

GULF OF MEXICO FISHERY MANAGEMENT COUNCIL

SHRIMP MANAGEMENT COMMITTEE

The Lodge at Gulf State Park Gulf Shores, Alabama

April 4, 2022

VOTING MEMBERS

- 10 Leann Bosarge.....Mississippi
- 11 Kevin Anson (designee for Scott Bannon).....Alabama
- 12 Billy Broussard.....Louisiana
- 13 Dave Donaldson.....GSMFC
- 14 Jonathan Dugas.....Louisiana
- 15 Dakus Geeslin (designee for Robin Riechers).....Texas
- 16 Chris Schieble (designee for Patrick Banks).....Louisiana
- 17 Joe Spraggins.....Mississippi
- 18 Andy Strelcheck.....NMFS
- 19 Troy Williamson.....Texas

NON-VOTING MEMBERS

- 22 Susan Boggs.....Alabama
- 23 Dale Diaz.....Mississippi
- 24 Phil Dyskow.....Florida
- 25 Tom Frazer.....Florida
- 26 Bob Gill.....Florida
- 27 Jessica McCawley.....Florida
- 28 Lisa Motoi.....USCG
- 29 Bob Shipp.....Alabama
- 30 Greg Stunz.....Texas

STAFF

- 33 Assane Diagne.....Economist
- 34 Matt Freeman.....Economist
- 35 John Froeschke.....Deputy Director
- 36 Beth Hager.....Administrative Officer
- 37 Karen Hoak.....Administrative & Financial Assistant
- 38 Lisa Hollensead.....Fishery Biologist
- 39 Ava Lasseter.....Anthropologist
- 40 Mary Levy.....NOAA General Counsel
- 41 Ryan Rindone.....Lead Fishery Biologist/SEDAR Liaison
- 42 Bernadine Roy.....Office Manager
- 43 Carrie Simmons.....Executive Director
- 44 Carly Somerset.....Fisheries Outreach Specialist

OTHER PARTICIPANTS

- 47 Lewis Coggins.....NMFS
- 48 Peter Hood.....NMFS
- 49 Alan Lowther.....NMFS

1 Jim Nance.....GMFMC SSC
2 Corky Perret.....MS
3 Laurilee Thompson.....SAFMC
4 John Walter.....SEFSC

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PAGE 12: Motion to recommend that the council request staff work with the Outreach and Education Technical Committee to identify the best process for conveying the importance of recovery of Secure Digital (SD) cards to Gulf of Mexico federal shrimp permit holders that have been selected by the Science and Research Director to report vessel position data. Once a notification process for shrimp permit holders is identified, letters to NMFS Fisheries Statistics Division should be sent emphasizing the importance of recovery of SD cards on Gulf of Mexico shrimp vessels and the efforts that have been identified to improve this outreach effort. [The motion carried on page 18.](#)

PAGE 24: Motion to convey to the SEFSC the support of the formal inclusion of the appropriate SSC members, council staff, and shrimp industry representatives in the development of the shrimp EDMs outside of formal SSC review and prior to the SEDAR research track. [The motion carried on page 30.](#)

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1 The Shrimp Management Committee of the Gulf of Mexico Fishery
2 Management Council convened at The Lodge at Gulf State Park on
3 Monday afternoon, April 4, 2022, and was called to order by
4 Chairman Leann Bosarge.

5
6 **ADOPTION OF AGENDA**
7 **APPROVAL OF MINUTES**
8 **ACTION GUIDE AND NEXT STEPS**
9

10 **CHAIRMAN LEANN BOSARGE:** I would like to call the Shrimp
11 Management Committee to order. Just to remind everybody, the
12 members are myself as Chair, Ms. Bosarge, and the Vice Chair is
13 Mr. Schieble. We have Mr. Anson, Mr. Broussard, Mr. Donaldson,
14 Mr. Dugas, Mr. Gill, Mr. Geeslin, Mr. Spraggins, and Mr.
15 Strelcheck, who is with us via webinar, I'm pretty sure.

16
17 The Adoption of the Agenda, the agenda can be found under Tab D,
18 Number 1, and I have a couple of things to add, or change, but,
19 before I do that, is there anybody else that would like to make
20 any revisions or addition to the agenda? All right.

21
22 Seeing none, I would like to add one item to Other Business, and
23 it's just a very brief update on the new scholarship that the
24 Southern Shrimp Alliance has developed, and then I think --
25 Staff and I spoke, and I think that Agenda Item VIII, which is
26 the SSC Recommendations, we're going to bump that up on the
27 agenda, and we'll take that up right after Agenda Item V, which
28 is that update on the current electronic logbook data
29 collection, and so we'll do our SSC recommendations right after
30 that, and I think it will flow a little bit better that way.

31
32 All right, and so, with those changes and additions, if there's
33 nothing else for the agenda, then I think I will actually
34 entertain a motion to approve the agenda as amended, since we
35 did change it.

36
37 **GENERAL JOE SPRAGGINS:** I will make a motion to approve it as
38 amended.

39
40 **MR. DAVE DONALDSON:** Second.

41
42 **CHAIRMAN BOSARGE:** All right. We have a motion by Mr. Spraggins
43 and a second by Mr. Donaldson. Any discussion on the motion?
44 Any opposition to the motion? Seeing none, the motion carries.
45 The next item on our agenda is the Approval of the January 2022
46 Minutes, and those can be found under Tab D, Number 2. Are
47 there any changes that need to be made to those minutes? Seeing
48 none, the minutes are adopted as written.

1
2 The third item is the Action Guide and Next Steps, which can be
3 found under Tab D, Number 3, and we will proceed through that
4 document as we go through each agenda item, and I will let Dr.
5 Freeman take us through the action guide for that item as it
6 comes up, and so that will bring us right into Agenda Item IV,
7 the Biological Review of the Texas Closure. Before we turn it
8 over to Dr. Coggins, Dr. Freeman, are you online with us to take
9 us through the action guide on that?

10
11 **BIOLOGICAL REVIEW OF THE TEXAS CLOSURE**
12

13 **DR. MATT FREEMAN:** Yes, ma'am, I am. For this agenda item, the
14 committee will be presented with the analysis of the Texas
15 closure. The Shrimp AP recommendation will be presented to the
16 committee, and the committee is requested to take action and
17 determine if the Texas closure should continue in 2022.

18
19 **CHAIRMAN BOSARGE:** All right. Thank you, Dr. Freeman. Dr.
20 Coggins, do we have you on the line?
21

22 **DR. LEWIS COGGINS:** Good afternoon, Madam Chair. Can you hear
23 me okay?
24

25 **CHAIRMAN BOSARGE:** Yes, sir. I think this might be your first
26 presentation to the council, and so we welcome you, and we're
27 glad to have you onboard as our new shrimp man. Go ahead. The
28 floor is yours.
29

30 **DR. COGGINS:** Thank you, Madam Chair and council members of the
31 Shrimp Management Committee. My name is Lew Coggins, and I'm
32 with the Gulf Branch of the Sustainable Fisheries Division, and
33 this presentation is a biological review of the 2021 Texas
34 shrimp closure.
35

36 The Gulf of Mexico shrimp management plan was implemented in
37 1981 for the EEZ fishery, and the goal of the Texas closure was
38 to increase the yield and value of brown shrimp harvested from
39 offshore Texas waters. Historically, the closure has occurred
40 from approximately mid-May to mid-July of each year, and, since
41 1990, the nearshore area has also been closed, in conjunction
42 with the EEZ closure.
43

44 This figure shows the offshore Texas brown shrimp catch in
45 pounds of tails for the months of July, in the color orange, and
46 August in blue, from 1981 to 2020. Catches during July show an
47 overall declining trend throughout the time period, and catches
48 in August show a more stable trend, but, beginning in the mid-

1 1990s, catches were generally centered around a higher level
2 than previously. Now, we can also see that, in the August
3 landings in 2020 and 2021, they were much higher than the low
4 August catches observed in 2019.

5
6 Here, you can see the distribution of sizes of the offshore
7 Texas brown shrimp catch during May through August 2021, and the
8 individual bars display the catches by market size category,
9 with the largest size on the left and the smallest on the right.
10 As expected, the total catches are smallest in May and June,
11 increasing to the highest in August, the first full month of
12 shrimping effort after the closure ended.

13
14 The largest catches are in the forty-one to fifty and fifty-one
15 to sixty-seven-count-per-pound categories during August, and
16 August catches of the thirty-one to forty category are also
17 substantial. Note that catches of shrimp in the greater than
18 sixty-seven category, in both July and August, are quite low,
19 suggesting the closure is having its desired effect, by
20 minimizing the catch of small shrimp.

21
22 This figure is from the report contained in your briefing
23 materials showing the annual percentage of the total May to
24 August Texas shrimp landings by region, 1981 through 2020, and
25 the black line is the upper Texas ports, and it shows an
26 increasing trend and the largest proportion of landings since
27 the early 2000s. The blue line is the lower Texas ports, and it
28 shows a declining trend in the proportions through time, and the
29 orange line is the middle Texas ports and shows a relatively
30 constant trend. Note that there appears to be less of a trend
31 in the proportions landed by region following the mid-2000s than
32 before.

33
34 Now we'll examine some catch data for white shrimp. This figure
35 shows the offshore Texas white shrimp catches during July 2021.
36 Note that, similar to a previous figure, catches in pounds of
37 tails are stratified by market size, with the largest shrimp in
38 blue on the left and the smallest shrimp on the right. The
39 three largest catches occur in market size categories less than
40 fifteen to twenty and twenty-one to twenty-five.

41
42 This figure shows the offshore Texas white shrimp catches during
43 August 2021, and the August catches, again, show the largest
44 landings in the larger size categories, with a small reduction
45 in the market category of less than fifteen per pound. This
46 figure again suggests that the Texas closure is allowing the
47 fishery to exploit larger-sized shrimp.

48

1 Summarizing the 2021 Texas fishing trends during May through
2 August, it indicates that both the offshore and inshore brown
3 shrimp catches are below the historical averages of 1981 through
4 2011, and, importantly, the July through August offshore
5 landings in the smallest size category made up less than 5
6 percent of that total.

7
8 The landings by region show a slight proportional increase for
9 the upper and lower regions and a slight decrease for the middle
10 Texas region, and the offshore Texas white shrimp landings in
11 July and August were below the 1980 through 2020 average. The
12 majority of white shrimp landings were in the fifteen to twenty
13 market size, again suggesting that the Texas closure is
14 contributing to the stated goal in the 1981 shrimp fishery
15 management plan.

16
17 I'm sorry, and I got off a slide there. This was the point that
18 I made in my last point, that, again, the white shrimp landings
19 were in those larger size categories, suggesting the Texas
20 closure was contributing to its stated goal. Madam Chair, and
21 the rest of the committee, with that, I thank you for your time
22 and attention, and the concludes my presentation.

23
24 **CHAIRMAN BOSARGE:** Thank you, Dr. Coggins. Are there any
25 questions from council members for Dr. Coggins? I don't see
26 any, Dr. Coggins. I will reiterate, Dr. Coggins, that, a lot of
27 times, the Science Center will give us those forecasts for what
28 you all expect to see over there this year, and I know you told
29 the Shrimp AP that you weren't able to accomplish that, you
30 being the Science Center, this year, for a couple of reasons.

31
32 That Galveston bait index, that they had not been carrying that
33 out, due to COVID and things like that, but, as those things
34 come back online, I hope that we'll be able to get those
35 forecasts again. We do very much enjoy them. Thank you. Mr.
36 Gill.

37
38 **MR. BOB GILL:** Thank you, Madam Chair. **In the discussion of the**
39 **Shrimp AP on this issue, they wanted to continue the tradition**
40 **of the Texas closure, and, if Bernie would bring up my first**
41 **shrimp motion, I will make that motion to continue the Texas**
42 **closure.**

43
44 **CHAIRMAN BOSARGE:** All right. While we're waiting on staff to
45 get that on the board for us, I think that does lead us right
46 into our next agenda item, which was going to be probably Dr.
47 Freeman summarizing that for us, and so excellent time for that,
48 Mr. Gill. Is that your motion, sir?

1
2 **MR. GILL:** That's my motion, and it's an exact copy of what the
3 AP motion was as well.

4
5 **CHAIRMAN BOSARGE:** All right. Do we have a second for the
6 motion?

7
8 **MR. DAKUS GEESLIN:** Second.

9
10 **CHAIRMAN BOSARGE:** It's seconded by Texas, Mr. Geeslin. Dr.
11 Freeman, while that's on the board, do you want to go through
12 that little section of the Shrimp AP report relative to this
13 particular agenda item, or do you want to just hold it until we
14 go through the whole report?

15
16 **DR. FREEMAN:** Madam Chair, there were no questions or discussion
17 documented in the AP summary for this particular agenda item,
18 other than the AP motion, which Mr. Gill has on the board.

19
20 **CHAIRMAN BOSARGE:** Beautiful. Thank you, and, as Mr. Gill said,
21 they did support this as well at the AP. All right. Any other
22 discussion on this particular motion? All right. **Seeing none,**
23 **is there any opposition to the motion? No opposition, and the**
24 **motion carries.**

25
26 Dr. Freeman, would you like to continue on? Would that take us
27 to our next agenda item, the update on the current electronic
28 logbook collection and Dr. Lowther?

29
30 **UPDATE ON CURRENT VESSEL POSITION DATA COLLECTION**

31
32 **DR. FREEMAN:** Yes, ma'am. For this agenda item, the committee
33 will be presented with an update on retrieval of data from cELB
34 units in use aboard federally-permitted Gulf shrimp vessels
35 since 3G transmission was discontinued in December of 2020. The
36 committee should consider the presentation and ask questions.
37 This information does not require any formal committee action.

38
39 **CHAIRMAN BOSARGE:** All right. Thank you, Dr. Freeman. Dr.
40 Lowther, do we have you on the line, sir?

41
42 **DR. ALAN LOWTHER:** Yes, I'm here. Can you hear me?

43
44 **CHAIRMAN BOSARGE:** Yes, sir. Go ahead.

45
46 **DR. LOWTHER:** All right. I guess there's a presentation. Thank
47 you, Madam Chair, and good afternoon, council members and
48 guests. The first couple of slides here, I just wanted to give

1 -- I guess I should have said that I am Alan Lowther, and I'm
2 with the Southeast Fisheries Science Center, in the Fisheries
3 Statistics Division, and so I just wanted to briefly remind
4 everybody here of what's going on, and so this is from a
5 previous presentation where the cellular electronic logbook
6 units, the 3G units, are no longer transmitting after December
7 of 2020.

8
9 The boxes do collect data, but they're not transmitting, and so
10 the plan for 2021, and now 2022, is for the shrimp fishery to
11 continue to use the units, but we need a process for retrieving
12 the SD cards from the units, and so we've been sending out
13 requests, with envelopes, asking for the shrimpers to switch the
14 SD card in their unit.

15
16 We did several steps in preparation for that. We developed
17 instructions on how to do that, and we sent those mailers to the
18 shrimpers and asked them to send the old card to the Galveston
19 Lab, and then, to make the internet security issues acceptable,
20 we -- Gulf States generously offered to set up a table on their
21 server where they can load the data and make sure that they were
22 checked for viruses and scanning and isolate any infected cards,
23 and so we definitely, again, want to express our thanks to the
24 Gulf States Marine Fisheries Commission.

25
26 **CHAIRMAN BOSARGE:** Dr. Lowther, are you still there, because
27 we're not hearing you anymore, and I don't think you're
28 finished.

29
30 **DR. LOWTHER:** Am I back now?

31
32 **CHAIRMAN BOSARGE:** Yes, sir. You're back now.

33
34 **DR. LOWTHER:** Okay. I saw a note that said my network
35 connection has been reestablished, and so, at some point, it
36 bugged out, and I apologize for that. Do we need to go back a
37 slide?

38
39 **CHAIRMAN BOSARGE:** No, and I think we got most of that.

40
41 **DR. LOWTHER:** Okay. All right. I apologize for that, and
42 hopefully that won't happen again. The first mailing, we mailed
43 out 493 replacement SD cards, and we had 59 percent of them, or
44 290, were returned, and so we had two rounds of reminders that
45 were sent out. One was a letter and one was an email, and then
46 I think there were also just some individual reminders that were
47 done through personal communication with people who would call
48 up with questions.

1
2 The second mailing was sent out on January 14, 2022, and, of
3 those, we have received back 150, and so basically a third, and
4 so we're planning on sending another round of reminders in the
5 near future.

6
7 We are definitely concerned about the fact that we are receiving
8 data from fewer of the electronic logbook boxes, and, obviously,
9 I don't think that any of us want this to be a long-term
10 solution, and this doesn't appear to be a sustainable data
11 collection, and so the council is in search of a longer-term
12 solution, and there have been a lot of discussions about what
13 that would look like, whether it's a cellular VMS or some of the
14 work being developed by LGL or a combination of different
15 methods.

16
17 I guess one of the issues is looking at -- I guess we'll talk
18 about the AP recommendations, but one of the ones was for
19 additional rounds of testing of different devices, and so I
20 think one of the things I think we need to make sure that the
21 council considers is what is the -- How long will that take, and
22 is the data collection going to continue to erode, or maybe what
23 actions we can take to increase the returns, through better
24 outreach.

25
26 Anyway, we're looking at the data that we're receiving and
27 trying to confirm which vessels are no longer collecting data,
28 and so we will be communicating with those permit holders, once
29 we make that determination, and then, additionally, we're
30 looking at the estimation methods to turn this ELB data into
31 effort estimates, and there are some issues there that were
32 discussed at the advisory panel as well that we could discuss,
33 if there was interest, but I think the main thing that I was
34 asked to provide was the update, and so I will leave it that,
35 and I will be happy to entertain any questions, and so thank you
36 very much.

37
38 **CHAIRMAN BOSARGE:** Thank you, Dr. Lowther. Are there any
39 questions for Dr. Lowther from the council? All right, and I
40 think -- I have thought about this since the AP meeting, and I
41 do think that we probably need to be proactive, and I have a
42 motion ready, to help spur some discussion on this, if staff
43 could maybe pull that up, and let's just look at it.

44
45 I think there's a couple of different things that we can do to
46 try and make sure that we get as many of those SD cards back as
47 possible, and I think it's time to go down that path and reach
48 out to the fishermen a little bit more. You know, I think about

1 the new logbook program that we're standing up for the for-hire
2 fishery, and, although we have a logbook program that's been in
3 effect for a while, we're now changing the way we submit it, to
4 get us through this transition period to some other type of
5 device, and I think we need to rely maybe on some of those
6 methods that we utilized in standing up that electronic logbook
7 for the for-hire, where we lean a little harder, maybe, on some
8 of our port agents.

9
10 Maybe we can use our Outreach and Education Committee to get the
11 word out, and let's make sure we're doing as much as we can on
12 our part, over and above just sending a letter, and so here's
13 the motion, and I'm going to read this into the record, and
14 we'll have some discussion and see if the committee wants to
15 make this motion.

16
17 **The motion is to recommend that council staff work with the**
18 **Education and Outreach Technical Committee to identify the best**
19 **process for conveying the importance of recovery of secure**
20 **digital (SD) disks to the Gulf of Mexico federal shrimp permit**
21 **holders that have been selected by the Science and Research**
22 **Director to report vessel position data. Once a notification**
23 **process for shrimp permit holders is identified, letters to Gulf**
24 **States Marine Fisheries Commission and NMFS Fisheries Statistics**
25 **Division should be sent emphasizing the importance of recovery**
26 **of SD cards on Gulf of Mexico shrimp vessels and the efforts**
27 **that have been identified to improve this outreach. Dr.**
28 **Simmons, did you want to comment any, since we're talking about**
29 **the Outreach and Education Technical Committee?**

30
31 **EXECUTIVE DIRECTOR CARRIE SIMMONS:** Thank you, Madam Chair.
32 We're certainly ready to help in any way we can. We would
33 obviously have you involved, and Dr. Lowther, and anybody else
34 from your group. I guess my question to you all is do you think
35 that would be helpful in this process of trying to get the word
36 out, because, I mean, we have longer-term solutions, but they're
37 not going to happen for a while.

38
39 **CHAIRMAN BOSARGE:** Dr. Lowther, do you think this could be
40 helpful? We want to be helpful here, or Dr. Walter. I'm sorry,
41 and I forget we have you over there.

42
43 **DR. LOWTHER:** I think it can be helpful, certainly. I think
44 it's difficult, because, like Dr. Simmons just pointed out, this
45 is a short-term process, and so, if this was something that was
46 a longer-term process, I think there would be more enthusiasm
47 for addressing it, but we have other -- Just within this shrimp
48 effort data, we have other requirements that we do need to get

1 this data, and it's very important, obviously, and so I think
2 anything we can do to improve the returns is well -- As a survey
3 statistician, I know that it's very hard to contact people and
4 make them play an active role in doing something, especially
5 something as complicated as going to the device and taking out a
6 piece of it and replacing it with another piece, and so, while I
7 think it's helpful, it's not guaranteed to work, and I don't
8 know how else to say that, but I think it's definitely important
9 to try, and the data are important, and so I don't see that we
10 have a lot of options at this point.

11

12 **CHAIRMAN BOSARGE:** Dr. Walter and then Mr. Gill.

13

14 **DR. JOHN WALTER:** Thank you, Madam Chair. I think it's an
15 excellent idea, and I really applaud you putting it forth,
16 because that was one of the things that came out of it, is we're
17 going to have to do something in the short-term, and, the more
18 help we can get, because I'll be honest that the fishermen don't
19 always like to hear from the agency about some of these things,
20 and so, if it comes from another source, and says, hey, this is
21 important, and please help all of us out, because we all, as a
22 group, need this data to ensure that our fisheries meet their
23 obligations, and that would be great, but it's going to be a
24 short-term fix, until we get something new in place. Thanks.

25

26 **CHAIRMAN BOSARGE:** Mr. Gill and then Ms. Boggs.

27

28 **MR. GILL:** Thank you, Madam Chair, and so I agree. I think this
29 motion is a step that will help, and it's not explicitly stated,
30 but I'm assuming that it's implicitly included that, if this
31 motion passes, then the E&O Tech Committee will work with
32 industry and organizations, such as the Southern Shrimp Alliance
33 and Texas Shrimp, et cetera, to try and make contact and convey
34 the message as efficiently as possible. Thank you.

35

36 **CHAIRMAN BOSARGE:** Yes, and I wouldn't want to speak for them
37 before they meet, but I'm sure that will be one thing that they
38 will definitely consider. Ms. Boggs.

39

40 **MS. SUSAN BOGGS:** Thank you, Madam Chair. I'm not on your
41 committee, but a point of order. Do you have a second on this
42 motion?

43

44 **CHAIRMAN BOSARGE:** Well, I don't think we've officially made the
45 motion yet. I just put it on the board, but, all right. Does
46 anybody want to make the motion? Thank you, Ms. Boggs. Okay,
47 and so we've got -- **Mr. Gill is going to make the motion.** Does
48 anybody want to second it? We've got a second by Mr. Broussard.

1 Okay, and so, Mr. Anson, you had some further discussion on the
2 motion that's officially made now?

3
4 **MR. KEVIN ANSON:** Thank you, Madam Chair. I am trying to recall
5 -- If they're selected by the Science and Research Director to
6 report, I thought there was some potential for revoking a permit
7 if they did not comply, and so I'm just wondering, in
8 relationship to the letters that are being sent, if that's being
9 conveyed in that manner, that there is potential for some fairly
10 negative punitive damages to them, inasmuch as at least for
11 permit renewal, and I'm just wondering, again, if that's in the
12 letter, or if that type of language is used in the letter, to
13 try to encourage responses.

14
15 **CHAIRMAN BOSARGE:** Dr. Walter, to that point?

16
17 **DR. WALTER:** I am not the best poised to answer that, but I
18 think it's a good question, and this letter coming from the
19 council would not, I think, have that in it, and that would need
20 to come from the agency. We're checking in on whether there is
21 some requirement to put these in, because it is a little bit
22 different than -- Mara, do you want to chime in there? Can I
23 phone a friend?

24
25 **MS. MARA LEVY:** What's in the letter I cannot speak to. What is
26 in the regulations basically says that you have to comply with
27 electronic reporting requirements, as directed by the SRD, and
28 so, I mean, I think it's reasonable to tell people that, if they
29 don't send these cards back, then they're not complying with
30 this particular requirement at this time, and then it means that
31 their permit renewal will be held up. I don't know what's been
32 in the letters, and I think the council could point out the
33 regulations that they want to. I mean, it's up to how you want
34 to proceed.

35
36 **CHAIRMAN BOSARGE:** Okay. I have Dr. Freeman's hand up on the
37 board. Dr. Freeman, would you like to chime in?

38
39 **DR. FREEMAN:** Thank you, Madam Chair. Just two minor comments
40 related to the motion, and I apologize for not catching them
41 earlier, but, in the second line, it should read "Outreach and
42 Education Technical Committee", and then, the fourth line, it
43 should be "secure digital cards", and those are just minor
44 things for the motion.

45
46 **CHAIRMAN BOSARGE:** All right. Thank you for that housekeeping.
47 All right. I'm going to take a comment from Mr. Gill, and then
48 I guess -- Mr. Anson, is it to this motion, or are we going to

1 go back to the reporting requirements?
2

3 **MR. ANSON:** Well, I mean, it could be to this motion, but it is
4 certainly for reporting requirements, but, inasmuch, I would
5 like to address the motion after Mr. Gill, if you don't mind.
6

7 **CHAIRMAN BOSARGE:** Yes, sir. No problem. Mr. Gill.
8

9 **MR. GILL:** Thank you, Madam Chair. I would like to urge that,
10 if this motion passes, that we take the positive approach and
11 downplay the negativity. From my perspective, if I get a letter
12 threatening me with loss of my license, my back starts arching
13 up, and I think we want to look more for collaboration and
14 working together to get a goal that benefits all of us, and we
15 should approach it with that in mind. Thank you.
16

17 **CHAIRMAN BOSARGE:** Mr. Anson.
18

19 **MR. ANSON:** Well, that kind of goes into my question regarding
20 what has been in the previous letters and if there is the
21 authority for some sort of action that's negative, that would
22 cause people to arch their backs, that might encourage more
23 reporting, and so I'm just -- I would like, I guess, Dr. Walter,
24 if you maybe, for Full Council, if you maybe could find out
25 maybe what some of that terminology is, or provide some copies
26 of those letters, so that we can understand that, and, if that
27 is in fact not being conveyed, and that could be conveyed in
28 this next iteration, that might help improve reporting. Thank
29 you.
30

31 **CHAIRMAN BOSARGE:** Mr. Donaldson.
32

33 **MR. DAVE DONALDSON:** Thank you, Madam Chair. I noticed that the
34 letter is to be sent to NMFS, as well as the commission, and I'm
35 wondering the purpose of sending it to the commission, because
36 we're just kind of acting as an intermediary, and we're not
37 really interacting with the shrimpers at all. While we would
38 welcome a letter from the council, I'm just not sure there is
39 going to be much utility in sending something to us.
40

41 **CHAIRMAN BOSARGE:** Dr. Simmons.
42

43 **EXECUTIVE DIRECTOR SIMMONS:** Thank you, Madam Chair. I think we
44 were just thinking you could help us with sending it to the
45 states, but, if you think Sea Grant, the Sea Grant folks, and
46 the state folks that are already on the Outreach and Education
47 Technical Committee could handle that, we could take that off.
48

1 **MR. DONALDSON:** I think that would probably be more appropriate.
2

3 **EXECUTIVE DIRECTOR SIMMONS:** Okay, and we'll just copy you, so
4 you know what's happening.
5

6 **MR. DONALDSON:** Yes, absolutely.
7

8 **EXECUTIVE DIRECTOR SIMMONS:** Okay. My other thought was I
9 thought, if the council is writing these letters, we would
10 probably stay away from any type of regulatory teeth for this
11 effort, would be my suggestion.
12

13 **CHAIRMAN BOSARGE:** Okay, and so a couple of things here. **First,**
14 **Mr. Gill, are you okay if we remove that "GSMFC" from there and**
15 **simply send a letter to NMFS and rely on our state partners that**
16 **are on the Outreach Committee?**
17

18 **MR. GILL:** **Absolutely.**
19

20 **CHAIRMAN BOSARGE:** Okay. Is there seconder -- I think, Mr.
21 Broussard, and are you our seconder, and are you okay with that
22 friendly amendment? All right. Okay.
23

24 Then I see this as a really a three-step process, and so let's
25 go back to the system we just set up for the for-hire fishery,
26 right and so I'm sure there were letters that went out to the
27 for-hire fishery, to let them know about the new system, all
28 right, and, at some point, which I think it actually just went
29 into effect, that it's now officially mandated and we're past
30 that phase where we're going, you know, be trying to get them on
31 the path and pointed in the right direction and do some
32 handholding and some outreach, and now there probably will be
33 penalties if they're not reporting.
34

35 In shrimp, we've sent letters, and I feel like, yes, we're going
36 to get to the point, most definitely, Kevin, and I believe that
37 point is coming pretty soon, where we're going to say, okay,
38 now, if you don't have that chip mailed in, we're not going to
39 renew your permit, but we have totally skipped over that middle
40 section, and so, to me, this motion speaks to that middle
41 section.
42

43 We've got to do that piece before we get to the part where we
44 say, well, we sent you a letter, and then a reminder, and you
45 didn't do it, and so we're not renewing your permit. We need to
46 make a concerted effort to have some real outreach and to get in
47 touch with these people and talk to them, either on the phone or
48 face-to-face, and we still have port agents, and we can lean on

1 them for some of this.

2
3 Our states, they interact with the shrimp fishery quite
4 frequently, and so, anyway, that's what this motion, to me, is
5 going to encompass, but I do agree that, sooner rather than
6 later, we're probably going to have to get to that point that
7 you're talking about, because that's what's going to get you the
8 tail-end of those cards, right? That's going to get you that
9 last little piece.

10
11 All right, and so is there any further discussion on this
12 motion? Seeing none, is there any opposition to the motion? I
13 have names up. Sorry, guys. First, we have Mr. Strelcheck.
14 Andy, are you there?

15
16 **MR. ANDY STRELCHECK:** I am supportive of the motion, but I just
17 wanted to make a couple of comments. With regard to the
18 conversation about holding up permits at time of renewal, just
19 keep in mind that a year could go by before they would have to
20 essentially submit the SD card, and so it is, obviously, a stick
21 that we can use, but it doesn't necessarily mean that we're
22 going to immediately get the data, until, obviously, that permit
23 renewal comes up.

24
25 The other suggestion would be the technical committee at least
26 reach out and engage with the NOAA Gear Monitoring Team, and
27 that gear monitoring team works commonly with the shrimp
28 industry on turtle excluder device issues, but, because of their
29 work and familiarity working with the shrimp industry, I think
30 they could probably be of assistance, in terms of guiding an
31 outreach strategy, and then, also, because there is a large
32 Vietnamese community in the shrimp industry, we may want to
33 think about how to do outreach directly towards the Vietnamese
34 community as well, and so thanks.

35
36 **CHAIRMAN BOSARGE:** Thanks, Andy. Excellent suggestions. Dr.
37 Lowther.

38
39 **DR. LOWTHER:** I just wanted to clarify some of the language
40 that's been in the reminders that we've sent, and it is all just
41 asking, and there has been no negativity, or no threats, and it
42 just says we mailed you a new SD card, and we haven't received
43 the old SD card yet, and, if you have misplaced it, let us know,
44 thank you for your cooperation, without which collection of this
45 critical information for the shrimp industry would not be
46 possible.

47
48 We don't -- We haven't had any -- There's been no permit issues

1 and no veiled threats, nothing like that to-date, and we're just
2 trying to approach it from a positive standpoint, and we did do
3 initial outreach to the Vietnamese community too, and the
4 initial instructions were translated into Vietnamese.

5
6 I don't -- I can't definitively say if the reminders have been
7 sent, or translated, in Vietnamese or not, and I can check on
8 that, but we have been cognizant of trying to make sure that our
9 -- You know, that we have bilingual outreach, and I just got a
10 note that the reminders were not translated, and so that's
11 something that we could work on. All right. Thank you very
12 much.

13
14 **CHAIRMAN BOSARGE:** Thank you, sir. Is there any further
15 discussion on this motion? All right. **Seeing none, is there**
16 **any opposition to the motion? Seeing no opposition, the motion**
17 **carries.** Yes, sir, Mr. Anson.

18
19 **MR. ANSON:** I just want to go back to the SD card issue, and so
20 I just wanted to get this process clear in my head. They've
21 been selected, 493 vessels, to load, or place, the SD card into
22 their cELB unit, and they're supposed to turn that in.

23
24 Once they've turned it in, they get mailed another one, and
25 they're supposed to put that in and mail it in, and they will
26 get another one, and so the process repeats, but, as I
27 understand it, it's all based on when they get the old SD card
28 turned in, and is it not, and so they get multiple ones at the
29 same time?

30
31 **CHAIRMAN BOSARGE:** The Science Center, NMFS, Gulf States,
32 whoever, somebody mails us an SD card with a letter and some
33 instructions on what to do with it, and that's the new SD card,
34 right, and so we go out to the boat, and we pull the old SD card
35 out, and we put the new SD card in. Along with that envelope
36 that had the instructions and everything is a return envelope,
37 and you just stick the old SD card in the return envelope and
38 send it off, and so it's kind of like one step, rather than
39 step-wise, and does that answer your question?

40
41 **MR. ANSON:** It does. I guess it still leaves, in my mind, if
42 they're not turning it in, are they, A, collecting, and then, B,
43 putting in a new card, I guess, and so I know we go back to the
44 language and such, but I just don't think that the brief summary
45 that Dr. Lowther just provided really underscores the urgency
46 for going through that process and mailing it in and inserting
47 in a new one and that type of thing. It just didn't come off to
48 me that that is -- It's like, hey, can you do this for us, and

1 it would be great, and it would kind of help us out with our
2 fisheries management, and there's no sense of urgency, and so
3 that's all. Thank you.

4
5 **CHAIRMAN BOSARGE:** Right, and I think that's why -- Well, I know
6 that's why I offered the motion that I offered up there, and
7 thank you to Mr. Gill for making it, so that we could further
8 that message right there that you're talking about, and, in my
9 fishery, you notice there's no -- We don't have shrimpers that
10 come to the meetings very often, and so, whereas some of our
11 other fisheries are much more in tune with what's happening in
12 the council realm, you just -- The nature of our fishery, and
13 we're out for a month at a time, right, and so making a meeting
14 is just about impossible.

15
16 You might be home for a week, or maybe two, and you've got to
17 work on the boat, and hopefully see your family for a minute,
18 before you go back out, and so it's just not as easy, and so I
19 think this is going to be very important, and I like that gear
20 team idea, and I appreciate that, because they definitely
21 interact with the shrimpers. They know those people on a first-
22 name basis, and so that's going to be great, to rely on them,
23 but hopefully we can get there.

24
25 All right, and so, Dr. Freeman, that's going to take us to our
26 next agenda item, which, after we rearranged the agenda, when we
27 adopted it, that's going to be the SSC recommendations on
28 development and process of using the empirical dynamic models on
29 brown and white shrimp, and so we have Dr. Nance here in the
30 audience with us, but, Dr. Freeman, if you would like to take us
31 through that action guide for that agenda item first.

32
33 **SSC RECOMMENDATIONS ON DEVELOPMENT AND PROCESS OF USING THE**
34 **EMPIRICAL DYNAMIC MODELS ON BROWN AND WHITE SHRIMP**

35
36 **DR. FREEMAN:** Yes, ma'am. Gladly. Here, the committee will
37 receive the SSC's recommendations on NMFS' development of EDMs
38 for predicting brown and white shrimp abundance in the Gulf of
39 Mexico. The SSC received a presentation on this topic from NMFS
40 at its March 2022 meeting and discussed how the project relates
41 to the previous efforts by the various NMFS working groups for
42 shrimp, as well as to the broader upcoming SEDAR research track
43 assessment, which is scheduled to start in 2023.

44
45 The Shrimp AP also received a presentation on this topic from
46 NMFS at its March 2022 meeting, and council staff will review
47 the Shrimp AP's feedback. The council should consider the
48 presentation and ask questions and determine if any action is

1 needed.

2
3 **CHAIRMAN BOSARGE:** Thank you, Dr. Freeman, and we have Dr. Nance
4 here with us, and who better to present on this item? Yes, he's
5 on our SSC, and chairman of our SSC, but he is also the former
6 head of the Galveston Lab, where all the shrimp science magic
7 happened for so many years, and so we're excited to have you,
8 and then, right after you, we're going to get Mr. Corky Perret,
9 the chair of our Shrimp AP, and so two wonderful gentlemen to
10 have with us today.

11
12 **DR. JIM NANCE:** Thank you. It's nice to be able to be here and
13 present to the Shrimp Committee. I was reminiscing with Corky,
14 and the first time we saw each other was in 1983, at a council
15 meeting, and we had presentations on the Texas closure, and so
16 it's nice to be able to sit by him again. Anyway, let's go
17 ahead, and we have the slides, and it's nice to be able to be
18 here in person again, and I don't like the virtual setting. I
19 like to be able to come in-person.

20
21 Dr. Michelle Masi, and she's now at the Southeast Regional
22 Office, but she detailed the Science Center's research since
23 2019 for the shrimp assessment models, including the age-
24 structured models, and so she went through what has been
25 happening on those models since 2019.

26
27 She relayed that the National Marine Fisheries Service Shrimp
28 SEAMAP working group, and I was a member of that, along with
29 several others, had determined that SEAMAP data was an excellent
30 representative index for offshore penaeid shrimp stock
31 abundance. She also reiterated that Shrimp Amendment 15 used
32 Stock Synthesis data for developing the annual status of
33 determination criteria for the three penaeid shrimp stocks, and
34 those are brown, pink, and white, in the Gulf of Mexico.

35
36 She asked a question to the SSC at that time of is an age-
37 structured model appropriate to provide the relative stock
38 status determination for the three penaeid shrimp populations,
39 and she outlined the reason for asking that question and the
40 fact that, by the time the December data gets in, and it's about
41 April when that gets out, and the assessment models then are
42 run, and we start to look at those, and those are presented to
43 the council later that year, and the stock that those were
44 developed on are all gone, and so is an age-structured model an
45 appropriate way to assess the shrimp population, which is an
46 annual crop? We didn't really talk about that in detail at the
47 SSC meeting, but it's something that we will need to talk about
48 in the future, as other models are being developed.

1
2 Dr. Stephen Munch from the Southwest Fisheries Science Center
3 was our next presenter, and he described empirical dynamic
4 models, EDMs. The EDMs can implicitly account for unobserved
5 variables, using lags in observed variables. It's a model to be
6 able to start to look at unobserved data, using observed data,
7 and EDMs, he outlined, don't need continuous data on all the
8 variables to make accurate predictions, and they don't need
9 predefined parameters and relationships in order to have enough
10 data that are available.

11
12 There's been a lot of published research on this topic, and the
13 public research he pointed to was comparing predicted errors
14 between EDM and traditional models across 185 fish stock that
15 determined that EDM forecasts were better for roughly 90 percent
16 of the population, and so it showed that EDMs were able to allow
17 for status determination for these stocks better than some of
18 the traditional models.

19
20 EDMs can predict adult shrimp abundance for brown and white
21 shrimp in each of the SEAMAP zones, and so he showed how the
22 SEAMAP data was being used to be able to predict the shrimp data
23 in those zones.

24
25 The initial EDM models use SEAMAP trawl survey data, and they
26 included lags in abundance, temperature, salinity, and dissolved
27 oxygen. Those were the inputs for the model. After the model
28 runs and a manipulation of things, only temperature and
29 abundance were found to be relevant in those models. For brown
30 shrimp, the overall correlation between the abundance indices
31 and SEAMAP was found to be 0.86, or a very high correlation.
32 For white shrimp, it was also found to be a high correlation,
33 overall about 0.75, and so a good correlation between those
34 values.

35
36 The next step that the Center would like to look at is to use
37 EDMs to determine status of the stocks for shrimp, and the SSC
38 was asked the question of whether we felt shifting from age-
39 structured models for shrimp may be needed, and we talked about
40 that a little bit, and we're waiting for the research track to
41 start, and we'll have discussions in the SSC about that, but,
42 while the Center is running these different models, we also
43 encouraged them to run some simple biomass models for comparison
44 with the EDM results.

45
46 As the next steps, the Southeast Fisheries Science Center plans
47 to derive status determination criteria for brown and white
48 shrimp and provide Gulf-wide updates to the SSC late in 2022.

1 We also discussed state recruitment indices, and we iterated
2 that those need to be considered for inclusion in these models,
3 since the SEAMAP data is used for adult abundance, and then we
4 have some state data that are used for recruitment abundance. A
5 peer review of the developed brown and white shrimp models, as
6 part of the SEDAR research track assessment, will commence in
7 2023.

8
9 As each of you know, the royal red shrimp is currently only
10 tracked for an ACL and landings, and so it wouldn't be included
11 in this, and there doesn't seem to be enough SEAMAP data for
12 pink shrimp, which is off of Florida, and the SEAMAP cruises
13 just started there in more recent history, and so there's not
14 enough SEAMAP data for the EDM to be developed for the pink
15 shrimp data. With that, I will be happy to answer any
16 questions.

17
18 **CHAIRMAN BOSARGE:** Thank you, Dr. Nance. Do we have any
19 questions for Dr. Nance? All right. Well, I think what we'll
20 do, Dr. Nance, is I believe the Shrimp AP had some feedback on
21 that particular agenda item as well. Do you have a question for
22 Dr. Nance? Okay, and so what we'll do, Dr. Freeman, if it's
23 okay with you, is we'll pull up the AP summary report and just
24 go over just that section for now, while we're on this topic,
25 and, if Mr. Perret has any feedback, we'll let him come to the
26 podium, and we'll get this agenda item knocked out in that
27 manner, and then we'll go on to the rest of the AP report.

28
29 **DR. FREEMAN:** Sure. That sounds good. If we scroll to the top
30 of page 7, and, while they're getting there, the AP was
31 interested in the presentation, and I will kind of couch that
32 with they recognize that it was an initial presentation, and it
33 had some potential, but they certainly had questions for Dr.
34 Masi about it, and I know, offhand, there were some questions
35 about some of the data that was being pooled.

36
37 **CHAIRMAN BOSARGE:** Dr. Freeman, I think that's it, right, on the
38 screen?

39
40 **DR. FREEMAN:** I was going to say that you might need to pull
41 that off of the council website, and I don't know if that's the
42 latest version of the AP report. Anyway, the AP had questions
43 about items, such as there being pooled data across statistical
44 zones, et cetera, and so, as a result of some of their interest
45 in the development, as well as the interest in having SSC
46 members provide feedback, they made a motion that was to convey
47 to the Southeast Fisheries Science Center the support of the
48 formal inclusion of appropriate SSC members, council staff, and

1 shrimp industry representatives in the development of shrimp
2 EDMs outside of formal SSC review and prior to the SEDAR
3 research track, and that motion carried unanimously. As it was
4 stated, again, the SSC is supposed to receive an updated
5 presentation in the fall of this year. The top of page 7 has
6 that motion from the AP.

7

8 **CHAIRMAN BOSARGE:** All right. Thank you, Dr. Freeman. We have
9 Mr. Gill, and I will go ahead and invite Mr. Perret, if he would
10 like to come and add any color to that. We have the chairman of
11 the Shrimp AP with us today, too. Go ahead, Mr. Gill.

12

13 **MR. GILL:** I will defer to Mr. Perret, if he cares to comment
14 before I bring my point up. It's always good to hear an ex-
15 council member and his sage advice.

16

17 **MR. CORKY PERRET:** Thank you, Mr. Gill. I guess I can use up
18 the rest of your time. First, representing the advisory panel
19 for shrimp, we want to thank the council for allowing us to
20 provide input and for following several of our suggestions, one
21 of which you passed already, a few minutes ago, but I have a lot
22 of questions for the EDM modeling, and Dr. Nance were talking
23 that we wished we had an hour or so to discuss some of this,
24 but, as an example, at our meeting last week, in the NMFS
25 presentation, a couple of stat zones east of the Mississippi
26 River were combined, because the data was so poor, the effort
27 data.

28

29 This is just one example of the importance of getting info from
30 the advisory people. It was pointed out by two, or maybe three,
31 of the fishermen that the reason there's a lack of data in that
32 particular area of the Gulf is because of the bottom type. It's
33 a hard bottom, and so there's very little shrimping activity
34 going on. Now, we're all for additional better science, but,
35 for me to hear, and this is the first time I've heard Dr.
36 Nance's presentation, that they're going to be making
37 predictions by stat zone, the number one question is what time -
38 - Let's just use one species that we know a lot about, the brown
39 shrimp.

40

41 At what time of the year is this prediction by zone going to be
42 made? Okay? Then we have a flood, and then we have a
43 hurricane, and then we have a manmade disaster, another oil
44 spill or something of that sort, and so, while I assume the
45 scientists are very optimistic about bring able to do this, and
46 I hope they can, I see a lot of -- I have a lot of questions,
47 and I can see a lot of issues that may develop relative to that.

48

1 One issue of real importance to the shrimp industry is these
2 offshore wind turbines, and you have taken a position and sent a
3 letter to BOEM, and I think it's important, from all fisheries,
4 and I just recently read where the North Carolina Charter Boat
5 Association has come out against these wind turbines in an area
6 off North Carolina, because of where they have planned to locate
7 them, what fishing area and things of that sort, and so I think
8 that's something of real importance.

9
10 While we've had experience in the Gulf with oil and gas
11 activity, and the oil and gas industry puts up money for a fund
12 called the underwater obstruction fund, if and when, or when,
13 these turbines are placed in areas, and we're talking about the
14 Gulf of Mexico, but it probably should be throughout the United
15 States, the Pacific, the Atlantic, and Gulf, in areas that that
16 industry should provide funding for gear compensation for, and,
17 again, representing shrimp, the shrimp fisherman and any other
18 fishermen that might have gear impacted by that activity.

19
20 The last motion you passed, adding staff, industry, and so on to
21 the committee, I think is important, because, as the example
22 that I gave about that bottom type, I think the industry people
23 and some of these staff members could help that process a great
24 deal, and so, with that, it's always a pleasure to be here. Dr.
25 Shipp -- I want to compliment Dr. Shipp, but he's leaving on me,
26 and it's good to see you, Bob. Thanks. I would thank all of
27 you. If you have any questions, I will try and answer them.

28
29 **CHAIRMAN BOSARGE:** Thank you, Mr. Perret.

30
31 **MR. PERRET:** Thank you very much, and, again, we appreciate
32 being able to provide input.

33
34 **CHAIRMAN BOSARGE:** Mr. Gill, the floor is back to you, sir.

35
36 **MR. GILL:** Thank you, Madam Chair, and so Corky mentioned it, to
37 some extent, but clearly this EDM development is potentially a
38 huge, significant change to how we view the shrimp science, and
39 we have an opportunity, it seems to me, which the AP has
40 expressed, to integrate the understanding from the practical
41 side with the science side, and so, Bernie, if you would bring
42 up the shrimp EDM motion. **I would like to make the AP's motion,**
43 **and, for example, one of the potential members, assuming they're**
44 **willing, that might be Dr. Nance.**

45
46 I mean, he knows the species, and he knows the prosecution of
47 the species, and he knows the historical context, and I think
48 that's invaluable to this group to, if you will, put on-the-

1 water eyes to the science being developed, and so I make the
2 same motion as the AP, as soon as it comes up. Thank you, Madam
3 Chair.

4
5 **CHAIRMAN BOSARGE:** All right. Thank you, Mr. Gill. I think
6 that motion is going up on the board. Is that your motion, Mr.
7 Gill? Do you want to read it into the record, and then we'll
8 see if we have a second?

9
10 **MR. GILL:** Yes, ma'am. **The motion is to convey to the SEFSC the**
11 **support of the formal inclusion of the appropriate SSC members,**
12 **council staff, and shrimp industry representatives in the**
13 **development of the shrimp EDMs outside of formal SSC review and**
14 **prior to the SEDAR research track.**

15
16 **CHAIRMAN BOSARGE:** All right. Thank you, Mr. Gill. Do we have
17 a second for the motion? I will second it. So, I like the
18 motion as well, and this actually does come, like you said,
19 straight from the Shrimp AP report, and I think they thought it
20 out, and, in fact, they had some discussion about it during the
21 AP meeting, and they revised it a couple of times, and I hope it
22 doesn't step on the Science Center's toes.

23
24 Dr. Walter was actually at that Shrimp AP meeting, and we had
25 some good discussion with him about this as well, and I ought to
26 thank you formally, and I know I thanked you off the record, but
27 it meant a lot to our industry to have you at that meeting, and
28 it's been a long time since we've had NMFS personnel there in-
29 person, and so we really appreciate you making the drive over
30 and spending the whole day with us. We really do.

31
32 I hope what this would accomplish is that we'll have some of
33 that historical knowledge from your center, that maybe has
34 retired now, like Dr. Nance, and we'll have them involved on the
35 frontend of this process. As you said, and the analogy you
36 used, was, as we're baking the cake, we'll have them involved a
37 little bit, and hopefully some industry representatives there as
38 well, when you're making those decisions and those assumptions
39 on what to put in that model, and we'll be involved in the
40 baking of the cake, so that we don't maybe end up baking it
41 twice.

42
43 I hope that you'll be able to support this, and everybody can
44 get onboard. I do think this is important, and it is a -- It's
45 going to be -- It's an important process for our industry, as we
46 look at possibly a new model, and then status determination
47 criteria coming out of that, and we want to make sure it's the
48 best that it can be, and we feel that we can be beneficial and

1 be an asset to the Center in that process, and so I have Dr.
2 Walter and then Mr. Gill.

3
4 **DR. WALTER:** Thank you, Madam Chair, and I do appreciate this,
5 and I don't think, from a Center perspective, we have really any
6 concerns about it. We have done the technical working groups
7 for a number of the other topics, and I think what I really
8 wanted to focus on here was that we haven't outlined the process
9 for how we're going to use this new science to give status
10 determination criteria or management advice.

11
12 We're talking a lot about EDMs. Well, that's just one tool for
13 predictive modeling. The EDM itself doesn't give the advice for
14 catch advice. That process, we have to work out an outline for
15 how we would do that and whether EDM would be a predictive model
16 or predict the abundance, and we would then modify the previous
17 catch based on a management procedure approach, or whether we
18 would put EDM into another assessment criteria, as one of the
19 inputs, or even whether EDM might not necessarily be the engine
20 that gives us the advice, and so that process is actually what
21 we need to continue to outline.

22
23 I think that's something that we could definitely be of value
24 and would benefit from a working group, as this is put out
25 there, and I would kind of extend it beyond just consideration
26 of EDM, given that there's a number of things that are probably
27 going to need to be considered before we turn it into an actual
28 advice framework, but I think, as I have looked it over, and I
29 think I'm supportive of it, and I think it's probably a
30 necessary step forward. Maybe even a friendly amendment to
31 extend beyond just EDM, towards the tasking for that technical
32 working group. Thanks.

33
34 **CHAIRMAN BOSARGE:** Mr. Gill.

35
36 **MR. GILL:** Thank you, Madam Chair, and I guess now I would ask
37 for Dr. Walter's help in rephrasing that to reflect that,
38 because I think that does improve it, but the comment I was
39 going to make is that this concept, and I'm sure he wasn't aware
40 of it when he talked, but Dr. Heyman talked this morning, during
41 the EBFM discussion, about collaborative work between industry
42 and science, and he put it in the cooperative research realm,
43 but this is one of the same exact things that he was talking
44 about on working collectively, collaboratively, together to make
45 things better. With that comment made, Dr. Walter, could you
46 suggest a better language, and I suspect it's remove EDMs and
47 replace it with something else, but what is that something else?

48

1 **DR. WALTER:** Madam Chair, I would offer up the term "management
2 procedure" to replace "EDM" in the sense that it's going to be a
3 procedure that we would follow for generating management advice,
4 and we don't necessarily need to be entirely prescriptive as to
5 what it's going to be, and that's what that group would need to
6 come up with, and then take it to the SSC, and the SSC would
7 then say, yes, this does meet our needs, and then the SSC would
8 propose that to the council. I think that's the process, that
9 we need some of that upfront work, and I think we need the
10 institutional knowledge that we have had at the table developing
11 those, and so I think that is actually definitely something that
12 we're supportive of. Thanks.

13
14 **CHAIRMAN BOSARGE:** All right. To speed this up, because I
15 promised that I would get out of here on time, let's leave "EDM"
16 in there and take that "management procedure" -- We're going to
17 put it in there, but put it after "EDM", and I think it will
18 flow better that way, and we can say, "in the development of the
19 shrimp EDMs and management procedures". Isn't what you said, is
20 "procedures", Dr. Walter?

21
22 **DR. WALTER:** Management procedure.

23
24 **CHAIRMAN BOSARGE:** Okay. Outside of the formal -- That will
25 give us a little more leeway and some broadness that you were
26 hoping for in that group, and allow us to maybe pursue other
27 things as well, and so, Mr. Gill, are you okay with that? I am
28 hesitant to take "EDM" out. I think it gets too blurry then. I
29 want to make sure that, if nothing else, we do at least focus on
30 that, and then whatever comes from it.

31
32 **MR. GILL:** Madam Chair, if I could, I guess the question that
33 rises, in my mind, and say, for example, EDM is not where we go,
34 and we don't want to get misled down that track, but the other
35 one is, when you talk about the management advice procedure,
36 that's on the backend of the science process, and I think the
37 intent of the original motion was to have the inclusion of the
38 historical knowledge, if you will, on the frontend and be part
39 of the process in developing whatever model, whatever process is
40 derived, to incorporate it going in and not have it as a backend
41 input, and, if that's consistent with this version, I'm good
42 with it.

43
44 **CHAIRMAN BOSARGE:** Dr. Simmons, do you want to answer that?

45
46 **EXECUTIVE DIRECTOR SIMMONS:** Thank you, Madam Chair. Just real
47 quick, I guess, Dr. Walter, it's a little confusing, to me, to
48 add this other part to the motion, because we do have a research

1 track planned, and I guess are we skirting almost a working
2 group, where we set up terms of reference and that kind of
3 thing, and we would be doing the same sort of exercise? I'm not
4 sure I'm completely clear, when we're adding this additional
5 language to the motion, how that would all fit in with the plan
6 for the research track, and can you explain that a little bit?

7

8 **CHAIRMAN BOSARGE:** Dr. Walter.

9

10 **DR. WALTER:** Well, one of the things that a lot of the technical
11 working groups were tasked with solving things in advance of the
12 research track, like effort, bycatch, indices for the stock, and
13 I see this as also being a technical working group that could
14 start to begin to solve some of those issues ahead of time. In
15 particular, we need to know how we would use EDM for management
16 advice, and, right now, that's actually something that the EDM
17 group is working on trying to do, and I think the intent here
18 was to try to have some of the institutional knowledge also
19 involved in that, but I think part of can EDM become the
20 management advice engine needs to be able to have it turn the
21 corner.

22

23 Right now, it's just predicting a relative abundance index from
24 one year to the next, and that doesn't give us advice. One
25 could turn that into a management procedure that says you would
26 adjust the previous year's catch on the basis of your index
27 prediction, and so, if your index goes up, your catch would go
28 up. If your index goes down, the catch would go down, and that
29 would be turning the corner on it and making it a management
30 procedure, versus it just being, right now, the predictive model
31 that it is.

32

33 Then it may or may not be that EDM solves all those problems,
34 and it may be that we use just straight-up indices, and it may
35 be that we need to derive, or develop, a way to get status
36 determination criteria out of this.

37

38 Now, all of these things do require a fair bit of scientific
39 inquiry to do, and the reason that I thought expanding it to
40 that management procedure for that group is because taking that
41 to the research track means that you have something in hand as
42 to what you would develop. Does it put the cart before the
43 horse for the research track? I think, since that work is
44 ongoing -- I mean, that's what Steve Munch and group, and
45 Michelle, are working on. The request was just to make sure
46 that there are other people included in that.

47

48 **CHAIRMAN BOSARGE:** Dr. Simmons, did you have any feedback?

1 We've got to wrap this up, and so my suggestion is, maybe, if
2 we're worried about the management procedure being a little
3 hazy, we could -- Dr. Walter just touched on it, and I think
4 what it gets down to is your SDCs, going from the EDM to
5 developing SDCs from that, status determination criteria from
6 that, and there are a couple of other questions that the group
7 would have to go through to get to that point, and do some other
8 evaluations, and so what do you think about changing "management
9 procedure" to "SDC", status determination criteria? Dr.
10 Simmons, and then, Mr. Gill, are you okay with that?

11
12 **MR. GILL:** Madam Chair, my reaction is I would prefer the
13 "management procedure", being less focused, to allow other
14 discussions above and beyond SDC.

15
16 **CHAIRMAN BOSARGE:** All right. Dr. Simmons and then Mr. Anson.

17
18 **EXECUTIVE DIRECTOR SIMMONS:** I guess the root of the matter is
19 we're trying to figure out if the EDM models are going to meet
20 the status determination criteria that we need, right, and so
21 that's what we're trying to figure out here, and I guess, with
22 this type of group -- This is more formal group, even than what
23 we had with the other working group, and so are we going to have
24 like a scope of work, terms of reference, or are we going to go
25 to the SSC? I just have a lot of questions that we'll have to
26 work through with the Science Center on that.

27
28 **CHAIRMAN BOSARGE:** Mr. Anson, are you going to bring us to
29 center?

30
31 **MR. ANSON:** I doubt it. I know you're past your deadline for
32 getting the committee over, but I just wanted to be clear. On
33 the "management procedure outside of formal SSC review", this is
34 to create the procedure, a standardized procedure, that would be
35 used in-season, or during-the-year management, that would
36 already have been approved by the SSC, or have been looked at by
37 the SSC, that we then use in the future, and I guess that's just
38 what I'm getting at.

39
40 Just, if you read that without any background information, it
41 looks like we're not having any input from the SSC, and that's
42 all, and I just want to make sure that it's clear. If that's
43 what the intent is, that's fine, but, if one just were reading
44 this off the street, they could see that that could be a
45 management procedure outside of the formal SSC review, and
46 that's all. I just wanted to make sure that there is that
47 distinction, that it is going to be reviewed by the SSC at some
48 point, once they develop it. Okay, and I'm getting

1 confirmation. Thank you.

2
3 **CHAIRMAN BOSARGE:** Thank you, and I think you put enough on the
4 record right there that it's clear. Mr. Gill, would you like to
5 go back to the original motion, as we originally crafted it?
6 What are you thinking?

7
8 **MR. GILL:** We've had several discussions here about how to
9 wordsmith this, and I think there is value in going back to the
10 original motion. If it passes, then we can develop it more
11 fully, and perhaps in a slightly different fashion, at Full
12 Council, and it would be a more productive and efficient
13 conversation.

14
15 **CHAIRMAN BOSARGE:** I love that idea, because we are short on
16 time, and so if staff will just put the original -- We've been
17 all the way around the world, and we're going to come back to
18 the beginning, where we started. All right. That was the
19 original motion. Mr. Gill is okay with that, and I was the
20 seconder. I'm okay with that, and I think that's lovely at this
21 point, and so is there any further discussion on this, before we
22 get to Full Council? **Is there any opposition to the motion?**
23 **Seeing none, the motion carries.**

24
25 All right, and so that is five minutes over time. Mr. Chairman,
26 we had just a couple of things left out of that AP report, and
27 we can pick those up at Full Council, and then my one Other
28 Business item won't take us but a second when we get to Full
29 Council, and so does that work for you?

30
31 **MR. DIAZ:** That works for me, and so thank you, Chairman
32 Bosarge, for bringing us through that committee.

33
34 (Whereupon, the meeting adjourned on April 4, 2022.)

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