

GULF OF MEXICO FISHERY MANAGEMENT COUNCIL

SHRIMP MANAGEMENT COMMITTEE

Embassy Suites Panama City Beach, Florida

October 23, 2023

VOTING MEMBERS

- 10 Chris Schieble (designee for Patrick Banks).....Louisiana
- 11 Kesley Banks.....Texas
- 12 Billy Broussard.....Louisiana
- 13 Rick Burris (designee for Joe Spraggins).....Mississippi
- 14 Dale Diaz.....Mississippi
- 15 Dave Donaldson.....GSMFC
- 16 Dakus Geeslin (designee for Robin Riechers).....Texas
- 17 Bob Gill.....Florida
- 18 Anthony Overton.....Alabama
- 19 Andy Strelcheck.....NMFS
- 20 Troy Williamson.....Texas

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- 24 Susan Boggs.....Alabama
- 25 Jonathan Dugas.....Louisiana
- 26 Tom Frazer.....Florida
- 27 Michael McDermott.....Mississippi
- 28 C.J. Sweetman (designee for Jessica McCawley).....Florida
- 29 Ed Walker.....Florida

STAFF

- 32 Assane Diagne.....Economist
- 33 Matt Freeman.....Economist
- 34 John Froeschke.....Deputy Director
- 35 Beth Hager.....Administrative Officer
- 36 Lisa Hollensead.....Fishery Biologist
- 37 Mary Levy.....NOAA General Counsel
- 38 Natasha Mendez-Ferrer.....Fishery Biologist
- 39 Emily Muehlstein.....Public Information Officer
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- 41 Bernadine Roy.....Office Manager
- 42 Carrie Simmons.....Executive Director
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- 44 Carly Somerset.....Fisheries Outreach Specialist

OTHER PARTICIPANTS

- 47 Leann Bosarge.....MS
- 48 Peter Hood.....NMFS
- 49 Tim Griner.....SAFMC

1 Clay Porch.....SEFSC
2 John Walter.....SEFSC
3
4 - - -
5

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1 The Shrimp Management Committee of the Gulf of Mexico Fishery
2 Management Council convened at The Embassy Suites in Panama City
3 Beach, Florida on Monday afternoon, October 23, 2023 and was
4 called to order by Chairman Chris Schieble.

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

10 **CHAIRMAN CHRIS SCHIEBLE:** Good afternoon, everyone. At this
11 time, I would like to call the Shrimp Management Committee to
12 order. The members of the committee are myself as Chair, Mr.
13 Gill as Vice Chair, Dr. Banks, Mr. Broussard, Mr. Diaz, Mr.
14 Donaldson, Dr. Overton, Mr. Geeslin, General Spraggins, or Rick
15 Burris, Mr. Strelcheck, and Mr. Williamson. All committee
16 members are present today.

17
18 The first item on the agenda is Adoption of the Agenda, which is
19 Tab B, Number 1. Does anyone have any other business that they
20 would like to see added to the agenda? I think we need to
21 actually add the other business that is listed, correct?

22
23 **EXECUTIVE DIRECTOR CARRIE SIMMONS:** Thank you, Mr. Chair, and so
24 I was just wondering -- We sent a letter to Dr. Evan Howell and
25 Dr. Cisco Werner regarding the climate resilient money, and if
26 it could be used towards the ELB effort, and so I will just ask,
27 at the end of the meeting, if they could give us an update on
28 that, if they have any information.

29
30 **CHAIRMAN SCHIEBLE:** Okay. So noted. Without any other
31 additions, does anyone have any objections to that agenda
32 amended? Seeing none, the agenda is approved. The next item on
33 the agenda is Approval of the August 2023 Meeting Minutes, which
34 is Tab B, Number 2. Are there any additions, deletions, or
35 corrections to those minutes from the August meeting? I don't
36 have any either, and so, seeing none, is anyone opposed to
37 adopting those minutes as written? Seeing none, the minutes are
38 adopted.

39
40 Next up on the agenda is the Action Guide and Next Steps, Tab B,
41 Number 3, and I believe that Dr. Freeman is remotely on the
42 meeting with us, and I will let him guide us through that. Dr.
43 Freeman, can you hear us?

44
45 **DR. MATT FREEMAN:** Yes, sir. Thank you. For the first agenda
46 item, the committee will receive results of the NMFS cellular
47 vessel monitoring, cVMS, testing on Gulf shrimp vessels.
48 Responding to the Gulf Council's motion, the goal of this

1 project was to test several different models of cVMS units,
2 alongside the existing cellular electronic logbook devices on
3 five vessels off of Palacios, Texas for the full length of an
4 average offshore trip.

5
6 Originally, three models were requested to be tested, and the
7 Southeast Fisheries Science Center expanded this to a fourth
8 unit. Retrieved data has been run through the Dettloff effort
9 algorithm for comparison. The committee will also hear about
10 progress on the early adopter approach. The committee will then
11 be presented with any Shrimp Advisory Panel motions related to
12 the results of the NMFS pilot study. The committee should ask
13 questions and provide feedback, both to NMFS on the pilot study
14 as well as to council staff on the next steps and timing for the
15 draft shrimp framework action.

16
17 Mr. Chair, one thing to add is the Shrimp Advisory Panel meeting
18 was held this past Thursday, and there is a note in the meeting
19 summary, but I did want to remind the Shrimp Committee that we
20 were one individual short of a quorum, and so the AP still did
21 make motions, and it was just one person short of a quorum.
22 Thank you.

23
24 **CHAIRMAN SCHIEBLE:** Okay. Thank you, Dr. Freeman. Moving on to
25 Agenda Item Tab B, Number 4(b), which is the results of the
26 side-by-side testing of cellular vessel monitoring systems, and
27 that will be Dr. Walter. Can you hear us, Dr. Walter?

28
29 **RESULTS OF SIDE-BY-SIDE TESTING OF CELLULAR VESSEL MONITORING**
30 **SYSTEMS (cVMS) AND CELLULAR ELECTRONIC LOGBOOKS (cELBs) ON GULF**
31 **SHRIMP VESSELS**

32
33 **DR. JOHN WALTER:** Good afternoon, everyone. Sorry that I cannot
34 be there in-person, but I'll be presenting the VMS testing
35 results from the side-by-side testing, and I am presenting this
36 on behalf of a large number of people who worked together on
37 this and got the units deployed over the 4th of July holidays in
38 Palacios, and then got the units taken off, and so I want to
39 give a thanks out to a lot of the people who worked on that,
40 from our staff, to LGL, and then to the vessel owners and
41 captains who allowed us to get on their boats and install these.

42
43 The motivation here is that we had previous monitoring done with
44 the cELBs, the current electronic logbooks, that recorded
45 information at ten-minute intervals, and that's the previous
46 system we had, and that's what is used to generate fishing
47 effort, which is critical information for managing the fishery,
48 as well as essential information for the biological opinions

1 related to sea turtles, that we have to monitor that effort, and
2 there's also an effort cap that is for bycatch.

3
4 That data was originally transmitted to NOAA Fisheries by the 3G
5 cellular network, but then, when that network stopped
6 transmitting, we no longer were able to get that data directly
7 from the devices, and so now we've got the process, in the
8 interim, to collect the chips and have them either mailed back
9 in, or we've got a lot of industry participation, with boots on
10 the ground going to vessels to get those chips.

11
12 We're collecting that data, in the interim, until we get a new
13 process in place, and, right now, it's still giving us effort
14 data, albeit not as systematic and as accurate as it was before,
15 because some of the devices are failing, and then we're not
16 getting as many chips back as we would have when the data was
17 transmitted electronically.

18
19 The goal is to try to determine what's going to be the future,
20 and we have both a requirement to do this, a request from
21 Congress to do this, and I think a strong motivation to get a
22 more modern effort data collection process in place, and one of
23 the keys to that is that we really want the units to be able to
24 actually transmit the data to us through the cellular networks
25 and not have to physically go out to vessels.

26
27 The objectives were to install new cellular VMS devices
28 alongside cELBs on five volunteer commercial shrimp boats and
29 monitor the performance at-sea during regular fishing trips and
30 then have that data be transmitted cellularly to us. In order
31 to get it before the council, we had to schedule that after the
32 Texas open, in the July-August timeframe, and we wanted the data
33 to be recorded at the standard ten-minute intervals for the full
34 length of an average offshore trip, and, in some cases, we got
35 multiple trips, because we were able to do that, and then we
36 wanted to run that data through the Dettloff algorithm, which
37 calculates the number of shrimping days, shrimping effort in
38 days, and so that is really the determinate of whether they work
39 or not, is whether they gave us similar results as to what the
40 existing 3G units gave us.

41
42 Then we compared those results in the side-by-side testing, to
43 evaluate the performance of the units, and this comes from a
44 motion passed by this council to conduct a side-by-side test.

45
46 The methodology is that Palacios, which is the port for a large
47 number of shrimp vessels that were getting ready to fish during
48 that Texas opener, was a convenient location for us to get on

1 vessels and get these units installed, and we installed multiple
2 different units on the vessels during that July timeframe, in
3 advance of the opener.

4
5 We tested four different VMS units, Boat Command and NEMO, which
6 are both approved by the ASMFC lobster fishery, and then Tracker
7 One, which was added, because it was available, and then Zen
8 VMS, which is approved for the for-hire fisheries in the Gulf of
9 Mexico. Originally, we requested to put Nautic Alert units on
10 the boats. However, they were not available, during this time
11 period, to us, and so we replaced them with some of the other
12 units that we had been exploring, and, as the ASMFC effort
13 monitoring for the lobster fishery has opened up a number of
14 units, we added both them and Tracker One to that.

15
16 We also replaced -- If there was an old cELB, one of the 3G
17 units, we put a new one on, to ensure that we would get reliable
18 data from them, in case one of the older units might have
19 failed, which, as it turns out, was a wise decision, and then
20 you can see, on five different vessels, we got almost the full
21 suite of different units on, except we didn't get Tracker One on
22 Vessel 5.

23
24 As I mentioned before, we ran it through the Dettloff algorithm,
25 which identifies trawling versus steaming, based on vessel speed
26 and based on the distribution of speed, and then that allows us
27 to then say whether the effort in a given location and time is
28 fishing effort or steaming effort, based on the vessel speed,
29 and that's calculated because you have two position points, and
30 then the straight-line distance between those two position
31 points, and you can derive a speed from that.

32
33 The results are we found that, of the old cELBs, two of the old
34 ones failed. The new ones all worked, but it does show that, as
35 those units age, just like any electronics, they're going to
36 potentially not continue to work, and, in this case, it was good
37 that we put new units on. We had results back from all four of
38 the VMS testing, except for Vessel 5, where we didn't get the
39 Tracker One on.

40
41 I do want to put a disclaimer out that many of the results here
42 will be focused on data determined to be valid by the current
43 estimation of commercial shrimp effort algorithm, the Dettloff
44 algorithm, and some gaps reflect device performance, while other
45 gaps reflect the algorithm filtering, due to vessel behavior,
46 such as when it's stationary for a long period of time. Also,
47 points are filtered out if they're not in the area we're
48 calculating our effort for, which is offshore, and so, if

1 they're inshore, those are filtered out, and so some of the
2 results that you see are due to that filtering algorithm, and
3 then we will try to clarify those as the results are presented
4 in more detail.

5
6 This is one result table for one vessel, and it's quite
7 detailed. I'm not going to go through every single one of these
8 for every vessel, and I will kind of briefly touch on them and
9 note that the colors show us where we got most of the data back
10 that we would expect, because we have an expected duration of
11 the trip, and then we would want to get all of that data back.

12
13 In some cases, we did not get all of the data that we expected
14 back, and, in some cases, you will see numbers over 100 percent,
15 and that means that there were data points that were in between
16 the ten-minute interval, and so there are more data points,
17 because, in some cases, devices are programmed to put a data
18 point down when they cross a border, when they power-on or off,
19 or for other reasons, and so sometimes you can get data that are
20 at say seven, or five, minute intervals. That's not a problem
21 for the algorithm, because, as I noted, it takes the speed from
22 the position, the two positions, and then the time between them,
23 and so it simply calculates that speed and whether it's steaming
24 or towing, regardless of whether it's seven or ten minutes.

25
26 You will see a number of situations of why issues were observed,
27 where, for instance, some of the units didn't report all the
28 data, and, in one case, for Vessel 1, one of the units required
29 a reboot, which requires a magnet that we didn't send with the
30 vessel, and so it couldn't get rebooted during the trip. There
31 were also some units that had some substantial gaps in the data
32 collection, and we're not quite sure why the Tracker One had
33 that, but you will see that, systematically, the Tracker One
34 units seemed to have a lot of gaps, which may be due to settings
35 related to whether they were within cell service.

36
37 Now, the units should still continue to report position, just
38 like your phone knows its position, even if it doesn't have cell
39 data, and it would just transmit that when it gets close enough
40 to shore. However, there might have been something with why
41 that didn't work, and we're going to explore that further,
42 because we've heard that the units do well in other fisheries.

43
44 Here is a figure of the estimated fishing tows, which is the
45 upper-dashed line, and then all of the data, both fishing and
46 steaming, which is the lower line, for each one of the units.
47 For Vessel 1, in gray, you see when it's in port. The green and
48 the red are the start and stop of a fishing trip, and what you

1 want to see is that the two lines show all of their data, that,
2 when they're in port, they are not fishing, and then that there
3 aren't substantial gaps.

4
5 These are the same results as I showed for Vessel 1 for Vessel
6 2, and, here, there was an issue, again, with the Tracker One,
7 and some of the other units had some other power issues here,
8 but, for the most part, we got pretty good results here from
9 most of the units. The old cELB did not work on this one.

10
11 Then you see the time series plot of the same data, and you see
12 the Boat Command and Tracker One had missing data, and then, in
13 some cases, the units were turned off for the first three days,
14 and I believe that was a power issue, and I will just quickly
15 scroll through the remainder of these slides, which are the
16 same, and we kept the presentation nearly the same as what was
17 given to the AP last week, and so, if there's a particular
18 question that people want to go back to on one of these slides,
19 we can do that, but I will just quickly go through them. This
20 is the time series plot, and this is Vessel 4, and this is
21 another time series plot, and this is Vessel 5.

22
23 Here are maps, and we've gotten permission from the vessels to
24 show the actual maps of the effort and space, and you can see
25 when they're leaving port and then when they're -- You see some
26 red in the bay, and we think that that's due to when the vessels
27 are lowering their outriggers, and then you see where the bulk
28 of the fishing is offshore, and you see that some of the units
29 had some substantial missing data. This is for Vessel 1, and
30 then Vessel 2, Vessel 3, Vessel 4, and Vessel 5.

31
32 This is really probably the make take-home message, and this is
33 the total effort, in tow days, after we've run the data through
34 the Dettloff algorithm, and what you can see is that most of the
35 units, except for the Tracker One, has got fairly similar total
36 tow days, and, essentially, it would be giving us the same
37 effort recording as any other ones, and we see that the new
38 cELBs generally performed well, with the exception of for Vessel
39 4. The Boat Command also performed well, except for on Vessel
40 2. NEMO also performed well. However, it had some -- Again, on
41 that Vessel 1, it required the reboot. Tracker One had the
42 greatest challenge, and I think we're still sorting out what may
43 have happened there, and then Zen showed quite good results.

44
45 I will note that there was, in one case, where there was more
46 effort hours recorded than any of the other ones, and this is
47 because we actually were emailed some extra days of fishing, and
48 that's simply because of that and not because there was anything

1 wrong with the unit, and it didn't have any other problem, and
2 so what we see is, generally speaking, pretty good performance
3 from the VMS units, and I think this sets us up well for moving
4 into the early adopter phase.

5
6 The challenges we faced were with some of the power issues, and
7 I think that speaks to how we're going to need to ensure that
8 the units are installed well and that they are wired to the
9 vessel, so that they obtain power when the vessel is operating,
10 and the data was also -- One of the other parts of this early --
11 What will be the next phase of the early adopter, which we
12 actually tested out during this testing phase, was having the
13 data be passed directly to the Science Center.

14
15 This is one of the potential options we're considering in the
16 framework amendment, in terms of how the data is routed, and, in
17 this case, we've created an application programming interface to
18 allow the vendors to push the data directly to the Science
19 Center. Several of the vendors tested pushing that data into
20 the database during the at-sea testing phases in the API, and
21 some of the vendors also emailed us the data, but now all of the
22 vendors have that capacity to be able to push the data to us.

23
24 Then what we would like to do is further flesh out that
25 potential during the early adopter program and then determine
26 whether that's something that we can do at scale as the program
27 moves operation, and the question will be is that something that
28 the Science Center can maintain, and that the vendors can also
29 maintain, and does it ensure the confidentiality and data
30 integrity necessary for the system to go operational.

31
32 The next steps here are to embark upon the early adopter
33 program. The Gulf States Fisheries Commission is administering
34 the contract to do this, and the contract has been awarded to
35 LGL Ecological Associates, and the goal of this is for voluntary
36 adoption of cellular VMS units on vessels by vessel owners and
37 operators.

38
39 They would get two years of data transmission fees paid for, as
40 well as the unit purchase and installation, and so it's a pretty
41 good deal. This is in advance of any rulemaking, and is
42 entirely voluntary, but it might -- It would most likely help to
43 support whatever rulemaking comes into place, in terms of being
44 able to beta test these units before anything is required, and
45 so, if there are vessels who are interested in being part of
46 this, they can contact Nathan Putman at LGL Ecological Research
47 Associates, and what we would recommend is that vessel owners
48 choose units that demonstrated good performance here and/or that

1 are type-approved for other fisheries.

2
3 In that case, we want vessel owners to have the choice of what
4 units to put in, and we, at NOAA Fisheries, are not dictating,
5 or do not right now have any requirements as to which units
6 would be supported. However, units that have shown pretty good
7 performance here would probably be preferred.

8
9 With that, I would just like to acknowledge, again, all the
10 people who have contributed to this project, and the Port of
11 Palacios, and give a thanks to the shrimp fishery. We know this
12 is a challenging time for many in the shrimp industry, and we've
13 heard that, and we want to ensure that we can get the effort
14 data modernized, in a new and improved program, with a minimal
15 and least challenges to the fishery, and we think that the early
16 adopter program is an option to help support that, and so
17 thanks, and I will take any questions.

18
19 One other thing that I will note is that our communications lead
20 -- We have a new communications person, and Meaghan Emory is in-
21 person at the meeting, and, Meaghan, if you can raise your hand,
22 and I believe we have handouts that we can provide on this early
23 adopter approach, if people are interested. Thanks.

24
25 **CHAIRMAN SCHIEBLE:** Understood. Thank you, Dr. Walter, and I
26 appreciate, you know, your summary of this, and I know we've
27 gone through this testing of these different units it seems like
28 for quite a while now, and these are probably the best results,
29 at least in my opinion, that I have seen over the course of
30 going through this multiple different iterations, and so thank
31 you for your patience, and all those folks that you have listed
32 there, for putting the effort in to get this done to where we
33 can work on it. Do we have some questions around the table for
34 Dr. Walter on the test results? Kevin.

35
36 **MR. KEVIN ANSON:** Thank you, Mr. Chair. I'm not on your
37 committee, but, Dr. Walter, regarding the Boat Command unit, it
38 had the overreporting, if you will, or the additional data
39 points that were collected, but yet it's approved by the ASMFC,
40 and is that an issue that they had noted, or do they have
41 similar kind of reporting, or data issues, with that, as far as
42 extra data points?

43
44 **DR. WALTER:** I don't know about in ASMFC and whether that's an
45 issue, but it's certainly -- With most of the VMS units, they're
46 required to ping when they cross certain boundaries, or when
47 they have a power-on or off, or when they've lost like
48 communication, and so I think it's pretty standard to get these

1 pings at finer intervals, and the algorithm just simply deals
2 with it appropriately, and so it's not an issue in any way, and,
3 in fact, it's actually part of the standard programming under
4 most VMS requirements, and so, no, it's not an issue that we
5 could see, but I don't know about the ASMFC. Thanks.

6
7 **CHAIRMAN SCHIEBLE:** Thank you, Dr. Walter. Mr. Strelcheck has a
8 question.

9
10 **MR. ANDY STRELCHECK:** Not a question, but I guess, in response
11 to Kevin's question, I think the main issue might be the
12 difference in the purpose of how they're using the units, and
13 so, in this instance, we're, obviously, trying to estimate
14 shrimp fishing effort, and ASMFC I think is more using them as
15 just locational devices for where the lobster fishery is
16 operating.

17
18 **CHAIRMAN SCHIEBLE:** Okay. Thank you, Andy. Do we have any
19 other questions? Ms. Boggs.

20
21 **MS. SUSAN BOGGS:** I'm not on your committee, but I did want to
22 ask, and is there a reason that Zen doesn't transmit directly to
23 the agency? I mean, are they looking at the data prior to it
24 going to the agency, or why is that different than the others?

25
26 **DR. WALTER:** The reason that they emailed us was because we
27 really only created the API during the testing phase, and so Zen
28 had been planning on emailing us the data, and only tested it
29 during that phase, but, operationally, how they sent it to us
30 was by email, and they can also use the API now, and so it was
31 just a timing thing, and I think, going on in the future, Zen
32 will just be using that portal. Thanks.

33
34 **CHAIRMAN SCHIEBLE:** Okay. Thank you, Dr. Walter. Mr. Diaz.

35
36 **MR. DALE DIAZ:** I just wanted to kind of echo what Mr. Schieble
37 said. Dr. Walter, thank you to you and your team, the folks
38 that participated in it, and I know you all pulled this together
39 in a short amount of time, and it's a difficult thing to deal
40 and wrestle with, and it is noted, and appreciated, and so thank
41 you, all.

42
43 **DR. WALTER:** Thank you.

44
45 **CHAIRMAN SCHIEBLE:** Ms. Boggs.

46
47 **MS. BOGGS:** Again, I'm not on your committee, but, on slide 23,
48 the results from Vessel 4, I've been -- I mean, most of the maps

1 on all the vessels show pretty closely, but, on Vessel 4, the
2 Zen map, and it seems like I'm picking on Zen, but it's way
3 offtrack, compared to the other tracks, and is there any
4 explanation for that? I mean, on track compared to the other
5 hardware that were used on this vessel, and was it a different
6 trip?

7
8 **DR. WALTER:** Yes, and that one has an extra three days of
9 fishing, down there in that lower-left, and so Zen just happened
10 to be able to collect that extra data, and we probably should
11 have just removed that.

12
13 **CHAIRMAN SCHIEBLE:** Okay. Do we have any other further
14 questions for Dr. Walter? If not, we can move on to the next
15 item on the agenda, which is Tab D, Number 4(a), and that's a
16 summary of the October 19, 2023 Shrimp Advisory Panel meeting,
17 and that will be from the Shrimp AP, Ms. Bosarge, please.

18
19 **MS. LEANN BOSARGE:** Good afternoon. Thanks for having me, and,
20 staff, if you want to, the first part of the summary is really
21 going to focus on that presentation that was just on the board,
22 and so, if you want to, you can pull that back up, because I
23 think it will be helpful as we go through this.

24
25 The AP first wanted to thank the council for putting forward the
26 motion that we had in our former AP summary report, where we did
27 ask for further testing on those three units, and thank you to
28 the council for making that motion as well, and sending that
29 letter on to the Science Center, and then we wanted to thank the
30 Science Center, because, really, this round of testing was very
31 well thought out, the protocols that you put in place, and you
32 gave us a great baseline, and you were very proactive in making
33 sure that you had the old 3G unit that had always been on the
34 boat on there, but then you also pulled your 3G units, that you
35 have the inventory at the Science Center, and put a new one on
36 there, in case the old one failed, and I think, had you not done
37 that, we wouldn't have had as great comparisons to go by, and so
38 we really appreciate you thinking through that and making sure
39 that this data was as useful as possible for us to figure out a
40 path forward.

41
42 Let me step back, and so we've had two rounds of testing, right,
43 and the first round of testing -- Staff, if you want to pull
44 that old PowerPoint up that we just saw, because we're going to
45 need to refer to it, and you can go to Slide 25, if you don't
46 mind, and so, in the first round of testing, we tested three
47 type-approved VMS devices, to see if they would work for shrimp
48 data collection, because our program is a scientific data

1 collection program.

2
3 It's different. Its main function is for science, and it's
4 different than all the other VMS programs that you have, right,
5 and we have to take this data and make sure that the shrimp
6 fishery is still in compliance with the Endangered Species Act,
7 and so this idea of the unit is offline, or it has down time, or
8 it has failures, and that's an inconvenience in a law-
9 enforcement-based program, if that's the purpose for the
10 program, and it's an issue when it's a science-based program.
11 We have to make sure that we're getting enough of the data to
12 get accurate results, right?

13
14 The first round of testing, those three units were tested, Zen,
15 NEMO, and Faria Beade. The Faria Beade failed, and I think NMFS
16 even took it off the type-approved list for all the different
17 fisheries, because it just -- It did not do well during that
18 testing.

19
20 NEMO had some issues, and it wasn't good at collecting the data
21 consistently, but there was this hypothesis that maybe that was
22 because it was not hardwired into the vessel, and it was using
23 solar power, and then the Zen did fairly well. It had one
24 issue, where, on a longer trip, it quit collecting data, and so
25 we did have one failure on the Zen, but, by and large, it did
26 well, and so we go into this second round of testing, right, and
27 we -- You all, and the Shrimp AP, you asked NMFS to go back and
28 test that NEMO some more, but hardwire it this time, to see how
29 it does, and you asked them to test the Zen again, because it
30 had that one failure, but it looked okay, and it looked
31 promising, and you asked them to test the Nautic Alert, which is
32 another type-approved VMS.

33
34 Those are the three that you asked them to test, and I have to
35 give the Science Center kudos, because they went and did some
36 research, and they found some other devices that are being used
37 in other fisheries that might work for us, and they tested those
38 too, and so they went above and beyond in that respect, and so
39 they tested an extra two, for a total of five, the Boat Command
40 and the Tracker One, and so those are used in other fisheries.

41
42 All right, and so the NEMO. We thought it was a solar-power
43 issue. If you look at those results there, and like on Vessel
44 1, and the new and old cELB give you about thirteen days of
45 trawling, nets in the water, right, effort. Boat Command gives
46 you about the same, and Zen gives you about the same, and the
47 NEMO gave us 3.8. The Tracker One gave us 3.3, and so, when you
48 do that math -- I mean, you don't have a 5 or 10 percent

1 difference in the effort being produced by these units, and
2 you've got a 250-percent-plus difference in the effort being
3 produced, and so, from a fisherman's perspective, at the AP, we
4 didn't see that as success, right, and the success is that the
5 testing showed us this, thank goodness, ahead of time, and it
6 showed us which units are still having problems, even when
7 hardwired, right, and so the AP did not feel like that NEMO was
8 a success.

9
10 Now, if you will go to -- I just want to point one thing out,
11 and you all have an hour-and-a-half for this committee, and so I
12 wanted to go through a couple of these slides in greater detail
13 and show you what the fishermen see, and I am so excited that
14 you have an hour-and-a-half, and this is pretty much the main
15 thing on your agenda, and so, if you will let me, let's go to
16 slide 11 real quick, please, ma'am.

17
18 If you -- Here is the rest of the story, and so think about this
19 from a fisherman's perspective, and so let's focus on the NEMO
20 for a minute, and, Carrie, can you be my Vanna White? All
21 right. On that screen back there behind you, because that's the
22 one that everybody can see, the NEMO, and so there's a solid-
23 gray line, and then there's a dotted-gray line above it, and the
24 solid gray line is the one that we're going to focus on, and so
25 any gap in the solid-gray line is where it stopped collecting
26 data, right, and so, Carrie, point to the first gap.

27
28 Okay, and there's gap one, and it quit working. Now go to the
29 second gap. There's a gap, and then the next one, and there's a
30 gap. Then the next one, and there's a gap, and then it stops
31 altogether, and so it stopped working five times on a trip, all
32 right, and that's a big deal for us as fishermen. That's a --
33 In the AP's mind, that was an all-out failure, and we don't want
34 you to push this unit forward in the early adopter program.

35
36 It had issues during the first round of testing, and it's got
37 more issues now, and there's another trip where it had issues,
38 and so it had issues on two out of five trips, and that's 40
39 percent failure, from a fisherman's perspective, and the other
40 thing that you have to think about, from a fisherman's
41 perspective, is heaven forbid if NMFS makes this a VMS rule, and
42 we've got to go to the dock every time it does that, and so
43 you're talking about twelve to twenty-four hours of just
44 steaming, of just running, and can you imagine what that fuel
45 bill looks like, to go in and fix it five times in one trip?

46
47 That's how the fishermen think about it, and I just kind of
48 wanted to back up and show you that from the fishermen's

1 perspective, and you can see there the Tracker One, and I'm not
2 going to spend much time on it, because pretty much all of the
3 boats that we put it on looks like that, and it just won't -- It
4 won't cut the mustard. It's not saying online, and it's not
5 collecting data when it's supposed to, and it's not reliable
6 enough for what we need for scientific data.

7
8 Then, if you go to slide 13, real quick, and so, on this one,
9 see that Boat Command, and that's the green line, and it does
10 pretty well until you get right down towards -- Right there.
11 See that? It quits collecting data, and we're not sure why. We
12 don't know if that's a power issue, a power supply issue, or if
13 it really did fail, and that's the only boat that we saw this
14 Boat Command vendor have an issue, and so the AP said, you know,
15 maybe it could have been a power supply, and we're going to look
16 into it more, and we feel like we want to continue testing this
17 Boat Command, as we go into the early adopter. You can see that
18 Tracker One has issues again.

19
20 The other thing that you can notice from this is like you see
21 how you have missing data at the very beginning of Zen, and the
22 Tracker One and the cELB, and you didn't have power to the
23 units, and my guess is -- See that gray bar, and that's where
24 they're at the dock. When you're at the dock, sometimes you're
25 on shore power, and you can get shore power, and you have to
26 unplug the shore power, and you've got to crank the generator,
27 and these units, a lot of times, are either plugged into an UPS
28 box or a power strip, right, like a surge protector, and, when
29 you crank that generator, it trips it, and so they didn't
30 realize that it had been tripped, and those units weren't on,
31 but it tells me that it's not a problem with the units, because
32 all three of them did it at the exact time and then came on at
33 the exact same time, and so that gives you a hint that that's
34 probably a power issue.

35
36 You see that as you go through these, and so the big take-away,
37 if you want to go back to slide 25, and the big take-away, for
38 us, is we've still go farther to go. I think this was
39 excellent, and we learned a lot from it, and we learned what we
40 don't want, right, and NEMO and Tracker One probably are not
41 going to be suitable for scientific purposes, for this fishery.

42
43 Boat Command and Zen, they showed some promise. However, each
44 one of them had one failure in each round of testing, right, and
45 like the Zen had a failure in the very first round, and then
46 Boat Command in this second round of testing, and so we want to
47 look at them some more and make sure that's a fluke, right, that
48 that happened to happen in the one-out-of-five boats, but, if

1 you had fifty boats, it still would have just been that one, and
2 we need to see that. We need to have some assurance there.

3
4 The other thing that I thought was worth highlighting, because
5 we also have this other mandate that we have to think about in
6 the interim, until we find a replacement, and that is that the
7 Endangered Species Act, and the different litigation that the
8 agency has been through, says that we have to at least maintain,
9 or do better, than what we've been doing with our data
10 collection for shrimp.

11
12 If you look at the new cELBs, which is still your same 3G cELB
13 that we've had on the boats for eleven years, the difference is
14 NMFS has a thousand of them in inventory, and so they took one
15 of those new ones off the shelf of their inventory and put it on
16 the boat, but it's still the 3G ELB. It does pretty well, and
17 so I think we have an interim stopgap that keeps us in
18 compliance there.

19
20 When you combine that with the fact that the industry has put
21 boots on the ground to increase the return rate on the chips,
22 we're doing okay, and it's not real-time data, but the data that
23 you're getting is just as good, if not better, than it used to
24 be, and so I think that's important to keep in mind.

25
26 Having said that, the AP passed a motion, and the motion said
27 that, at this time, based on the most recent NMFS cVMS testing,
28 the Shrimp AP requests that the Tracker One and NEMO units not
29 be included in the early adopter program. However, we left it
30 open-ended, because we don't want to shut anybody out forever,
31 and so we added another sentence, and it said that, if improved
32 versions of those units are available at a later date, the
33 Shrimp AP could consider them at that point. The Shrimp AP
34 further requests that NMFS widely distribute the results of the
35 NMFS cVMS testing directly to shrimp permit holders.

36
37 This early adopter program is being funded with the \$800,000
38 that the shrimp industry went to Congress and begged for,
39 essentially, and it was sent down to NMFS. Now, a good portion
40 of that \$800,000 was kept within NMFS to work on some things
41 that they want to work on, and around \$300,000, or maybe a
42 little less, once you take off some admin fees, is going to go
43 to the fishermen, and my best guess at it was probably \$280,000.
44 I couldn't get a definite answer, but the max would be \$350,000,
45 and it's probably down around \$280,000, and so that's all we
46 have to work with.

47
48 Don't spend that money on devices that we know aren't going to

1 work, please, and so that's why we passed this motion, to make
2 that very, very clear.

3
4 The other thing that the AP talked about was -- The reason that
5 we structured this motion this way, and said leave those off,
6 instead of saying, no, we want you to go forward with X, Y, and
7 Z is because we didn't want to eliminate any units that may come
8 out of the woodwork that we don't know about yet that might, you
9 know, work well for testing, and NMFS wrote that into their
10 protocol, when they put this contract out for bid, and so that
11 is written in there, that other units can come in and be
12 considered. We don't want these two, in their current form, to
13 be considered though, that NEMO and the Tracker One.

14
15 That's what we have there, and one thing that the AP didn't talk
16 about, but I just thought of just now, as I was listening to
17 that presentation, is, as we move forward with that early
18 adopter program, it's really another testing phase, essentially,
19 and we're going to be getting more data in. Yes, it's great to
20 get these units paid for and on the boats, but, to me, the big
21 bang for the buck is the data you get that you can evaluate, so
22 that we can figure out what units could really be the future for
23 our industry, but we can't do that if we don't have CELB units
24 as a baseline on the boats that we're putting the early adopter
25 devices on, and so I just -- I want to plant that seed, that I
26 hope that NMFS will think about that, to make sure that we have
27 data that we can really evaluate, when we get it back.

28
29 You have like a thousand of those units on the shelf, and maybe
30 you can send some of those to the contractor who is going to be
31 handling this, and you're going to have to program them, and
32 they're not programmed, but put them on the boats, along with
33 whatever you put on for the early adopter units, so we've got a
34 baseline to compare to.

35
36 I thought about that, and then the only other question that the
37 AP had, and, really, and I'm the chairman of the AP, and I will
38 be honest that I'm not sure the answer, after going through that
39 meeting, and that page 25, the effort results, what is that a
40 result of? Is that after you put the raw data from these units
41 through the entire Dettloff algorithm, or through a portion of
42 the Dettloff algorithm, or not through the Dettloff algorithm,
43 but more just an Excel-type program, where you get the speed of
44 the boat and determine what it's doing, and that I couldn't
45 quite gather, and so hopefully we -- Because that was a big
46 piece of this, especially with the extra points.

47
48 We knew, going into this, that the OLE-type VMS units, that are

1 type approved right now, they ping more than every ten minutes,
2 because they have to. That's how their protocols are written.
3 They have to ping when they cross boundary lines, and they have
4 to ping every time there's a power-up or power-down, and lots of
5 different things, and we wanted to make sure that wasn't going
6 to cause a problem with the algorithm, and so do we know --
7 Those numbers, at they a full-blown run of the Dettloff
8 algorithm, where you change the directory that you pull the data
9 from in your computer code, and highlighted the whole algorithm,
10 the whole computer code, and ran it, or did you just highlight
11 part of it and run it, or what?

12

13 **CHAIRMAN SCHIEBLE:** Dr. Walter has his hand up.

14

15 **DR. WALTER:** My understanding is that that's the full Dettloff
16 algorithm, and so it takes the data out if it's in a bay or
17 estuary, and it assigns depth based on the vessel depth data
18 file, et cetera, et cetera.

19

20 **MS. BOSARGE:** All right. Thanks, and maybe if we could, you
21 know, talk to Kyle Dettloff, because, yesterday, at the AP, we
22 were told that it was run with just a portion of it, and so
23 that's where the confusion is, I guess, coming from on that.

24

25 I think that's pretty much it, and I think the key take-home is
26 that, you know, at first, I think we were really rushing into
27 this, with this replacement program, and I think we've slowed
28 down and backed up and started to do some really thorough
29 testing, and we're learning a lot, and I think, if we'll stay
30 kind of at the pace that we're at, and not rush into anything,
31 and let's get some more testing, and make sure this is going to
32 work, and I think we might end up with a good result here, as
33 long as we don't jump in too fast. We've got to make sure that
34 it works before we put it out there.

35

36 Another thing for NMFS to think about is, in your early adopter
37 program, and I think, maybe early next year, you're planning on
38 taking those old cELBs off the boat, and starting to phase them
39 out, and, I mean, based on this, it seems like it would be
40 advantageous to leave them on there a little bit longer,
41 especially even just as an interim stop-gap, to make sure that
42 we've got good, solid data, until we get our for-sure
43 replacement. That's all for that. Do you want me to go through
44 the rest of the report right now, or do you want me to pause for
45 a minute?

46

47 **CHAIRMAN SCHIEBLE:** Well, it looks like we have some questions
48 for you about this particular topic, and we're going to go back

1 to Dr. Freeman for the action guide, to see where we're at as
2 far as the framework action, and I think we need to address that
3 a little bit, and then we can probably come back to you for the
4 remainder of the report, but don't run away. Stick around.
5 Thank you for that summary from the AP, Ms. Bosarge, and, also,
6 it sounds like, you know, we've got three functioning units here
7 that the AP agrees that worked fairly well in this test, versus
8 what we've seen in prior testing, which is a positive result,
9 and so that's fairly good, I think, considering what we've seen
10 in the past, moving forward with this, and so would you agree
11 with that, that at least the AP looks at three of these units as
12 being fairly reliable?

13
14 **MS. BOSARGE:** Yes, and, by the three, you mean the old cELBs and
15 then the two potential replacement units? Yes, I think we do,
16 and the one thing -- The only real reservation that we had,
17 other than the two failures that we saw that we want to make
18 sure were a fluke and not a recurring thing, and we do want to
19 see the actual -- So the Zen data, as they mentioned, was
20 emailed in, whereas, for the other units, and I guess the
21 companies have some kind of portal, right, and NMFS was able to
22 go to the portals for those companies and pull the data off the
23 portal, and so it's much more of a transmission, right, rather
24 than just an old-fashioned email in.

25
26 The AP had some reservations about that, and they really want to
27 see the capability of Zen to transmit this data, once you're at
28 a full-scale program, right, with hundreds of boats, because
29 emailing in -- That's not going to work, right, and it's got to
30 be transmitted automatically, and so it's good that Zen was able
31 to use the API, but we hope that, going forward, any data coming
32 from the Zen is, at a minimum, at a portal level, where NMFS can
33 pull it. The best-case scenario is all the vendors are actually
34 pushing it to the API to NMFS, and so thanks.

35
36 **CHAIRMAN SCHIEBLE:** Okay. Thank you, Ms. Bosarge. At this
37 time, I will just go back over the motion regarding this that
38 the Shrimp AP made, keeping in mind that the Shrimp AP did not
39 have a quorum, but, since they're an advisory panel, this is
40 mostly a suggestion for the council, this motion.

41
42 It states that, at this time, based on the most recent NMFS cVMS
43 testing, the Shrimp AP would request that the Tracker One and
44 NEMO units not be included in the early adopter program. If
45 improved versions of these units are available at a later date,
46 the Shrimp AP could consider them at that point. The Shrimp AP
47 further requests NMFS widely distribute the results of the NMFS
48 cVMS testing directly to federal shrimp permit holders. I think

1 that second part there is something that we also need to
2 probably discuss, maybe with Dr. Walter, going forward, and how
3 that distribution would take place, but, for discussion's sake,
4 around the table with this committee, does anybody have any
5 questions, or statements, regarding this motion? Mr. Gill.

6
7 **MR. BOB GILL:** Thank you, Mr. Chairman. I think, before we get
8 into discussion on the motion, I would like to hear, and I don't
9 think we've heard, the Science Center reaction to that motion,
10 because this is all about gathering data for the science, and
11 they're the ultimate arbiters of that, and I would like to hear
12 what they have to say, pro or con, relative to that motion.
13 Thank you.

14
15 **CHAIRMAN SCHIEBLE:** Thank you, Mr. Gill. I guess, Dr. Walter,
16 did you hear that request for a response to this motion from the
17 Science Center?

18
19 **DR. WALTER:** Yes, I did, and I will respond, as I did at the AP,
20 that it's not our preference to exclude units, and, in
21 particular, units that are used widely in other fisheries, and
22 there may very well be a simple explanation for why some of them
23 didn't work as well in the testing.

24
25 What we normally do is set the specifications for what's needed,
26 and so like set the VMS specifications, or, in the framework
27 amendments, outline the specifications, and then vendors can
28 meet them or not, and then that would be the normal process,
29 rather than, right now, excluding vessels from the early
30 adopter, or excluding units from the early adopter, approach,
31 and so our preference was not to exclude two of those, but
32 rather to say that that was still going to be a decision that a
33 vessel owner could make, in consideration of these results, and
34 then under advisement of the contractor who will be doing the
35 work, and we'll also be coordinating between the vendors and the
36 vessel owners for installations. Thanks.

37
38 **CHAIRMAN SCHIEBLE:** Okay. Thank you, Dr. Walter, and so your
39 preference would be to see all five of these units included in
40 the early adopter program?

41
42 **DR. WALTER:** Just that it not be excluded right now, that the
43 council not pick the winners or losers right now, and I don't
44 know that that's necessary to be done at this point. I think we
45 still are going to learn more information as we embark on the
46 early adopter approach.

47
48 **CHAIRMAN SCHIEBLE:** I guess I don't know enough about this, but

1 what if the industry decided to choose some of these units, and
2 they aren't reliable, after they choose them, and how would that
3 work?
4

5 **DR. WALTER:** Well, presumably, if they pick one, and it fails,
6 there will be some -- There might be some warranty, in terms of,
7 if it's going to be purchased on a volunteer basis, and so of
8 this testing was actually provided to us at no charge, or at a
9 reduced charge, by the vendor, and so they willingly
10 participated in this, and that's one of the reason that I feel,
11 in some cases, it might be a little unfair to say that the units
12 were failures in this, when there might be an easy answer. If
13 the units were purchased as part of the early adopter approach,
14 and they failed due to a warranty issue, presumably that would
15 be between the vendor and the purchaser, and, if there was still
16 money available, I would imagine that the vessel owner could get
17 a different unit, as part of the early adopter program, if funds
18 were still available. Thanks.

19
20 **CHAIRMAN SCHIEBLE:** Dr. Frazer.

21
22 **DR. TOM FRAZER:** Thank you, Mr. Chair. I'm not on the
23 committee, and I'm just trying to navigate what I heard the AP
24 say and what I'm hearing the Science Center say, right, and so
25 there are five units that were tested, and the AP is suggesting
26 that probably three of them they would like to pursue, and the
27 Science Center says, well, it may be too early to drop the other
28 two out, but, if you're in the early adopter program, is the
29 decision to which unit you use -- Is it up to the fishermen to
30 make that? I don't know, and that's what I'm trying to figure
31 out.

32
33 **CHAIRMAN SCHIEBLE:** That's a good question. Dr. Walter, I
34 believe that decision is up to the fishermen, correct, and they
35 could pick from the choices that would be in the program?

36
37 **DR. WALTER:** That's correct, yes. The fishermen can make that
38 call.

39
40 **DR. FRAZER:** All right. Thank you.

41
42 **CHAIRMAN SCHIEBLE:** Mr. Diaz.

43
44 **MR. DIAZ:** I think this might be for Dr. Walter too, and so
45 Leann drove a pretty good point home when she was talking about
46 the unit that failed five times and had to make five trips back
47 to the dock, and, every time I pass a gas station, and I look up
48 and see the price of diesel, and I really don't know how shrimp

1 fishermen stay in business. I don't, because, I mean, you're
2 talking about people burning a hundred gallons a day.
3
4 In the early adopter program, Dr. Walter, if there is a unit
5 failure, is there any reason why these fishermen would have to
6 come in?
7
8 **DR. WALTER:** No, there's no reason -- This is entirely
9 voluntary, and there be no reason that the vessel would need to
10 come in. Thanks.
11
12 **CHAIRMAN SCHIEBLE:** Mr. Strelcheck.
13
14 **MR. STRELCHECK:** Well, and just an added point that, even if
15 this was a fully-implemented program, these devices are cellular
16 devices, and so we wouldn't even know if it failed at-sea until
17 they came back into cell range, right, and, if they're in cell
18 range, then we would know, because it's being monitored in real-
19 time.
20
21 **CHAIRMAN SCHIEBLE:** Dr. Porch.
22
23 **DR. CLAY PORCH:** I would just add that the vendors will have to
24 meet some reporting standards, and so it wouldn't be that you
25 could pick any device that you want, that you think might be
26 performing, and so one of them would be that it has to report in
27 an appropriate format that we can accept in our system, or
28 whichever system is set up.
29
30 **CHAIRMAN SCHIEBLE:** So compatibility with the API database,
31 correct? Dr. Simmons.
32
33 **EXECUTIVE DIRECTOR SIMMONS:** Thank you, Mr. Chair, and so what
34 are the current requirements for the fishery? Is that the
35 national technical specifications that we have for the cellular
36 VMS, satellite VMS, because there is no technical specs for this
37 fishery currently.
38
39 **DR. PORCH:** I mean, right now -- I mean, originally that was --
40 I think it was the OLE standards. Let me get back to you.
41
42 **EXECUTIVE DIRECTOR SIMMONS:** The reason that I ask is because,
43 when the council funded the P-Sea WindPlot study, I had many
44 vendors come to me and say what are the technical specifications
45 for this fishery, and I think it's an important question that we
46 need to get to the bottom of.
47
48 **CHAIRMAN SCHIEBLE:** Mr. Strelcheck.

1
2 **MR. STRELCHECK:** I think we're going to have to come back to
3 this, and have some internal conversations between now and Full
4 Council, and so my understanding is the money was left to the
5 Gulf States, and LGL is now a subcontractor for this, and, you
6 know, we, as the government, can't sole-source, or we can, but
7 we have to justify sole-sourcing, and I don't know if the
8 agreement with LGL, or Gulf States, stipulates kind of
9 requirements, or standards, that the units have to meet, right,
10 and so I think that's a key consideration here.

11
12 What I am concerned about, and I think what the industry is
13 concerned about, is we don't want to put a bunch of units out on
14 vessels that aren't going to work, or that don't meet our needs,
15 and that's going to erode trust and confidence in the program,
16 and I also don't want to push out a lot of units, during the
17 early adopter program, that may not be approved then later by
18 this council, right, and so making sure that, legally, we can do
19 all of this with the contracting regulations I think is a big
20 question for me, and so we need to get back to you, I think,
21 during Full Council on that.

22
23 **CHAIRMAN SCHIEBLE:** Okay. Thank you, Mr. Strelcheck. Do we
24 have any further questions? Dr. Frazer.

25
26 **DR. FRAZER:** Again, just following-up, because I'm trying to
27 figure out what's going to happen here at Full Council, and
28 listening to what Andy just said, and so, if you move into the
29 second phase of this program, and there are five units out
30 there, and so I just want to -- I am trying to navigate the
31 expectations of the industry and the science, right, so that --
32 I mean, NMFS will phase the program, and what the industry saw
33 was concern, right, and they wanted to limit the number of
34 units, but if the second phase is just an extension, or
35 expansion, of the science, and the industry is not going to be
36 held accountable, right, for failures and things like that, it
37 seems to me like, if you're going to have X number of units, and
38 let's say there's 500, we want to have a hundred of each of
39 those units.

40
41 I am feeling like there's going to be two sets of expectations,
42 the industry saying I only want things that work, and the
43 science guys are saying I'm not sure that we know which one is
44 the best one, or what's going to work yet, and so we want to
45 just have the full complement of things, and so do you hear what
46 I'm saying, Andy? I just want to make sure that everybody is in
47 agreement by the time we have this discussion at Full Council.

48

1 **CHAIRMAN SCHIEBLE:** Okay. Thank you, Dr. Frazer. Do we have
2 any other comments? Dr. Simmons.

3
4 **EXECUTIVE DIRECTOR SIMMONS:** Thank you, Mr. Chair, and so I
5 guess, that being said, is it possible, for the second phase,
6 the early adopter, to come back with more results to refine this
7 a little bit better, because it seems to me -- I think we heard,
8 at the AP meeting, only like fifty, to maybe a hundred, units
9 might be able to be distributed, with the funding that's
10 available, and so I think there's a lot of concern about those
11 not working, and not getting approved later on, and then I feel
12 like the money is wasted, and so is it possible to get more
13 results before this is narrowed down through this program,
14 adopter program?

15
16 **CHAIRMAN SCHIEBLE:** That may be for Dr. Walter, and I see that
17 you have your hand up.

18
19 **DR. WALTER:** Yes, Chair. The early adopter program will
20 certainly give us more results, and we're expecting to get a lot
21 more data out of it, and so that's going to tell us a number of
22 things, and one is it will be in more places, and hopefully more
23 vessels. Two, we'll be able to address a couple of the issues
24 that we saw even with some of the top-performing units, such as
25 the power supply.

26
27 In terms of -- You had asked about whether there are
28 specifications, and I think the framework amendment has -- While
29 it's still in draft form, it has a set of specifications that
30 probably could be considered as guidelines for units. Since we
31 won't have the rulemaking in place, and we need to embark upon
32 the early adopter program, we won't have specifications for that
33 fishery in place, but I think the guidelines are pretty clear,
34 and they probably wouldn't change too much once that was
35 actually formalized, and so maybe that's the information to pass
36 to the contractor, in terms of these are the general guidelines
37 for data transmission, integrity of the units, service, and
38 ability for support, et cetera, that's already in the existing
39 framework draft. Thanks.

40
41 **CHAIRMAN SCHIEBLE:** Okay. Thank you, Dr. Walter. I think it
42 sounds, to me, like, in this committee, it may be best to look
43 at possibly holding off, at least on the first part of this
44 suggested motion from the Shrimp AP, as far as exclusion or
45 retention of the different units for the early adopter program,
46 but, Dr. Walter, can you explain to me -- The second part of
47 their motion is to widely distribute results of this testing to
48 the permit holders, and is there a mechanism that's easy for

1 that to be done?

2
3 **DR. WALTER:** We have a set of materials that are going to be
4 going out, through a Fishery Bulletin, and then a web story, and
5 I think the request, from the AP, was to provide a concise
6 illustration of these results as part of that material.

7
8 Since the AP was just last week, we haven't drafted that, but
9 we're going to try to work on that, but I think it's going to
10 take a little bit of time, and I want to at least get the
11 announcement for the early adopter approach out as soon as
12 possible, but you will have to bear with our communications team
13 on how fast we can get this concise version of the results out
14 to people, but, yes, we agree that it's important for the
15 fishermen to know about this and then be able to make an
16 informed decision. Thanks.

17
18 **CHAIRMAN SCHIEBLE:** Thank you, Dr. Walter. I agree with you,
19 and I think getting the results out, so that folks know before
20 the early adopter program, and they can make their own choices
21 then, and so would you need a motion from the council for this,
22 or is this something that's going to take place regardless?

23
24 **DR. WALTER:** This will take place regardless, and we're going to
25 proceed with this. The motion could sort of direct people in
26 one direction or another, but I don't know that it's necessary
27 for us to embark upon this, the early adopter approach, and to
28 start getting the units on vessels. Thanks.

29
30 **CHAIRMAN SCHIEBLE:** Okay. Thank you, Dr. Walter. If there's no
31 further questions regarding this specifically, or comments, I
32 think I'm going to kick it back to Dr. Freeman to at least
33 advise us, as a council, on the next steps and timing for the
34 shrimp framework action. Dr. Freeman.

35
36 **DR. FREEMAN:** Yes, sir. Thank you, and so just a reminder for
37 the committee that there was a motion, at the April meeting,
38 asking that the draft shrimp framework action not be brought
39 back to the council until NMFS had completed this side-by-side
40 testing.

41
42 The council also passed a motion revising Alternatives 2 and 3
43 in the document, and so I will note that the IPT needs to review
44 those, and will likely do so after this council meeting, and so,
45 as far as direction, if the committee, as well as Full Council,
46 would like the IPT to explore the continued development of the
47 draft framework action, beyond Chapters 1 and 2, we would need
48 direction on that, or, if there are additional results, such as

1 the discussion about those from like the early adopter program,
2 if folks would like for us to wait until that, any direction,
3 like I said, in terms of development of the current draft
4 framework action would be helpful for staff.

5
6 **CHAIRMAN SCHIEBLE:** Okay. Thank you, Dr. Freeman. Do we have
7 any comments regarding that within the committee? Mr.
8 Strelcheck.

9
10 **MR. STRELCHECK:** I still see, obviously, a lot of work ahead, in
11 terms of the testing and the early adopter program, and that's
12 going to continue to inform us as we go forward, and those will
13 be important results that the center and others can bring back
14 to us.

15
16 I think, given where we're at though, it would be good to dust
17 off the amendment and start working on it again, as that
18 information develops and becomes available in 2024, and so I
19 would recommend that we bring this back in January and begin
20 discussions again on the amendment.

21
22 **CHAIRMAN SCHIEBLE:** Okay. Thank you. I agree with you, and I
23 think, you know, bringing it back, sooner than later, at least
24 for the committee to look at and go through and see how each of
25 those alternatives will mesh with the new systems that we've
26 tested, versus what we had when the document was first drafted,
27 will be beneficial.

28
29 Also, a timeline, and I don't know if Dr. Simmons can better
30 answer this maybe, but does that mesh with the early adopter
31 program, to be able to bring it back in January, if that's being
32 implemented at the same time? It doesn't matter?

33
34 **EXECUTIVE DIRECTOR SIMMONS:** I don't know, and I can't recall
35 what the timeline is on the early adopter program. Sorry.

36
37 **CHAIRMAN SCHIEBLE:** Thank you. Okay. Well, there we go. I
38 guess, if there's no other comments on that, I will go back to
39 Dr. Freeman for the action guide and next steps.

40
41 **DR. FREEMAN:** Yes, sir. For the next agenda item, the committee
42 will be presented with any remaining AP recommendations that
43 were not covered under other agenda items and determine if they
44 wish to take any action on the AP's recommendations.

45
46 **CHAIRMAN SCHIEBLE:** Ms. Bosarge, could you please give us the
47 remaining items from the Shrimp AP meeting?

48

1 **REMAINING ITEMS FROM SUMMARY OF THE OCTOBER 19, 2023 SHRIMP**
2 **ADVISORY PANEL MEETING**

3
4
5 **MS. BOSARGE:** Yes, sir. I will do my best, because we did cover
6 some other things that the AP felt were very important, and I
7 just wanted to thank Andy for his comments. I appreciate that,
8 that you are thinking about the industry, and that trust
9 element, and the buy-in, and making sure that we don't put
10 things on the boat that are probably not going to work. We've
11 got enough headwinds going against us right now, and I
12 appreciate that.

13
14 As far your tech specs, the ones that Dr. Walter referred to,
15 that are the ones that I wrote, that he was talking about that
16 might could be used for vendors that are in your document, I
17 just will note that there is a requirement in there that those
18 devices must attain and record at least 95 percent of the
19 required ten-minute interval position fix data in a twenty-four
20 period for each twenty-four-hour day of at-sea testing, and your
21 NEMO and your Tracker One didn't meet that requirement, and so
22 just -- I put it in there for a reason, because we didn't want
23 to use things that don't work, and so just, I don't know, brush
24 up, and see if you like it, see if you can find enough warm
25 fuzzy, Andy, to not exclude something, but exclude something,
26 and so all right, and let's move on with the committee report.

27
28 Discussing a Collaborative Path Forward to Understanding the
29 Inshore Shrimp Effort to Inform Sea Turtle Restoration Efforts
30 in the Gulf of Mexico, I think I can sum that up that the AP was
31 generally not supportive of participating in this project.

32
33 The Update from BOEM on the Gulf Wind Energy, the two things
34 that I think are important, and there is a motion there, and the
35 AP was a little worried that, with the new proposed critical
36 habitat for Rice's whale and the green sea turtle and the
37 corals, lots of different things that are coming out on critical
38 habitat, that, because those aren't actually in place yet, and
39 they're just proposed rules, we wanted to make sure that NMFS is
40 still going to have to have some consultation, moving forward,
41 and we're thinking about that prior to any wind development
42 actually occurring, because what we see, from the shrimp
43 industry's perspective, as far as mammals and things like that,
44 and interactions with endangered species, is, when the oil
45 industry screws it up and kills some of them, we end up paying
46 the price.

47
48 You end up trying to find a way to make us have fewer

1 interactions to rebuild what they messed up, and, I mean, look
2 at BP, and we're going through that right now in our industry,
3 and so we don't want that to end up on our backs. If you think
4 that there could be noise from these windmills that's going to
5 interfere with these whales, we want you to put it out there to
6 BOEM now, and be on the frontside of this, because, once the
7 windmills go into place, it's just like the windmills that you -
8 - You have an oil platform, at one point anyway, in the middle
9 of the Flower Garden Sanctuary, because it was there before you
10 designated it, and so you can't get rid of it at that point, and
11 it's there, and so we want you to be thinking about that on the
12 frontend.

13
14 The other thing that the Shrimp AP brought up is that we're
15 seeing some of these windfarms on the east coast that are out
16 there, and, all of a sudden, they're no longer profitable.
17 Interest rates have gone through the roof, and that changes the
18 dynamics of the economics of these entities and their contracts
19 from what they're going to get paid per kilowatt hour, or
20 whatever it is, of this energy, and so there's a possibility now
21 that these things can be sitting out there idle, because they're
22 not profitable, but they're still out there taking up trawlable
23 grounds, right, and so, in the oil industry, if you have an oil
24 platform that is no longer producing oil for this country,
25 energy for our people, then there's a requirement that says,
26 after X number of years of it not producing energy anymore,
27 you've got to get it out of there and give that bottom back to
28 the other user groups in this country that are producing
29 something for the nation, and that would be us, producing
30 protein by shrimping those grounds, and so they don't have that
31 in place for the wind energy yet.

32
33 We're seeing that this is a real possibility, and we want to
34 make sure that idle iron NTL goes into place in the Gulf of
35 Mexico, right alongside the installation, and we don't want it
36 after the fact, and we want to know, going into it, that you're
37 going to get it back out of shrimp grounds if it's not producing
38 anymore.

39
40 You can see that all of this is kind of reflected in that motion
41 there from the Shrimp AP to continue to go through this process
42 with NMFS and make sure that we're on top of this, to minimize
43 any adverse impacts on the shrimp industry.

44
45 The next item on our agenda was the update on the reinitiation
46 of the shrimp bi-op, due to sawfish and giant manta rays, and we
47 had a lot of good conversation about this, and we really got
48 into some details, and I thought there was some good questions

1 asked.

2
3 Generally speaking, I would say that the AP was a little worried
4 about there not being enough interaction with the fishermen in
5 this process, with the fishing industry, and we want to make
6 sure that we have a voice in this, that we're telling you what
7 we see, and you tell us what you see, and we can groundtruth
8 each other, right, and so we do want to make sure that we
9 somehow have a larger voice in that and a seat at the table.

10
11 All right, and so the next agenda item was the Endangered
12 Species Act Listing and Critical Habitat Rule Update, and so, in
13 this presentation, we actually -- It was sort of like four
14 presentations in one, and so there's all these different
15 critical habitat designations going on at the same time right
16 now within NMFS, or recently close to each other, relatively
17 close to each other, and a couple of them I want to point out.

18
19 Let's do the Rice's whale first, and so -- Well, we'll start
20 with the sea turtle, because that's the one right there, and the
21 green sea turtle is on the board, and so let's start with that
22 one.

23
24 We did pass a motion, and the motion references a comment letter
25 that was submitted by the Southern Shrimp Alliance, which is an
26 industry trade group that represents all the Gulf states, as
27 well as the South Atlantic states, that produce shrimp, and so
28 they wrote a letter really having some reservations about the
29 proposed critical habitat designation for the green sea turtle,
30 and I will just -- You really should read the letter, okay, and
31 it's very well written, and it's rather lengthy, and I won't do
32 it justice here, but to give you some kind of idea about what
33 our reservations are there.

34
35 With the green sea turtle habitat designation, and so there's
36 284 references to unpublished data in the biological report, and
37 literally 100 percent of the sixteen citations for the stranding
38 data in Table 3 of the biological report are for unpublished
39 data. There are references, and reliance, on unpublished shrimp
40 trawl bycatch, and so these are all unpublished data, and you
41 would have to assume that that has not been subject to the same
42 rigorous peer review standards that are in place for published
43 data that have to go through that type of peer review.

44
45 We are worried about the heavy reliance on unpublished data in
46 this, and the other thing that really concerned us is this idea
47 of these conservation values that are being placed, and they're
48 not -- They're not quantitatively crafted, and it's more of a

1 qualitative justification, given at a high, medium, or low
2 conservation value, and that is what dictates should be critical
3 habitat or not, and so we have some reservations about that as
4 well.

5
6 All of these -- When you start bringing all of these things
7 together, it undermines the confidence that the industry has in
8 the reliability of the conclusions that are drawn in that
9 proposed rule, and this can have implications for our industry
10 later on, and this will not, in itself, cause us to have
11 regulations. However, there will eventually be a biological
12 review, and this will be part of it. It will come up, and there
13 may be reasonable and prudent measures, which, i.e., more
14 regulations on our fishery, in order to make sure that we're in
15 compliance.

16
17 We just want to see quantitative, hardcore data that is really
18 justifying this, and not quite so much touchy-feely, and we want
19 to see some numbers.

20
21 The Rice's whale, the critical habitat for that, and so, right
22 now, I think the proposed rule -- The depth contours that they
23 want to use are a hundred meters through 400 meters, if I
24 remember correctly, and is that right, Andy? Is that top line
25 right, the 400? Okay.

26
27 So our -- Again, this is going to reference -- This motion from
28 the Shrimp AP references another letter that the Southern Shrimp
29 Alliance wrote and submitted as public comment for this critical
30 habitat designation, and I'm sure that Dr. Freeman, or Dr.
31 Simmons, can get you all of these letters, if you would like to
32 see it, and I won't do it justice, but I will try and quickly
33 kind of highlight the things that we are concerned by in the
34 shrimp industry.

35
36 If you look at the actual observational data, and like I put my
37 eyes on the whale kind of data, right, and not modeled, but I
38 saw it, and so those data suggest that the critical habitat area
39 should be much deeper than what you have it listed at right now,
40 deeper than that hundred-meter isobath, and it should be -- It
41 suggests that it should be closer to the 150-meter isobath.
42 That is important because of this.

43
44 If you look at your shrimp data, and your effort, that you have
45 at your disposal from our ELBs, you will see there is
46 significant shrimping effort, from that data at least, all the
47 way out to about 120 meters, and so, if this whale is not really
48 in this hundred meters, and you don't have any physical

1 observations of it being there, and we're modeling it to be
2 there, then we are likely creating a problem between
3 stakeholders that does not exist, that you will have to deal
4 with, and regulate, when it's really not an issue. They really
5 aren't overlapping. Do you see what I'm saying, and so it's
6 important to get this cutoff right.

7
8 There is one predictive model that is referenced in that
9 proposed rule, in the data behind it, and that predictive model
10 even points to the 200-meter isobath as being an important area
11 that those whales occupy, and there's only one predictive model
12 that is putting it shallower, and that is a yet-to-be-published
13 paper, and so that's not a published model, a published paper,
14 yet, and that's the one that says it might should go into that
15 hundred-meter isobath, but you don't have hardcore eyes on the
16 whale in that depth, and you have one predictive model that puts
17 you closer to 200, and so the shrimp industry is asking, through
18 the Southern Shrimp Alliance, what I thought was fairly
19 conservative, and we only asked you to go out to the 120 meters,
20 when, really, your data puts you at closer to 150 to 200.

21
22 If you read further in the letter, we also give you some
23 rationale for backing out that 400-meter isobath contour, back
24 it up to about that 350, because what you're getting into there
25 is your royal red grounds, and that's your royal red shrimpers.
26 They shrimp in that deeper water, and, when I said that 120
27 earlier, 120 meters, I guess that I should be specific, and I'm
28 talking about brown, pink, and white, okay, and not royal reds.
29 I'm talking about your penaeids, brown and pink and white,
30 penaeid.

31
32 Pass the letters along, if you can, so that they can read the
33 full letter, but I think this is important for the council to
34 think about, because it's going to land on your plate later. It
35 probably will be better if we can make sure we get those lines
36 where they really should be in the first place and be forward-
37 thinking about it.

38
39 All right, and the only other item under that agenda item -- So
40 it's the listing of these five Caribbean corals as endangered
41 species, under the Endangered Species Act, and it really caught
42 all of us by surprise, because we had not heard about this year,
43 and it's already final. It's in place, and it's been done, and
44 I think you all heard about it for the first time at your August
45 meeting, and so it got presented to us now, but it's already
46 been implemented, and it's never been before the Shrimp AP, and,
47 when I looked at the timeline, I think Protected Species has
48 been working on that, off and on, since 2014, and I was on this

1 council from 2013 to 2022, and, for the life of me, I cannot
2 remember it ever being presented, and it was a huge area down in
3 the Keys that is being taken in as critical habitat.

4
5 We didn't get much background on it, just looking at it, and it
6 looks like there's probably a lot of modeling that was possibly
7 involved in it, and we had some reservations about that, and we
8 would like to see the data, and maybe even see the council write
9 a letter to NMFS and say, hey, you know, I know you've already
10 done this, but you didn't present it to us until the last hour
11 here, and we didn't get any feedback from our APs, and it seems
12 to be something they're concerned about, and so we're having
13 hell in our industry right now.

14
15 We're at a precipice. The shrimp prices have bottomed out,
16 because the imports have finally gotten to the point where it's
17 not just -- They're not just depressing our price anymore, but
18 they have filled up all the freezers in this country, and
19 there's not enough people to even go buy them, and so the demand
20 is gone, and so we're doing good if we can find somebody that
21 will unload the boat.

22
23 About the only shrimp, brown, pink, and white, that there's
24 still a little bit of a market for, that we can sell our shrimp,
25 find somebody to buy them, is pink, and I'm not sure why that it
26 is, and maybe because they don't raise them in ponds overseas,
27 and I don't know, and that critical habitat designation for
28 those corals -- That's down in our pink shrimp grounds, and
29 we're worried that's going to come back to bite us, that somehow
30 that's going to end up in regulations.

31
32 We just want to see the science that it was based on and see,
33 you know, how you came up with that, and why you didn't present
34 it to us earlier, so we could give you feedback, if maybe it
35 should have been tailored a little bit more, and so we hope the
36 council will take that up with NMFS, and that's about the only
37 thing we've got left going for us at this point. I think that's
38 it, but let me make sure.

39
40 **CHAIRMAN SCHIEBLE:** Thank you, Ms. Bosarge. I almost had to
41 invoke the public comment buzzer.

42
43 **MS. BOSARGE:** You're shutting me down?

44
45 **CHAIRMAN SCHIEBLE:** We're getting close on time.

46
47 **MS. BOSARGE:** Well, that's it. I'm at the end.

48

1 **CHAIRMAN SCHIEBLE:** Perfect timing, as usual. Thank you. The
2 final item on the agenda is Other Business, and I will let Dr.
3 Simmons kick that off, and then I believe that Dr. Walter has a
4 couple of items to go through.

5
6 **OTHER BUSINESS**
7

8 **EXECUTIVE DIRECTOR SIMMONS:** Thank you, Mr. Chair, and so we may
9 have to come back to this at Full Council too, but I will just
10 put the request out there that the council sent a letter to Dr.
11 Werner, after Evan Howell gave us a presentation, Dr. Howell
12 gave us a presentation, regarding the climate resilience, the
13 IRA funding, and I think there was some idea that the data
14 acquisition, the data -- I think it's called the Essential Data
15 Collection and Advanced Technologies portion, or pot, of
16 funding, if that potentially could be used to help with
17 advancing technologies in the shrimp fishery.

18
19 We did send that letter, and we did talk about it, just briefly,
20 at the Council Coordination Committee last week, and we were
21 told that there is some regional spend plans that may be coming
22 out, and we didn't know how that might fit in with this, but, if
23 you had any updates for us, Andy or Clay, that would be great,
24 on that letter.

25
26 **DR. PORCH:** We've read the letter, and we're considering it.
27 The bottom line is the spend plans have been pretty well
28 developed, and so what we're looking at now is if there's any
29 gaps, any funds available, and there's a lot of things in the
30 queue and so, at this point, no decisions, no firm decisions,
31 have been made, but it would fall in a long queue, and so I
32 don't have any good insights of whether it could be funded or
33 not through IRA.

34
35 **EXECUTIVE DIRECTOR SIMMONS:** Just one quick follow-up. Thank
36 you, and so the other thing that was discussed is the councils,
37 the regional management councils, potentially updating their
38 research and monitoring priorities to help with this effort, and
39 is that futile at this point, that the spend plans are already
40 pretty fully vetted and it's not useful for us to update those?
41 We would be normally next year, under our five-year budgeting
42 process, but this would be a more focused, I guess, effort, and
43 I think that was briefly discussed at the national level, but it
44 hadn't trickled down, I guess, to the regional level, if that's
45 something they wanted us to do, but we can circle back at Full
46 Council, and I will just put that out there. Thanks.

47
48 **CHAIRMAN SCHIEBLE:** Okay. Thank you, Dr. Simmons. Mr. Gill.

1
2 **MR. GILL:** Thank you, Mr. Chairman. Before it escapes us, Leann
3 mentioned the possibility of the two letters regarding sea
4 turtles and Rice's whale comments from SSA, and could we ask Dr.
5 Freeman to provide those to council prior to, for consideration?
6 At the AP, which I attended, I was impressed with the rationale
7 that was given verbally as to those, but I would like to
8 understand it better before we get into whether we follow those
9 up with a council motion. Thank you.

10
11 **CHAIRMAN SCHIEBLE:** So you would like those before we get to
12 Full Council, or are you talking about before the January Shrimp
13 Committee meeting?

14
15 **MR. GILL:** Before Full Council, because that's where we're going
16 to discuss what we're doing here in committee.

17
18 **CHAIRMAN SCHIEBLE:** Yes, and I agree. I was just making sure
19 that's what you meant. Dr. Freeman, is that possible? Did you
20 hear what Mr. Gill asked for?

21
22 **DR. FREEMAN:** Yes, sir, I did, and I sent a PDF version of those
23 two letters to our admin staff earlier this morning, just in
24 anticipation that a committee member may request that, and so I
25 will verify with them that they can get that sent out before
26 Full Council.

27
28 **CHAIRMAN SCHIEBLE:** Thank you, Dr. Freeman. As usual, you're
29 ahead of us. Mr. Strelcheck.

30
31 **MR. STRELCHECK:** Well, I will just add -- I mean, I can't speak,
32 obviously, for the council and what you want to do with regard
33 to industry letters, but the agency has an obligation,
34 obviously, and we've gone out, and we've solicited public input
35 and comments, and so now we're reviewing that public input and
36 comments on our rulemakings, and certainly we'll consider that
37 as far as any sort of further development of the final rule,
38 just like the council would do any sort of rulemaking as well.

39
40 **CHAIRMAN SCHIEBLE:** Thank you, Mr. Strelcheck. I see Dr. Walter
41 has his hand up, and I want to ask you a quick question before
42 you speak, and so are you available Thursday? Are you going to
43 be on the call during the Full Council period, where possibly
44 you could give the presentation on the early adopter program, or
45 is that something that Executive Director Simmons wants to do
46 now? It's these last three agenda items, Tab D-6(a), 6(b), and
47 6(c), and are we wanting to do those during Full Council? Are
48 you available, Dr. Walter, or do you want to do that now?

1
2 **DR. WALTER:** I would be available, and I think we could pretty
3 much knock that out by saying that the handouts are available,
4 and we don't even need a presentation. I do have one other very
5 short comment to make.

6
7 **CHAIRMAN SCHIEBLE:** Go ahead, please.

8
9 **DR. WALTER:** So one of the things that we're working on is
10 trying to find synergies between the turtle project, which is to
11 implement effort monitoring in inshore waters, mostly in state
12 waters, but, because most federally-permitted vessels are also
13 state-permitted, those vessels may also be applicable to that,
14 and that project has a substantial amount of funding available
15 to it, and so, if there are synergies that could be made between
16 the turtle project and the early adopter program, it could be
17 very valuable, particularly because I think one of the AP's
18 goals is trying to implement --

19
20 To ensure that the new effort monitoring has the minimal
21 economic impact on the fishery, and so, if they could be vessels
22 to get effort monitoring units through the turtle program, maybe
23 in a similar way as the early adopter program, and we're
24 exploring that, and I know that the AP was not a fan of the
25 turtle project, but the reality is that effort needs to be
26 monitored, and it's an essential element of what allows the
27 fishery to be authorized under the biological opinion, and so
28 more data is actually better data to inform the process, and, if
29 they can get free units, I think that's something that might be
30 palatable. Anyway, more to come on that. Thanks.

31
32 **CHAIRMAN SCHIEBLE:** Thank you, Dr. Walter. Do we have any other
33 further comments, or questions, around the committee? Seeing
34 none, Dr. Freeman, do you have anything further, before signing-
35 off?

36
37 **DR. FREEMAN:** That's all. Thank you, Mr. Chair.

38
39 **CHAIRMAN SCHIEBLE:** I appreciate it. Back to you, Mr. Chair,
40 and that concludes the Shrimp Management Committee.

41
42 (Whereupon, the meeting adjourned on October 23, 2023.)

43
44 - - -