 it's completely dead.

11  
12 I am sure that many of you are wondering have we identified what  
13 this disease is, and the answer is not at this time. We have an  
14 idea that either that secondary infection could be caused by  
15 bacteria. Some of the corals both in the field and the lab have  
16 responded very well to antibiotic treatments, but we don't know  
17 if that's the punitive pathogen or if it's just a secondary  
18 infection, once the coral begins to die.

19  
20 There is a lot of work that's going on in trying to identify  
21 what the pathogen is, but the problem with many marine pathogens  
22 is there is going to be a consortium of a variety of different  
23 viruses, bacteria, fungus, and it can make it very, very  
24 difficult to try to find what the actual primary causative agent  
25 is.

26  
27 We do know that it's a variety of different bacteria that,  
28 through different analysis and testing about the microbiome, and  
29 so we've seen this footprint. As the corals move throughout the  
30 Florida reef tract, we have seen this reliable footprint that  
31 suggests that there is a variety of consistent bacteria that are  
32 attached with the lesions, or associated with the lesions, when  
33 you find that.

34  
35 I know this is relatively depressing to hear all of this, and  
36 many of you might be wondering what actually is being done, and  
37 so there has been a response structure that has been imposed in  
38 Florida, and these are -- I won't go through all of these  
39 individually, but there are many different response teams that  
40 are working on different aspects of stony coral tissue loss  
41 disease, and there has been a lot of support given to the State  
42 of Florida and to DEP and different research groups to try to  
43 combat and respond to this disease event.

44  
45 Here are four of them, and there are still active research teams  
46 that are looking at the epidemiology. You do have teams in the  
47 Florida Keys that are using reconnaissance and intervention,  
48 and, in some of these pictures, you can see that they're

1 actually treating the individual lesions on the corals and then  
2 applying this antibiotic paste.

3

4 We are working with the Caribbean, to try to educate them and  
5 show them the warning signs on what to look for, and then a  
6 project that I'm a part of is Coral Rescue, which you might have  
7 seen in different news media pieces, and, in short, what we're  
8 doing for Coral Rescue is we're trying to preserve some of the  
9 genetic diversity of these most vulnerable corals and putting  
10 them in safeguarded facilities, and I forget, but we have an  
11 aquarium in Galveston, Moody Aquarium.

12

13 Those of you that are from Texas, they have about seventy-five  
14 of our corals from this project, in which we've taken them from  
15 the Florida reef tract, and they are currently being held at  
16 Moody Gardens, and they're going to hold them for the next  
17 couple of years, and then we're going to try to use them for  
18 spawning stock and for restoration purposes.

19

20 That is kind of the idea of the Coral Rescue Team, is that we  
21 will remove about 4,500 corals out of the environment, and we're  
22 working with a large, large network of aquariums and zoos around  
23 the United States that have volunteered to be able to keep these  
24 corals and care for them, really at no cost, and then, as we  
25 move them around to different facilities that are being built,  
26 and I will show one here, just real quickly, and that's the boat  
27 that we collect the corals on.

28

29 This is what the corals look like when they're actually in  
30 captivity, and that's at Jenkinson Aquarium up in New Jersey,  
31 and they have corals there, and they are giving tours of them.  
32 Here is one at the Florida Aquarium, and we're building four of  
33 these greenhouses at the Florida Aquarium, which are going to be  
34 large restoration facilities, and some of this money has come  
35 from the State of Florida to be able to build these greenhouses,  
36 and that blueprint and that diagram is where the restoration  
37 center will take place.

38

39 They just had a successful press release, in the last couple of  
40 months, where they had one of these species of corals that are  
41 highly vulnerable to this spawn in captivity, and so then those  
42 get settled out, and then those will get transplanted back out  
43 to the reef, and so we're hoping to do this for those twenty or  
44 so really vulnerable corals, and it's unleashing and opening an  
45 entirely new world of science, things that we're learning about  
46 corals that we never knew or that we could learn through their  
47 field observations, and we're now learning about them through  
48 this captive breeding process and what we're trying to do.



1  
2 I guess, with this part, it's actually quite exciting, because  
3 maybe these are programs that we should have started years ago,  
4 when we knew that the coral reef crisis was getting as bad as it  
5 was, but this disease, and the response to this disease event,  
6 is really taking us to the next level, in terms of trying to do  
7 restoration work to help rebuild the Florida reef tract, and,  
8 again, really, one of the important things, I think as we sit  
9 around in this room, is places like the Flower Garden Banks and  
10 Pulley Ridge are really special.

11  
12 I know that sometimes we feel like -- Maybe you feel like we're  
13 always pushing for these preservation areas, but, with at least  
14 what I've seen with the Florida reef tract over the last ten to  
15 fifteen years, and now dealing with this event, and knowing that  
16 some of these corals are at places at Pulley and at places at  
17 the Flower Garden Banks, and they are special and they are  
18 unaffected by this disease event, that's why we're trying --  
19 That is basically becoming our bank account for corals right  
20 now, or our safety net, because they have shown resistance and  
21 resilience to many of these stressors that have really wreaked a  
22 lot of havoc on the Florida reef tract, and so I will just leave  
23 it with that, because I know we've got other business to do.

24  
25 **MR. HICKMAN:** I just want to say one thing too about we're  
26 losing all these corals, and we have this horrible disease that  
27 is spreading, and we were talking about the natural gas and oil  
28 platforms in the Gulf of Mexico earlier being 3,000, and now  
29 we're down to like 1,800, but those platforms are covered in  
30 corals.

31  
32 Every time they remove one of those platforms, they kill those  
33 corals, and so that's something to think about, moving forward.  
34 From a shrimp industry standpoint, I know you all don't like  
35 platforms, or you don't like the cutoff rigs, which we fishermen  
36 love, and corals will grow on those things, especially in the  
37 top of the water column.

38  
39 As we remove them, maybe we want to keep a few of them, because  
40 you can transplant corals off of them, and G.P. will tell you  
41 that invasive species get on them too, and that is true, but,  
42 also, you can use them to grow corals, if you want to transplant  
43 corals to them, and so it's just a thought.

44  
45 **MR. RUZICKA:** I will just circle back. If you guys do want to  
46 learn more about all the different responses that are taking  
47 place, you can go to this page on this presentation right here,  
48 which gives you a lot of information about the disease and where

1 it's currently located. That AGRRA website will give you up-to-  
2 date information on reports that are happening across the  
3 Caribbean, and I should not gloss over this fact about coral  
4 rescue.

5  
6 Doing something like coral rescue would have been unheard of  
7 three or four years ago. The fact that we've actually reached  
8 this point, and that we're pulling corals out of the water, it  
9 goes to show you the concern that we have, and so there's a  
10 website here, where you can stay up-to-date with the progress of  
11 that.

12  
13 We have almost 1,500 colonies in care across the United States,  
14 at these different facilities, and there's corals in Iowa, and  
15 corals in Texas, corals in New Jersey, and you can use this  
16 website, and this is free, publicly-available website, to  
17 understand which corals have been pulled out of the water and  
18 where they are located, and so this is a pretty monumental  
19 project that's going on here, because it's not easy to get  
20 permission to pull corals out of the water, and we all know  
21 that.

22  
23 **DR. BROOKE:** This is probably a stupid question, but you're  
24 taking these out of a diseased area, and you're putting them in  
25 these aquaria, and they are recirculating and not flow-through,  
26 aren't they? I mean, the last thing you want to do is to  
27 accidentally infect a huge area by putting a diseased coral in a  
28 flow-through system.

29  
30 **MR. RUZICKA:** That's right. It's a combination of both, and so  
31 most of the AZA facilities, and so the Association of Zoos and  
32 Aquariums facilities, they are recirculating, but there's a  
33 large process, and I won't go over all the details of coral  
34 rescue, but, when we pull a -- I will just go bring up one  
35 picture for this.

36  
37 We're doing all of our collections out in the Dry Tortugas and  
38 the Marquesas right now. We're doing them all ahead of where  
39 the disease boundary is, because, like I said, the last report  
40 is near Western Dry Rocks.

41  
42 We go out and we do these coral collection cruises on the Makai,  
43 and this is the Makai, and then we bring them into the  
44 University of Miami or Nova Southeastern University, and the  
45 coral is being held on the boat, and then every single coral is  
46 genotyped.

47  
48 We are developing getting the genetic information, and all of

1 them are mounted, because they are much happier and much better  
2 when they are mounted on these tiles, and they're all tagged and  
3 labeled, so we can understand. We're trying to get 200  
4 genotypes of each coral for restoration purposes, and so we take  
5 them to Nova, and we take them to the University of Miami, and,  
6 there, you can see that's one of the tanks on the left at the  
7 University of Miami, with those tubs of egg crates, and they go  
8 through a quarantine period.

9  
10 After they pass the quarantine period, then we ship them to a  
11 facility like Moody in Texas or Adventure Aquarium or Omaha  
12 River, and so they're getting corals that have gone through  
13 quarantine, which we should know should not have any stony coral  
14 tissue loss disease, and so we're putting those protocols and  
15 procedures into place, because we can't -- Occasionally, we have  
16 a coral that will die in quarantine, not necessarily because of  
17 stony coral tissue loss, but we don't know the life history of  
18 the coral that we collect.

19  
20 Some of these corals that are vulnerable, we don't know how long  
21 it has lived for, and we could be collecting it towards the end  
22 of its life, and then it dies under the stress of that, but all  
23 the corals that are around these different facilities in the  
24 United States have fared fairly well, and I think we've only  
25 lost two so far, out of the 1,500, which is pretty remarkable,  
26 but the idea will be when they -- We've already had some  
27 spawning success in captivity, which is really good, and we know  
28 that we're just going to have to put them back out on the reef  
29 and take our chances.

30  
31 We're not going to be able to genetically engineer them or  
32 modify them to be able to survive stony coral tissue loss  
33 disease. We're just going to have to hope that there is some  
34 genotypes that are naturally resilient to it.

35  
36 **CHAIRMAN KILGOUR:** Thank you very, very much. I think we're  
37 going to have to move ahead to Other Business and hope that we  
38 can circle back to the CRCP grant, and so Corky came prepared  
39 with a couple of things to add under Other Business, and so  
40 let's get to them.

41  
42 **OTHER BUSINESS**  
43 **DISCUSSION OF DECLINE OF NESTING OF THE KEMP'S RIDLEY SEA TURTLE**

44  
45 **MR. PERRET:** Thank you, Morgan. I appreciate you giving us the  
46 time. There has been some documentation and papers presented  
47 and so on and so forth about the decline in the number of Kemp's  
48 nesting at Rancho Nuevo and the beaches down in Mexico, and

1 there's been different hypotheses as to what's going on. One is  
2 the BP spill, and my former major professor recently came out  
3 with a peer-reviewed scientific paper relative to carrying  
4 capacity of the Gulf relative to Kemp's and so on and so forth.

5  
6 We really need a good stock assessment on the Kemp's. Now, we  
7 had some handouts, and do all of the members have the handouts?  
8 I guess where I was going, or we were going, is some of the  
9 shrimp committee members have been discussing this, and now I've  
10 lost my motion.

11  
12 We are extremely concerned about this decline in nesting of the  
13 Kemp's, and there is definitely a need for a good stock  
14 assessment on Kemp's ridley sea turtles, and, with that in mind,  
15 I would like to offer a motion on behalf of the Shrimp Advisory  
16 Panel that would go to the Gulf Council.

17  
18 **My motion is that, given the unexpected substantial declines in**  
19 **nesting activity in Mexico in recent years, there is a critical**  
20 **need for a stock assessment update for Kemp's ridley sea turtles**  
21 **that should be performed by competent sea turtle experts. This**  
22 **assessment should address, among other things, if, how, and to**  
23 **what degree density dependence and the 2010 Deepwater Horizon**  
24 **spill may have contributed to this decline. That's my motion.**

25  
26 **CHAIRMAN KILGOUR:** Is there a second to the motion?

27  
28 **AP MEMBER:** I will second it.

29  
30 **CHAIRMAN KILGOUR:** All right. Is there discussion on the  
31 motion?

32  
33 **MR. PERRET:** Well, again, the shrimp industry has made great  
34 sacrifices, with TEDs in the nets, and that certainly has helped  
35 to contribute to the reduction in take of the Kemp's, as well as  
36 other sea turtles, and now, with this recent decline in the last  
37 few years, we're extremely concerned about this, and we're  
38 trying to find out if this may be the reasons, and also the need  
39 for a stock assessment at this time, especially since this  
40 species seems to be -- The nesting seems to be declining.

41  
42 **AP MEMBER:** I certainly agree with Corky. With this decline --  
43 Contrary to popular belief, the shrimp industry is very  
44 interested in sea turtles. We do everything we can to protect  
45 them, but, with this decline, the problem is we don't know, and  
46 nobody knows, why these turtles are declining, the nesting, and  
47 we need to find out.

1 We need to find out not only for our industry, but for  
2 everybody's industry. There could be a hundred different things  
3 causing this, or an aggregate of a hundred things causing it,  
4 but we need to find out, and we need to fix it, if it's  
5 something to do certainly with the shrimp industry.

6  
7 We will do what we can to fix it, and I heard last night that it  
8 could be water temperature, or it could be anything. It could  
9 be stress that is preventing the turtles to nest every two  
10 years, like they normally do, and, instead, they're extending it  
11 out to three to four years, and so we just don't know, but a  
12 stock assessment will certainly, I think, help provide answers  
13 to that, and, maybe by the time we get something, we'll know  
14 more about it, or the natural occurrence of it, and so I  
15 certainly support what Corky was saying. Thank you.

16  
17 **MR. HICKMAN:** I agree, and I would support that. I will say  
18 this is something that I've seen in the last ten years of  
19 spending a hundred days in the Gulf of Mexico. We fish a lot of  
20 Sargasso weed, or weed lines, and the amount of plastics -- The  
21 amount of marine debris in our weed lines has increased by  
22 hundreds of percent.

23  
24 We went through a big period of drought, and now, all of a  
25 sudden, we're going through a period of major flooding across  
26 the whole North American continent. Our group, the Galveston  
27 Professional Boatmen's Association, started a deal this year.  
28 Part of our fishing rodeo is we're doing a balloon rodeo. The  
29 top captains get rewarded by picking up the most balloons.  
30 You've got to document it and take pictures of the balloons. I  
31 picked up thirty-three balloons in one day. These balloons are  
32 from graduations and weddings and deaths, however people  
33 celebrate whatever they do, and they let these balloons go.

34  
35 They all end up in the Gulf of Mexico, and a turtle is not a  
36 smart animal. A turtle will eat anything. We see these  
37 juvenile turtles on these weed lines, and they are chewing on  
38 plastic. Plastic gets in their intestines, and it absolutely  
39 kills them.

40  
41 The amount of marine debris has exploded in all of our oceans,  
42 and the turtles are eating it, and there needs to be more  
43 research done on how many of these turtles are dying from this  
44 stuff, and so our deal is, at the end of the year, Ocean  
45 Conservancy, and some other folks that have helped us sponsor  
46 this balloon rodeo, the top captains get cash prizes for picking  
47 up the most balloons. They love balloons, for whatever reason.

1 We have got videos of untangling the balloon strings from their  
2 little flippers and all this stuff, and it's a huge impact, and  
3 we really need to look at the marine debris connection to this  
4 decline in turtles. It's a big deal.

5  
6 **MR. BROOKER:** Scott mentioned Ocean Conservancy, who I  
7 represent, and we've had the international coastal cleanup going  
8 for more than thirty years, and it happens every third Saturday  
9 in September, and so it's coming up next weekend, and so you can  
10 go sign up for a cleanup, if you would like, but turtles go  
11 after balloons because they look like jellyfish, which is a  
12 predominant food of theirs.

13  
14 Just to the point of marine debris and plastics, I wanted to  
15 give you a statistic, and that is that, every year, nine-million  
16 metric tons of plastic goes into the oceans, and that's an  
17 amount that would be equal to one dump truck filled with garbage  
18 every second of every minute of every hour year-round, and so  
19 it's a staggering amount of debris that, obviously, we need to  
20 be doing something about for turtles, and for all of us, really.

21  
22 **MR. DELANEY:** If I could just add something to it, I had sent a  
23 couple of slides that I think I saw up there briefly, and it's  
24 just to give everybody a picture of just how severe the decline  
25 has been, and I got this data from Jamie Pena, who has been  
26 running the Rancho Nuevo project for many, many years, with a  
27 lot of people helping him, of course, but I don't know if those  
28 slides can be put up again, but this is the latest update on the  
29 2019 season.

30  
31 I guess the second slide probably shows it graphically, and it's  
32 the easiest to see what's been going on. We went through a  
33 whole period of time of exponential increase in the population,  
34 and then we had some major disruptions, perhaps coincidentally,  
35 post-2010 Deepwater Horizon, and we've had some major  
36 fluctuations in the last two years, just a massive decline in  
37 the nesting, and so we need to get to the bottom of this.

38  
39 The shrimp industry is held responsible for sea turtle bycatch,  
40 and the status of the population is an important factor in the  
41 consideration of what measures are applied to the shrimp  
42 industry, and so we're very interested in getting to the bottom  
43 of this, and so I appreciate the motion.

44  
45 **MR. PERRET:** Any time I had someone come before me or a group or  
46 a council or commission that I was on with a proposal for any  
47 type of study, probably one of my first questions was how much  
48 will it cost, and my best guesstimate, talking to people that

1 have done this type of thing, and are involved with this type of  
2 thing, was somewhere in the neighborhood of \$250,000 to  
3 \$300,000, and so that's a ballpark figure.

4  
5 With the amount of money that we've spent on a lot of other  
6 things, I think it's a relatively small amount for something  
7 that is so important and that needs to be done, and so thank  
8 you.

9  
10 **AP MEMBER:** When was the last time that stock assessment was  
11 performed? Do we know the answer to that?

12  
13 **CHAIRMAN KILGOUR:** Benny.

14  
15 **DR. GALLAWAY:** The last stock assessment was conducted in 2013,  
16 and it was published in 2016, along with an update, which  
17 supplemented -- It was a special issue of *Gulf of Mexico*  
18 *Science*, and so the data go through 2013, and the stock  
19 assessment was 2016, and it ended on the fact that it could be  
20 density dependence and it could be other things, but there was a  
21 path forward as to how you might resolve that.

22  
23 **CHAIRMAN KILGOUR:** All right. Any more discussion, or are we  
24 ready to vote on the motion? Did the Coral SSC or Coral AP want  
25 to join this motion, or is this okay with it being a shrimp --  
26 The Coral AP wants to join this motion, too. Coral SSC, do you  
27 have any thoughts?

28  
29 **MR. SCHMAHL:** I have no objection.

30  
31 **CHAIRMAN KILGOUR:** Okay, and so it will be a motion from the  
32 whole group. All right. **Given the unexpected substantial**  
33 **declines in nesting activity in Mexico in 2018 and 2019, there**  
34 **is a critical need for a stock assessment update for Kemp's**  
35 **ridley sea turtles performed by competent sea turtle experts.**  
36 **The stock assessment should address, among other things, if,**  
37 **how, and to what degree density dependence and the 2010**  
38 **Deepwater Horizon spill may be contributing to this decline.**  
39 J.P.

40  
41 **MR. BROOKER:** Is it worth mentioning, somewhere in here, the  
42 relevance as to why this is coming from the Shrimp AP and the  
43 Coral AP? Something about tying it back to the fishery somehow  
44 I think might be valuable to the council.

45  
46 **CHAIRMAN KILGOUR:** Okay. Corky.

47  
48 **MR. PERRET:** I just suggest that we add, after what we heard

1 from these guys on this end of the room about plastic and other  
2 things -- What degree density dependence and the 2010 Deepwater  
3 Horizon spill and other factors, to take other things, and so I  
4 made the motion, and I would like to have --

5  
6 **MR. DELANEY:** It already says that. It says "among other  
7 things".

8  
9 **CHAIRMAN KILGOUR:** So are you wanting specifically marine  
10 debris?

11  
12 **MR. PERRET:** It's in there. That's fine. Thank you.

13  
14 **CHAIRMAN KILGOUR:** Corky, I overhear from the Coral AP that  
15 marine debris particularly.

16  
17 **MR. HICKMAN:** Marine debris would be good in there.

18  
19 **CHAIRMAN KILGOUR:** It would be nice to address specifically.

20  
21 **MR. PERRET:** I will go with that. That's a specific thing and  
22 go ahead.

23  
24 **CHAIRMAN KILGOUR:** Okay. **Could you add "and marine debris"**  
25 **after "spill"?** Okay. Is everyone comfortable with this? Could  
26 you change it to "density dependence, the 2010 Deepwater Horizon  
27 spill, and marine debris"? Thank you. **Is there any opposition**  
28 **to this motion? Seeing none, the motion passes.** Was there  
29 something else under Other Business? Were there two things?

30  
31 **DISCUSSION OF BEGINNING CORAL AMENDMENT 10**

32  
33 **MR. HICKMAN:** Western Dry Rocks, but we already kind of  
34 discussed that. **I would like to make a motion for the council,**  
35 **for the Gulf Council, to start working on Coral Amendment 10.**

36  
37 **MR. PERRET:** Was that on the agenda?

38  
39 **MR. HICKMAN:** I put it in Other Business, and that can be a  
40 Coral AP motion.

41  
42 **CHAIRMAN KILGOUR:** Okay.

43  
44 **MS. KRUEGER:** I will second it.

45  
46 **MR. PERRET:** Just give me some rationale of why.

47  
48 **MR. HICKMAN:** I was going to say this earlier, because you all



1 were talking about how corals were connected to fish, and it's  
2 real simple. More coral equals more fish. Less coral equals  
3 less fish, and we need to be protecting some of these sensitive  
4 coral areas in the Gulf, and some of these are deepwater corals,  
5 areas that aren't shrimped, but they can be affected in the  
6 future, and it would be good to protect these areas as we --  
7 Like, currently, we've got the largest harvest of deepwater  
8 grouper that we've ever had, because we've had a lot of effort  
9 shift from the red grouper fishery. These are areas that are  
10 essential fish habitat, and we need to make sure that we protect  
11 these corals.

12  
13 **CHAIRMAN KILGOUR:** That's a Coral AP and Coral SSC motion.  
14 Corky.

15  
16 **MR. PERRET:** Scott, I agree with that, and I agree with what you  
17 said earlier, because I'm very familiar with offshore oil and  
18 gas platforms, and the removal of these platforms is removing  
19 fish habitat, and now, hopefully, most of them are going into  
20 designated artificial reef zones, and so I know that's not  
21 always the case, but, if they are -- Well, I would assume, if  
22 indeed this goes forward and the council pursues this, that the  
23 use of oil and gas structures certainly should enhance the  
24 growth of coral, and so that will be, I'm sure, in Amendment 10.

25  
26 **MR. HICKMAN:** We just finished a two-year -- Well, it's got one  
27 more year of work with Benny Gallaway on a BOEM project that  
28 studies fisheries tied to oil and gas platforms, and we're  
29 hoping, in the next twelve months, that we'll be able to come to  
30 the Gulf Council and give a presentation on that, but there's  
31 already been some really useful information come off of that for  
32 amberjacks and some of the other things that the council is  
33 dealing with, but Coral Amendment 10 can definitely look into  
34 some of the corals on the natural gas platforms, oil and gas  
35 platforms.

36  
37 **MS. BOSARGE:** Scott, for people that aren't as familiar with  
38 what you mean by Coral Amendment 10, these two groups came  
39 together, these two APs and the SSC, and we had a whole suite of  
40 coral sites that the coral experts wanted to look at closing,  
41 and we came together, and we prioritized things, and we said,  
42 you know, we can come up with a compromise, and here is our -- I  
43 think it was fifteen high-priority areas, and we walked out of  
44 that meeting thinking, okay, we feel good about that, and we  
45 hadn't closed the bulk of the hard bottom in the Gulf of Mexico  
46 to certain gear types.

47  
48 We don't want to get it in as shrimpers, and I will grant you

1 that, but there's more fishermen than just shrimpers, and so  
2 what you're proposing is bring all the rest of those sites back  
3 onto the table and look at closing those?  
4

5 **MR. HICKMAN:** As we get more multibeam information from a lot of  
6 these new surveys and a lot of this new stuff that we're doing  
7 in the Gulf right now, and a lot of it is deepwater stuff, and  
8 it's not where you all are shrimping. It's deepwater habitat,  
9 and those sites need to be looked at as well.

10  
11 **MS. BOSARGE:** But you and I both know there's fishermen that  
12 fish those deepwater sites. Generally speaking, your longline  
13 guys fish deeper than your other reef fish fishermen, and then  
14 you've got people that fish even deeper than that. You've got  
15 deep-droppers, and you've got people like that, and so I know we  
16 want to protect everything by drawing a circle around it, but  
17 you've got to think about the fishermen too, and I really felt  
18 like the fishermen and the coral people came together and came  
19 up with a compromise, which was that fifteen sites, and to come  
20 back just a couple of years later and put everything back on the  
21 table -- That just, to me, breeds ill will.

22  
23 **MR. HICKMAN:** There is a lot of new stuff that they're finding,  
24 and the fishermen, the longline fishermen that I've talked to,  
25 are not dropping their gear over the top of the corals anyway,  
26 and, as we all talked about earlier, how we did it with the  
27 Flower Garden Banks is we weren't making big boxes. We drew  
28 smaller things where people could still fish around them. They  
29 don't want to fish up in that sticky bottom. They want to fish  
30 on the edges.

31  
32 **MS. BOSARGE:** But you and I both know that the bottom longliners  
33 are right now having some issues with the Flower Gardens people,  
34 because they thought they would still have historical access to  
35 those crowns, to those tops of those corals, where they have  
36 historically fished down there, over there, without doing huge,  
37 significant damage to them.

38  
39 We just cut off that area to those fishermen, or we will when it  
40 goes through, and so what you're proposing is now we go and get  
41 all the rest of these sites and cut those off to them too,  
42 because that is what will happen, Scott, and we have to leave  
43 them -- If you could show me that 90 percent of this coral was  
44 devastated due to bottom longlines, I could go with you, but you  
45 and I both know that that's what we're talking about doing.

46  
47 **MR. HICKMAN:** Well, I don't believe that to be the case, but I  
48 think that it's reevaluate some of these other sites that

1 they've found and some of the new data.  
2  
3 **DR. BROOKE:** Those fifteen sites came from somewhere, and there  
4 was an arbitrary number, as far as I can tell, and so the number  
5 of sites was cut down to fifteen, and we used those in  
6 evaluation, and a lot of these sites -- When we talk about deep,  
7 we mean 400 meters and deeper, and I don't know anybody, apart  
8 from the royal red shrimpers, that are fishing that deep. For  
9 what?  
10  
11 **MS. BOSARGE:** For reef fish. They're fishing out there, and  
12 we've got charter boat guys that fish out there, and you've got  
13 commercial guys that fish out there.  
14  
15 **DR. BROOKE:** They are going after the blackbelly rosefish at 800  
16 feet, and is that what you're talking about?  
17  
18 **MS. BOSARGE:** No, the reef fish that we normally target.  
19  
20 **DR. BROOKE:** They're not as deep as some of these. The shelf  
21 edge areas are fished by the bottom longliners, but we're  
22 talking about reefs that are a thousand meters and deeper, and  
23 so a lot of the areas are not currently fished, and some are,  
24 but, you know, there's a ton of hardbottom habitat in the Gulf  
25 of Mexico, and we're just looking at identifying areas that we  
26 think are particularly ecologically valuable and drawing tiny  
27 little boxes around them, and this was an amendment that was  
28 proposed by Tom Frazer back when we did Coral Amendment 9, to  
29 start with Coral Amendment 10, to at least consider some of  
30 those areas that were cut out of our original list.  
31  
32 **MR. HICKMAN:** Some these areas of this habitat, this deepwater  
33 stuff like that, I don't know anybody that is fishing that deep,  
34 but these reefs are a thousand years old. I mean, these things  
35 grow super, super slow, and I see the value in protecting them,  
36 and so that's why I made the motion.  
37  
38 **MR. DELANEY:** I am just curious, and I don't see any graphics,  
39 and so I don't know what depths we're talking about, but does  
40 this have any effect, and maybe, Leann or Steve, you could  
41 answer this, but will this cause us, the shrimp industry, to  
42 engage on what impacts this might have on the royal red shrimp  
43 fishery, which fishes very deep?  
44  
45 **MR. BOSARGE:** Not that I know of, Glenn. They are not quite  
46 that deep, when she's talking about a thousand meters and more.  
47 That is deep.  
48

1 **MR. DELANEY:** A thousand meters. Okay. Thanks. They fish as  
2 much as a thousand feet, I think.

3  
4 **MR. BOSARGE:** Yes, correct.

5  
6 **AP MEMBER:** I do have a question, Scott and Sandra. If we're  
7 not fishing, or longlines are not fishing on them, what are we  
8 protecting them from? If it's too deep for any fishing, what  
9 are protecting them from?

10  
11 **DR. BROOKE:** Well, it's not too deep for some emerging  
12 fisheries, like the blackbelly rosefish for example, and, just  
13 to clarify, there are some of the sites that we're looking at  
14 that are less than a thousand meters, and so they do come within  
15 your royal red fishing zones.

16  
17 We dealt with that last time, and there was an exemption for the  
18 royal red fishermen that were engaged in one of our target  
19 areas, and so we have worked with the industry to try and  
20 compromise, and they are still allowed to work in that area, and  
21 so the idea is that, because these areas are so vulnerable, it's  
22 really easy to destroy them, and they take a very, very long  
23 time to come back, if they do, and the biggest impact to deep-  
24 sea corals globally is fishing.

25  
26 Now, we don't have those kinds of fishing industries in the Gulf  
27 of Mexico, and so our sort of philosophy is that, if it's not  
28 going to impact fisheries, and if we can protect some of these  
29 highly-important ecological areas, and we're not asking for  
30 every stick of coral in the Gulf of Mexico, then now is a good  
31 time to do it, before industry is invested in a new fishery that  
32 might pop up, and so I don't know if that makes sense.

33  
34 **MR. HICKMAN:** The Gulf Council is doing a current EFP process  
35 for the golden crab fishery to come into the Gulf, and their  
36 traps, if they are done right, are 2,000-pound traps. If you  
37 could just say there was no current in the Gulf, and you could  
38 guarantee that that trap wouldn't go down on top of a thousand-  
39 year-old coral -- You know, there are threats currently, things  
40 being worked through, and so, if we could go in and the council  
41 would look at some of these spots, and it's okay to want to  
42 protect this and this and this and these big areas of these  
43 deeper-water reefs, and we don't want to drop golden crab traps  
44 on top of these things.

45  
46 There are emerging fisheries that are coming up that could be a  
47 threat in the future, and you've got to think of it like the  
48 giant sequoias in California. The guys that first started

1 cutting those things down were like, well, whatever. You look  
2 at them like giant sequoias, and they're a thousand years old,  
3 and so why not protect them from future threats? Why shouldn't  
4 we protect a sequoia forest from future threats? That's how a  
5 lot of people look at these reefs.

6  
7 **AP MEMBER:** I am certainly not against protecting anything, but  
8 we're still reluctant to take something away that's not  
9 happening. Maybe the threat gets closer or there's an example  
10 or something, but I'm just not fond of trying to take something  
11 away that is not being impacted yet.

12  
13 **MR. HICKMAN:** As you see, I was very pro in doing the right  
14 thing for the shrimp industry on this current expansion and  
15 making it work, and I like the shrimp industry. I like eating  
16 shrimp, and I want to see those people keep working. This is  
17 something that is not going to affect the shrimp industry, but  
18 it may be affected by something else later, and so that's why I  
19 made the motion, and I think that we should look at protecting  
20 some of these deepwater habitats.

21  
22 **AP MEMBER:** A question for Sandra or Scott. Is there  
23 preliminary ROV data on these things, and, secondly, are these  
24 lophelia reefs, primarily, that we're talking about?

25  
26 **DR. BROOKE:** All of the areas that we proposed, all forty-two or  
27 forty-seven of the areas that we proposed as candidates back  
28 during Coral Amendment 9, the stipulation was that we had to  
29 have visual evidence that there are corals there. There is a  
30 lot more areas that we know are predicted to have corals, but  
31 those were not included in those sites, and so, of that suite,  
32 yes, we do have actual data that they're there, and it depends  
33 on the depths. Anything from about 400 to 700 meters could be  
34 lophelia.

35  
36 We also included mesophotic depths under the deep-sea coral,  
37 because of NOAA's designation, and so there were some of the  
38 pinnacle sites that were fifteen meters to 150 meters, I think,  
39 somewhere in that range, and then there were the ultra-deep  
40 sites, the madrepora and the very long-lived octocorals, that  
41 were included, and they were deeper than a thousand meters, and  
42 so the whole range.

43  
44 **MS. KRUEGER:** Granted, the Gulf Council can only regulate  
45 fisheries, but there is the potential for deep-sea mining of  
46 rare earth metals, and so this would then kind of create a  
47 consultation process, and then it could also cause those sorts  
48 of explorations to avoid those areas, to avoid that

1 consultation, and so that's another possible thing.

2  
3 **CHAIRMAN KILGOUR:** I am going to cut in front of you real quick,  
4 but so there were forty-seven areas, and it was divided into --  
5 It ended up being fifteen areas with regulations, with an  
6 additional eight that did not have regulations, but I would like  
7 to highlight that a lot of the areas that are remaining on the  
8 table for consideration in Coral 10 are currently being  
9 considered for the Flower Garden Banks expansion, and so there's  
10 a lot of overlap there.

11  
12 This also doesn't preclude changing some of the boundaries from  
13 some of the existing HAPCs, which are under consideration in  
14 Coral Amendment 10 to more closely mimic the coral outline, and  
15 so I want to put that out there, and, lastly, the Gulf Council  
16 made a motion, at the August 2018 meeting, that when Coral  
17 Amendment 10 began work again that they wanted it to -- The  
18 council wanted it to be like Coral 9 and have a meeting of the  
19 Shrimp and the Coral APs and SSC come together to discuss those  
20 boundaries, so that everybody is on the same page on what is  
21 being proposed and what the rationale is, and so I am hoping  
22 that the council will continue to do that for Coral Amendment  
23 10, but I just wanted to let everyone know that that motion was  
24 made, and it is existing. When Coral 10 starts, there should,  
25 hopefully, be another joint meeting to kind of look at those  
26 boundaries together. Leann.

27  
28 **MS. BOSARGE:** Just a few statistics, because Scott was talking  
29 about protecting this area. The Gulf of Mexico federal waters,  
30 and that's what we regulate, right, is 243,926 square miles.  
31 Hard bottom, of that almost 250,000 square miles, hard bottom is  
32 12,131 square miles, and so less 5 percent of that entire  
33 federal waters is what -- I am sorry, Shrimp AP, but I'm going  
34 to talk about the reef fish fishermen, the commercial reef fish  
35 fishermen, are working.

36  
37 If you look at the square miles of the Florida Keys Sanctuary,  
38 and G.P.'s sanctuary, the Flower Gardens Sanctuary, and then the  
39 HAPCs that the council has in addition to those, we already have  
40 50 percent of that that is off limits to a whole host of  
41 commercial gear.

42  
43 We have shoved the commercial fishermen out of there with their  
44 traditional gears, and it's really not efficient to go out there  
45 with traditional hook-and-line and try to commercial fish.  
46 There's a reason that we don't use traditional hook-and-line to  
47 commercial fish.

1 Now, yes, we can go down this road, but I think, at some point,  
2 we need to learn lessons from the South Atlantic. That guy you  
3 talked about that was over here in the Gulf, that was doing that  
4 EFP -- In the South Atlantic, they have closed so much area,  
5 coral area, that they have pushed those fishermen into very  
6 small spots. That guy that golden crabs, he's got just a  
7 handful of sites that he can fish.

8  
9 That is not healthy for the ecosystem. When you do that, you  
10 put all the fishing pressure on a couple of little spots, and  
11 what happens? You fish them down. You fish them out, because  
12 you can't spread your effort out and pick a little here and a  
13 little here.

14  
15 It would be like if I had three basil plants at home that I  
16 picked leaves off of, and I said, well, I can't pick them off of  
17 those two anymore, but I'm going to cook with basil just as  
18 much, and I'm going to have no leaves left on that third basil  
19 plant, because I had to pick them all, and do you see what I'm  
20 saying?

21  
22 We need to be cognizant of that. That's why those guys are over  
23 here trying to find a new fishery in the Gulf and fish for  
24 golden crabs over here, but it's not healthy for our Gulf  
25 ecosystem either when we keep compressing that effort into just  
26 a handful of spots, and you think it's a huge area, but, when  
27 you've already got half of it closed down, it's getting smaller  
28 and smaller, and so I have concerns.

29  
30 **MR. HICKMAN:** I concur with you, Leann, on a lot of those  
31 points, but I will say that I work with corals as well as  
32 fisheries, and, as a fisherman, and I travel all over the world  
33 fishing, our coral reef systems are going away so rapidly that  
34 it's scary, and I have two young children, and I don't want my  
35 kids to live in a world with no coral reefs.

36  
37 If we could be proactive on some of these areas, especially some  
38 of these old coral habitats, it's the right thing to do, and  
39 it's always a compromise. Everything is a compromise, and I  
40 think Coral Amendment 10 will be that same compromise, and so I  
41 at least want to see them start working on it and have  
42 discussions on it, some of this deepwater stuff. I see the  
43 value in it.

44  
45 **CHAIRMAN KILGOUR:** I would like to just -- I like your basil  
46 analogy, I do, but I would like you to think about what if it  
47 took a thousand years to grow that one basil plant and you just  
48 threw a crab trap on it and it's gone now. That is, I think,

1 where a lot of the coral biologists are coming from, is that it  
2 takes a thousand years to grow that small little basil plant,  
3 and one crab trap can wipe it out, and so it's really important  
4 that, if there are these areas that need protection, that they  
5 get the protection they need, and so I think it's a discussion  
6 worth having. Sandra.

7  
8 **DR. BROOKE:** Just a comment on the South Atlantic Fishery  
9 Management Council areas. The council worked with the golden  
10 crab fishermen, and they got all of their historical fishing  
11 areas opened to them, just to make that comment. They did.

12  
13 **MS. BOSARGE:** They are trying to open some of the areas back up  
14 to them.

15  
16 **DR. BROOKE:** I know, but those are new areas. They are not  
17 historical areas, and they want to go into areas that they don't  
18 know what is there, and that's why there is a question about it,  
19 and they are coming into the Gulf not because that option has  
20 been closed in the South Atlantic, because it hasn't. It's  
21 still open for discussion, and it's pending.

22  
23 I don't know when it's going to stop being pending, but it is  
24 pending, and so they're coming over here because the demand for  
25 the fishery has increased, and there used to be a historical  
26 golden crab fishery in the Gulf, and they used to fish up by the  
27 lophelia banks, by Many Mounds, and now they want to come over  
28 and do experimental fishing, which is fine, but it's not like  
29 they have been -- It's not because they have fished out their  
30 areas and they've got nowhere else to go. I think it's a bit  
31 more complicated than that.

32  
33 **MR. SCHMAHL:** I just wanted to kind of reinforce the -- Back  
34 when we originally identified those areas of concern, in I think  
35 it was 2014 or so, and we had the coral group, and we put  
36 together that -- It ended up being forty-seven sites around  
37 that, and we had a lot of discussion about that, and, actually,  
38 we were trying to be reasonable, at that time.

39  
40 There were actually a lot more than that that could have been  
41 identified, and, with the modeling that shows that you have  
42 suitable habitat, it could be extremely large areas, and so,  
43 when we came forward with that proposal of forty-seven, we had  
44 pared that down quite a bit, and so, when the Gulf Council cut  
45 that back to fifteen, it seemed to me to be -- It was a  
46 compromise, but I felt that that was not really based on  
47 science.

48



1 If you want to base it on science, I would still argue that  
2 those forty-seven sites are still extremely, extremely  
3 important, and the ones that were left out need to be looked at  
4 again.

5  
6 **MR. PERRET:** When you propose things, you're not giving anything  
7 up. You are gaining something at the loss of another group, and  
8 that is just what has happened with fishery resources. You are  
9 going to gain coral areas, and I am all for it. If indeed the  
10 coral is there, we want to protect the coral too, and so you're  
11 not giving anything up, yet the shrimp industry is losing area.  
12 Now, the shrimp industry doesn't want to trawl on coral, but the  
13 coral areas need buffers and so on and so forth. We have seen  
14 that. Don't think that you're giving. You are gaining, is what  
15 you're doing.

16  
17 **MR. SCHMAHL:** I work for the government, and I work for the  
18 people of the United States of America, and I think that the  
19 people of the United States of America are giving something up  
20 if we lose these coral resources that are so significantly  
21 important.

22  
23 **MR. SAMMARCO:** I have a question. This is a technical question  
24 for the fishery people. How accurate are the guys that work in  
25 deep water, when they drop their gear? I mean, they must have,  
26 obviously, deep sounding information, but do they know where  
27 they are dropping their stuff? I don't know. Is it accurate  
28 within 5 percent or 10 percent, either trawling gear or traps or  
29 whatever?

30  
31 **MS. BOSARGE:** I won't speak to traps, because that's not my  
32 industry, but, yes, the royal red guys, which are the deepwater  
33 shrimpers, they are very accurate. They have to be, because  
34 their life depends on it. The amount of gear that they have out  
35 and the amount of cable that they have out, if they were to hang  
36 up in that coral -- First off, you're way offshore, and so it's  
37 rough. It's not like being next to the beach.

38  
39 When you hang up, what happens is that boat starts to turn, and  
40 one side of it starts to go down, and so you start to list. If  
41 you are in any kind of sea and you hang up like that, just like  
42 that, you can roll that boat over, and you have cost you and  
43 your crew your life, and so do they know where they're putting  
44 that gear out? Yes, they better, or it will cost them dearly.

45  
46 **MR. BOSARGE:** Just to clarify that, when they spool their cable  
47 on their winch, you have to stick it through a hole in the drum  
48 to start spooling, and you normally put a clamp on that cable.

1 Those royal red guys take the clamp off. That way, if they get  
2 in that trouble, they can let it go, because, otherwise, it's  
3 going to take them down.

4  
5 **MR. HICKMAN:** Speaking about deepwater fisherman, and I'm not a  
6 deepwater fisherman, and I'm not a longliner, but my best friend  
7 lands over 40 percent of the deepwater IFQ quota in the whole  
8 Gulf of Mexico, and he has multiple longline boats.

9  
10 Do they fish around some sticky areas from time to time? Yes,  
11 but they don't get their gear back if they do, or, if they do,  
12 they damage the bottom. Do they fish the flats and in the mud  
13 and all this other stuff? Sure, and they lay down ridges, and,  
14 at different times of year -- These fish do move around.  
15 They're on the flats, and they're up next to the sticky bottom,  
16 and they do all kinds of stuff, but it's the captains that know  
17 what they're doing to not lay that line in that bottom.

18  
19 Does it happen? Do we have ROV data with longline in some of  
20 these areas? Yes, we do. Not a tremendous amount, but we do  
21 have some of that data. Would it be good to keep them out of  
22 that? Would Buddy be happy with me if I was saying we want to  
23 protect more -- They want to make a living, and I get it, but do  
24 we need to protect -- There is a compromise. There is a give-  
25 and-take in all of this.

26  
27 You do have to have habitat long-term to be able to have these  
28 fisheries, to be able to catch them. If you've got more fish on  
29 that bottom, you're going to have more fish around it on the  
30 flats, and it's just -- It's a spillover effect, and it works.

31  
32 **DR. BROOKE:** Just to your question, Paul, about the traps, we  
33 have talked to the golden crabbers about this, how well they  
34 know where they are putting their lines, and, of course, they  
35 try and avoid the corals, but you're talking about a long line  
36 of traps in a very high current, and they admit that -- They  
37 have some control over where the traps go, but not 100 percent.

38  
39 **AP MEMBER:** In the Atlantic, I'm sure, in the Gulf Stream.

40  
41 **CHAIRMAN KILGOUR:** All right. I think we've had a lot of great  
42 discussion on this. It's a Coral AP and Coral SSC motion.

43  
44 **UNIDENTIFIED:** One quick comment. I live around here, and I see  
45 a whole bunch of fish, and I come here and I thank NOAA and  
46 National Marine Fisheries -- There is no shrimp, and we've been  
47 saying this for four or five years, and you think, when you  
48 remodeled and moved from the other office, you could have found

1 a NOAA/National Marine Fisheries poster, which I had in my  
2 office, which was beautiful, of shrimp. That's all I have to  
3 say.

4  
5 **CHAIRMAN KILGOUR:** Let's vote on this motion. **Any opposed to**  
6 **the motion? The motion carries with no opposition.** Basher, can  
7 you do it in five minutes?

8  
9 **DR. BASHER:** I can do it in five minutes.

10  
11 **CHAIRMAN KILGOUR:** I am just going to make a note that I have to  
12 leave at 5:30, and so, if I leave, forgive me.

13  
14 **DR. BASHER:** It's ten minutes. It won't take long.

15  
16 **MR. SCHMAHL:** Morgan, I apologize, but I'm going to have to  
17 leave like right at five, just to catch a flight.

18  
19 **CORAL REEF CONSERVATION PROGRAM UPDATE**

20  
21 **DR. BASHER:** Thank you, everyone. I will be very brief, just  
22 because I know that everyone is tired, and so I am working as a  
23 Coral Reef Biologist with the Gulf Council since last year, and  
24 so I will give you a brief update on the Coral Reef Conservation  
25 Grant that we have.

26  
27 The grant, in the current cycle, is focused on -- It's like a  
28 three-year proposal, and it's focused on endangered coral  
29 species, which are addressing threats to the coral reef in terms  
30 of climate change and fisheries and also how these things are  
31 affecting the coral reef ecosystem and associated fisheries in  
32 the Gulf of Mexico.

33  
34 The way we address these threats is by using decision-support  
35 tools, defined tools, engaging stakeholders throughout that  
36 process, and, also, doing some comprehensive scientific review,  
37 and also producing some learning tools or materials which can be  
38 used by everyone.

39  
40 Just to start, I know that everyone in this room knows that  
41 NOAA, in 2014, published a Federal Register notice that listed  
42 seven coral species as threatened under the Endangered Species  
43 Act, and so we developed several storyboards and tools which  
44 were developed as outreach materials to increase awareness about  
45 them for the general public.

46  
47 One of the goals of the proposal was to identify the baseline  
48 abundance of the distribution of the coral species in the Gulf

1 region and generate extensive Story Maps with a literature  
2 search for the current distribution, their life history  
3 information, and potential threats to the Gulf, through climate  
4 change or other means, and, also, create metadata and maintain  
5 those information in the portal, so that everyone can access it.

6  
7 I will just go through some of the outreach materials that we  
8 developed as part of this proposal, and so you can go to those  
9 links listed in this presentation, and you can do that later on,  
10 but I will just go briefly.

11  
12 There is a storyboard about life history and climate change  
13 impacts on the ESA-listed species, and there is a storyboard on  
14 the causes and consequences of the coral reef declines across  
15 the Gulf, and there is also individual threats to the corals  
16 listed in another storyboard.

17  
18 We also developed pamphlets as outreach materials for the ESA-  
19 listed species, and these can be downloaded from the website.  
20 We haven't made it public yet, because we plan to do -- Also,  
21 we're going to generate a booklet which can be used by divers,  
22 like a dive guide, and you can just flip it and see which corals  
23 are endangered and which coral is not endangered, and so we are  
24 planning to include some of the more common corals in this list,  
25 in a dive pamphlet, and that will be available very soon, and we  
26 are almost done finalizing the layouts.

27  
28 One of the outreach materials is we coordinated with federal and  
29 state agencies to host the ESA coral observation database, and  
30 this database was previously hosted by NOAA, and then they asked  
31 us to host it on our website, so everyone could access the  
32 information, because it was pretty much restricted before that.

33  
34 I will give a brief demo of what that database interface looks  
35 like. Once you open that link, it will show up, and this is the  
36 interface, and it gives the information of how to navigate the  
37 interface and use different functions. On the right, you can  
38 turn on and off different coral species, which ones you want to  
39 see and which ones you don't want to see, and, below here, it  
40 shows the numbers, and so, if you zoom in a particular -- Once  
41 you zoom into particular areas, it will show the number of  
42 observations in the particular visualization.

43  
44 You can also pick the individual points and see what type of  
45 coral it is and the data sources collected from where and also  
46 the depth ratio, and you can even search -- You can filter by  
47 year, like if you wanted to see boulder coral which is found  
48 from -- Like the range is 1993 to 2018, and so we are updating

1 the database like every year, and we get data from NOAA and  
2 other partners. You can filter data based on the year, also.

3  
4 Also, the recent HAPC areas, everything is shown in the map, and  
5 so it will be helpful for anyone who wants to explore to see  
6 what areas where the ESA corals are found and whether they are  
7 next to HAPC areas or close to areas. All of this information,  
8 we are planning to make it available, and you can download it  
9 from the server, and I will go into that detail a little bit  
10 later in the presentation.

11  
12 The next task of the proposal is documenting climate change  
13 affecting the health of the corals and the information -- We  
14 plan to do it by compiling different environmental and climate  
15 information that we have across the Gulf and put it into like a  
16 platform which could be used by users and managers and the  
17 public and also develop some spatially-explicit models  
18 incorporating climate change and information, and it should be  
19 published through different white papers and learning modules,  
20 to give the information on what we find out from these analyses.

21  
22 I think what we discussed earlier, like Morgan mentioned, that  
23 Coral 9 will be with NOAA in the next few weeks, and it will be  
24 published, and so it will be part of the report for the project,  
25 and another project we developed is the HAPC explorer, and you  
26 can go to the link and check that out. It's to explore defined  
27 HAPC areas and also download the Shapefiles for you to use, and  
28 we started doing some predictive models for the coral species,  
29 like particularly ESA species across the Gulf, and this is some  
30 of the areas which are predicted to be higher in presence, and  
31 we are validating the data with the current observation data  
32 from different sources, and this can be done for all seven coral  
33 species, ESA species.

34  
35 One of the things that I think has come up at this meeting is we  
36 need to update the information for the Coral 10, to know exactly  
37 which areas -- What is proposed is to identify the areas which  
38 are currently protected through defined regulations and whether  
39 that protection is working or not, and so we plan to do like a  
40 short study based on a literature search and data to find out  
41 hotspots of different areas, some managed area and non-managed  
42 areas, and compare the areas, like how the areas and the fish  
43 have different species distribution varied across the sites.

44  
45 For that, we plan to do -- Like use some data from Flower Garden  
46 Banks and like Steamboat Lumps and Madison-Swanson and the  
47 Edges, and these are like control sites of managed areas, and we  
48 also have some data from the South Texas Banks, and I will be

1 open to anyone, if any of you have any data for our non-managed  
2 sites which we could use, and it will be useful for us to do the  
3 comparison later on.

4  
5 As a part of the proposal, we also developed some deep-sea coral  
6 species storyboards, and we are -- When I started, I found that  
7 there is not much information that you can get from the NOAA  
8 website about deep-sea corals, and there is very brief  
9 information there, and so we plan to develop like a very  
10 detailed storyboard about what kind of information we know about  
11 each individual species.

12  
13 So far, we have done like four, and there is a few more on the  
14 way, and so this is all available online, and you can go and  
15 browse and see. If anyone wants to know more about some of  
16 these species, you could just browse them and see the  
17 information there.

18  
19 Also, as part of this project, after I joined, we created a new  
20 geospatial site to have the data from the council products, and  
21 that can be accessed from -- It's the same as NOAA, and so it's  
22 gmfm.com, and we will make available different  
23 geospatial products through this website, so anyone can get  
24 access it for free. We also have our internal server, which  
25 could be used to distribute the data, if you want to do any like  
26 extensive analysis, and we could give you log-ins to do the  
27 analysis on there.

28  
29 Finally, the coral portal is getting a new face and update, and  
30 this is like a long-time -- This is a new look for the coral,  
31 and I don't know whether you will like it. I will just go  
32 briefly through the website. This is the new coral portal  
33 website, and there is some different storyboards and tools and  
34 products that we have developed.

35  
36 These is also this, and, whenever we post something, it will  
37 come up here. It will also show what are the popular posts that  
38 people are reading through to look at our website, and you can  
39 also -- There is a new -- We are trying to create like a new  
40 resources page, where you can download different Shapefiles,  
41 which we have, and you can download those or you can link to our  
42 geospatial server. There is a link to that here, and so it can  
43 be a resource for you if you want to use it.

44  
45 As outreach materials, we have the pamphlets, which we could use  
46 to educate people about the ESA corals, and there are the new  
47 dive booklets, which we could also use, and the new coral  
48 portal, and I urge everyone to visit it and give me feedback, if

1 you have any, because we plan to make it publicly available  
2 after the next council meeting, and so, before that, if you have  
3 any feedback, just send that to me. Also, our geospatial  
4 server, which it could be used for important different layers  
5 into your maps.

6  
7 Some of the tasks we plan to do in the future are like continue  
8 developing explicit models with the climate change areas and  
9 climate change information also and include information about  
10 hurricanes, and, as I mentioned, compare the effectiveness of  
11 MPA and non-MPA sites based on the available data. By MPA, I  
12 mean managed sites, and there will be a few more storyboards and  
13 white papers coming out as part of this proposal. Thank you.  
14 Eight minutes.

15  
16 **CHAIRMAN KILGOUR:** Basher, you're my hero. Are there any  
17 questions for Basher? Leann.

18  
19 **MS. BOSARGE:** No, but I've got to clarify one thing at some  
20 point.

21  
22 **CHAIRMAN KILGOUR:** All right. If there are no questions for  
23 Basher, have at it.

24  
25 **MS. BOSARGE:** We had a discussion earlier, and I had to refresh  
26 my memory on that closure in the South Atlantic, and so I'm  
27 going to read to you verbatim from their amendment. This is  
28 about golden crabbers in closed areas. When the Stetson-Miami  
29 Terrace CHAPC was created, it restricted access for the golden  
30 crab fishermen in the Northern Zone. Golden crab fishermen  
31 requested that their historic access to the fishery be  
32 reestablished in the Northern Zone at an advisory panel meeting  
33 in January of 2013. There was some concern that the new closed  
34 areas had limited fishable areas for the fishery.

35  
36 Specifically, fishermen wanted historic information from some  
37 different places, and it talks about what they wanted analyzed  
38 and things like that, and the South Atlantic Council is -- They  
39 held up to their end of the bargain, because there was also some  
40 areas for rock shrimpers over there that were historical grounds  
41 that were closed, and they said, when they finally passed that  
42 amendment that closed a bunch of that area, they said, because I  
43 was about this far pregnant, and I remember it distinctly when I  
44 was there, but they said, look, you know -- Because most of what  
45 they closed is based on modeling and not actual -- Here, in the  
46 Gulf -- Yes, they used modeling to close areas in the South  
47 Atlantic, and it says it in here.

48

1 In the Gulf, we actually used documented eyes on the coral, ROV  
2 or whatever, to close areas, and they said, all right, shrimpers  
3 and golden crabbers, we're going to close it, but we promise you  
4 that we'll go back and look at it after a certain number of  
5 years, when we have some more research that we can look at and  
6 documentation.

7  
8 That is in fact what they are going to do now, and we hope that  
9 some of the rock shrimp grounds and some of those historical  
10 golden crab grounds will be opened back up, where we weren't  
11 damaging coral and we weren't trawling on coral, and so just for  
12 the record.

13  
14 **CHAIRMAN KILGOUR:** Thank you for the clarification. Is there a  
15 motion to adjourn?

16  
17 **MR. HICKMAN:** I will make the motion to adjourn, or I will  
18 second your motion.

19  
20 **CHAIRMAN KILGOUR:** I can't make it, but if there is one.

21  
22 **MR. HICKMAN:** Motion to adjourn.

23  
24 **AP MEMBER:** Second.

25  
26 **CHAIRMAN KILGOUR:** Any opposed? All right. Thank you,  
27 everybody.

28  
29 (Whereupon, the meeting adjourned on September 16, 2019.)

30  
31 - - -