

1 GULF OF MEXICO FISHERY MANAGEMENT COUNCIL

2  
3 SHRIMP MANAGEMENT COMMITTEE

4  
5 Webinar

6  
7 April 12, 2021

8  
9 **VOTING MEMBERS**

10 Leann Bosarge.....Mississippi  
11 Kevin Anson (designee for Scott Bannon).....Alabama  
12 Dale Diaz.....Mississippi  
13 Dave Donaldson.....GSMFC  
14 Robin Riechers.....Texas  
15 John Sanchez.....Florida  
16 Andy Strelcheck.....NMFS  
17 Ed Swindell.....Louisiana

18  
19 **NON-VOTING MEMBERS**

20 Susan Boggs.....Alabama  
21 Jonathan Dugas.....Louisiana  
22 Phil Dyskow.....Florida  
23 Tom Frazer.....Florida  
24 Lt. Nicholas Giancola.....USCG  
25 Martha Guyas (designee for Jessica McCawley).....Florida  
26 Chris Schieble (designee for Patrick Banks).....Louisiana  
27 Bob Shipp.....Alabama  
28 Joe Spraggins.....Mississippi  
29 Greg Stunz.....Texas  
30 Troy Williamson.....Texas

31  
32 **STAFF**

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 Jessica Matos.....Document Editor & Administrative Assistant  
39 Natasha Mendez-Ferrer.....Fishery Biologist  
40 Emily Muehlstein.....Public Information Officer  
41 Ryan Rindone.....Lead Fishery Biologist/SEDAR Liaison  
42 Bernadine Roy.....Office Manager  
43 Camilla Shireman.....Administrative & Communications Assistant  
44 Carrie Simmons.....Executive Director

45  
46 **OTHER PARTICIPANTS**

47 Benny Gallaway.....LGL Ecological, TX  
48 Dave Gloeckner.....NOAA  
49 Peter Hood.....NMFS

1 Michelle Masi.....NOAA  
2 Corky Perret.....MS  
3 Clay Porch.....SEFSC  
4 Spud Woodward.....SAFMC

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PAGE 31: Motion to direct staff to begin a framework action to set up reporting requirements for the expiring 3G cELB program to transition it to a new platform for effort reporting of the Gulf of Mexico federal shrimp fishery. The motion carried on page 33.

PAGE 39: Motion to recommend to NMFS that federal waters be closed out to 200 miles to run concurrent with the date that the State of Texas recommends for the 2021 Texas shrimp closure in the Texas Territorial Sea. The motion carried on page 39.

- - -

1 The Shrimp Management Committee of the Gulf of Mexico Fishery  
2 Management Council convened via webinar on Monday morning, April  
3 12, 2021, and was called to order by Chairman Leann Bosarge.

4  
5 **ADOPTION OF AGENDA**  
6 **APPROVAL OF MINUTES**  
7 **ACTION GUIDE AND NEXT STEPS**  
8

9 **CHAIRMAN LEANN BOSARGE:** I would like to call to order the  
10 Shrimp Management Committee. I will remind everybody of our  
11 membership, real quick. It's myself as Chair, Patrick Banks or  
12 Chris Schieble as Vice Chair, and I think Chris is on the line  
13 with us this morning. We have Kevin Anson, Dale Diaz, Dave  
14 Donaldson, Robin Riechers, John Sanchez, Andy Strelcheck, and Ed  
15 Swindell, and I believe that Robin had to step away for just a  
16 little bit, but I think he'll be able to rejoin us maybe for the  
17 second-half of the committee.

18  
19 That's our committee. On our agenda, the first item of business  
20 is going to be to adopt the agenda. I do have one small  
21 revision. As you can see, we have a jam-packed agenda, and we  
22 have about two hours, and we're a little behind, which is normal  
23 for these webinar meetings.

24  
25 I'm going to take the Agenda Item Number VII, Update on Effort  
26 Data Collection, and move it to the top of our agenda, and so,  
27 after we finish our Action Guide, we will go right into that  
28 update on effort data collection and get those presentations,  
29 and I am doing that in an effort to have the two items that need  
30 decisions, or direction, at the top of our agenda, that being  
31 the Texas closure and the effort data collection, so that we  
32 make sure that it through those.

33  
34 That will be moved up on the agenda. Were there any other  
35 revisions or additions to the agenda from committee members? I  
36 don't see any names on the board, and so, if there are no other  
37 revisions, is there any opposition to adopting the agenda as  
38 amended? Hearing no opposition, the motion carries, and the  
39 agenda is adopted.

40  
41 The second item of business will be the Approval of the November  
42 2020 Minutes, found under Tab D, Number 2. Were there any  
43 revisions that needed to be made from those minutes from our  
44 November 2020 meeting? I don't see any hands on the board. I  
45 know there is a little bit of a lag, and so feel free to jump  
46 in, if I move too quickly and you wanted to raise your hand. I  
47 don't see anything, and so, if there are no revisions, we will  
48 approve the minutes as presented. The minutes are approved.

1  
2 The next item is our Action Guide and Next Steps. Dr. Freeman,  
3 I'm assuming you want to go through this as we get to each  
4 agenda item, and so, if you want to, can you go ahead and take  
5 us through the Action Guide and Next Steps for our agenda item  
6 on the update of effort data collection, please, sir?

7  
8 **DR. MATT FREEMAN:** Yes, ma'am. Thank you. For the Action  
9 Guide, the committee will be briefed on the status of 3G cELBs  
10 before receiving two presentations related to shrimp effort data  
11 collection in the Gulf. Dr. Gallaway will present an update on  
12 a pilot project to collect effort data using P-Sea WindPlot.  
13 Dr. Gloeckner will then present alternative options for  
14 collecting shrimp effort data and associated costs.

15  
16 The committee should consider the presentations and ask  
17 questions. The committee has a previous motion for a white  
18 paper on the associated costs of using an expanded P-Sea  
19 WindPlot pilot program. Council staff requests guidance on  
20 whether to include alternative options to P-Sea WindPlot within  
21 the white paper. The committee will receive Shrimp AP  
22 recommendations related to effort data collection and should  
23 provide guidance to council staff on actions to be taken.

24  
25 **CHAIRMAN BOSARGE:** Thank you, Dr. Freeman. Just to kind of take  
26 a step back, real quick, before we delve into these  
27 presentations, for the committee, to refresh your memory, the  
28 shrimp fleet -- We garner the effort information, and so how  
29 much we trawl and where we trawl at, by the electronic logbooks  
30 on our boats, and that's what our electronic logbooks capture,  
31 is effort information.

32  
33 The ones we have on the boats now, the technology is 3G, which  
34 is a little too old, and the box is still collecting data, but  
35 it's no longer transmitting the data to NMFS, and so you're  
36 going to get a presentation on how we get that data off those  
37 boxes, those old 3G boxes, and then you're going to get a couple  
38 of presentations on what we do to replace those old 3G-  
39 technology-type boxes moving forward, and so then we'll have  
40 some discussion on where the council wants to go with that.  
41 With that, I will turn it over to Dr. Gloeckner to give us our  
42 presentation on the older -- The status of the older 3G cellular  
43 ELB devices.

44  
45 **UPDATE ON EFFORT DATA COLLECTION**  
46 **STATUS OF 3G CELBs**  
47

48 **DR. DAVE GLOECKNER:** Like the slide says, I'm Dave Gloeckner,

1 and I'm the Director of the Fisheries Statistics Division at the  
2 Center, and we're going to go over some interim data collection  
3 processes.

4  
5 Just a brief review, the cELB units ceased transmitting  
6 information to NMFS on December 31, and, in reality, the  
7 National Environmental Satellite Data and Information Service in  
8 Stennis shut down the machine receiving the logbook data on  
9 December 7, and so, in actuality, we stopped receiving the data  
10 on that date.

11  
12 The units are still collecting data, but they're just not  
13 transmitting, and the plan for 2021 is for the fishery to  
14 continue to use those units, and the data will be manually  
15 obtained by the Center on the SD cards that are included in  
16 those units.

17  
18 What we plan to do is develop instructions for the fishermen, so  
19 that they know how to remove the old SD cards and install the  
20 new ones, and we'll develop a mailer for sending new cards to  
21 the fishermen with a return address mailer for the old cards to  
22 go to Galveston. The Gulf States Commission will develop a  
23 table on their Oracle server to load the data from the SD cards  
24 and develop a scanning process so that they can isolate any  
25 viruses on any cards that happen to be infected.

26  
27 Then the IT staff from NMFS will work with the Gulf States  
28 Commission to develop a process to access that table at the Gulf  
29 Commission, pull the data to a NMFS server, and run conversion  
30 code to create usable data and do some quality control. Then we  
31 will send a letter, before May, explaining the process to the  
32 fishermen, copying the Gulf Council, SSA, and any other groups  
33 we identify.

34  
35 We will work with SERO, and we'll publish this in a Fisheries  
36 Bulletin before May. We're actively working with SERO right  
37 now, trying to identify some key dates and solidify those dates,  
38 so that we can let everybody know when this will happen.

39  
40 After May, we'll send packages -- We'll send packages by mid-  
41 May, and then NMFS will forward the SD from fishermen to the  
42 Gulf States Commission, to be loaded to their tables. After  
43 review of data, we will identify any bad units and make  
44 decisions to replace those units or not.

45  
46 By the end of June, I think that will just be determined, by  
47 whether or not we have decided to identify a process that will  
48 replace the current process. If we have some units identified,

1 such as P-Sea WindPlot, that we can use to replace the current  
2 cELB units, maybe we don't need to replace the ones that go bad,  
3 and so we'll just have to see how this goes.  
4

5 After May, the Gulf States Commission will return the batches of  
6 used chips to the Galveston Lab for storage, since it's  
7 considered a federal document, and so we actually have to manage  
8 those, and the process can be repeated in the fall, if a  
9 replacement for the cELB is developed through the Gulf Council.  
10 Hopefully we can repeat this, if needed, but, over time, I think  
11 we have to work towards getting a viable replacement that will  
12 transmit electronically. I think that was all for this one.  
13

14 **CHAIRMAN BOSARGE:** All right. Thank you, Dr. Gloeckner. Are  
15 there questions from the committee for Dr. Gloeckner on this  
16 first presentation? Matt, you keep me straight, if I miss a  
17 hand.  
18

19 **DR. FREEMAN:** Yes, ma'am.  
20

21 **CHAIRMAN BOSARGE:** All right. I don't see any hands up. Dr.  
22 Gloeckner, I have a quick question for you. The reason that we  
23 -- The chip from the fishermen will get sent to Galveston, and  
24 Galveston will forward them on to Dave Donaldson's group over at  
25 Gulf States. Is that strictly because of the chance of a virus  
26 or something like that, because you can't put it on your NMFS  
27 server, and is that why Dave's group puts it on their server  
28 first and then sends it to you?  
29

30 **DR. GLOECKNER:** Yes, and we've got some security requirements,  
31 at the federal government, that the Gulf Commission doesn't  
32 necessarily have, and so it makes it an easier process if we  
33 just load the data in Gulf States, and then we can just access  
34 the data in a table that they've got.  
35

36 **CHAIRMAN BOSARGE:** Okay, and I will just kind of throw this out  
37 there, and so the server that you used to use for us, for the  
38 shrimp data, was at Stennis, and you referred to it as a NESDIS  
39 server, and you said it was shut down on December 7, and my  
40 understanding is though that they actually shut it down to move  
41 it to a different location, and there is two of those servers,  
42 those NESDIS servers, at Stennis.  
43

44 One of them they moved to Asheville, North Carolina, and the  
45 other one they moved to the Pascagoula Science Center NMFS Lab,  
46 and so that server is actually housed in a Science Center  
47 facility now, from what I understand, and, now, I don't work for  
48 the government, but that's what people tell me. What's the

1 possibility of plugging in that server at the Pascagoula Lab and  
2 streamlining the process a little bit?

3  
4 **DR. GLOECKNER:** My understanding was that they got rid of the  
5 server at NESDIS because it was old and was out of compliance  
6 with criteria protocols. Now, I know that they are working on  
7 setting up a server in Asheville, and they are working on  
8 setting up a server in Pascagoula, but I do not think they have  
9 the protocol set up to pull the data in from these chips and  
10 wash it through any security and virus control and do all of  
11 that. That takes a little bit more time.

12  
13 As you know, everything in the government takes time, and so  
14 that's why we decided to go ahead and go with using the Gulf  
15 States Commission as a place to load the data and then have NMFS  
16 access it from there. It just seemed more timely to do it that  
17 way.

18  
19 **CHAIRMAN BOSARGE:** Gotcha, and timely is key in this case, and  
20 so I concur completely. All right. No problem. I was just  
21 wondering. If those servers are in the process of being set up  
22 though, that's good to know, because that can be a fallback for  
23 us for the permanent program that replaces the expiring 3G, that  
24 those servers are going to come back online, and so that's good.  
25 All right. So, if there are no other questions for Dr.  
26 Gloeckner, which I don't see any, then we --

27  
28 **MR. KEVIN ANSON:** Madam Chair, I had my hand raised. Can I ask  
29 a question?

30  
31 **CHAIRMAN BOSARGE:** Yes, go ahead, Kevin.

32  
33 **MR. ANSON:** Thank you. Dr. Gloeckner, thanks for the  
34 presentation. How do operators, or vessel captains, know -- I  
35 mean, the unit is on, and it has a power function, and a power  
36 light function comes on, and is that correct?

37  
38 **DR. GLOECKNER:** As far as I know, yes. Just because it's on, it  
39 doesn't mean that it's working properly though, and so that's  
40 something we'll have to identify when we get the first round of  
41 data, to make sure we see if any of those units aren't working  
42 properly, and then we can make that decision to replace it or  
43 not.

44  
45 **MR. ANSON:** That was my next question, is how do the operators  
46 know if it's actually working properly, and so have you all  
47 thought about that? As someone turns in their hard, and they  
48 had the power on, so to speak, for every trip, but it wasn't,

1 for technical or some other hardware issues, wasn't collecting  
2 the data, and I'm sure you all have thought of that, or have  
3 been thinking of that, for those instances.

4  
5 **DR. GLOECKNER:** Yes, and we do have some units that are  
6 available to replace those, if they have failed. It's just a  
7 matter of how many have failed and do we want to go through that  
8 if we have an impending replacement. It is just a sample, and  
9 just losing a few from the sample probably isn't a big deal,  
10 but, if we've got more of a problem, then we'll probably go  
11 ahead and replace them.

12  
13 **MR. ANSON:** Thank you.

14  
15 **CHAIRMAN BOSARGE:** Thank you, Kevin, and feel free to jump in if  
16 your name doesn't pop up on the board fast enough. I have no  
17 issues with that at all, and I am glad that Kevin spoke up,  
18 because it made me remember my other thought on this  
19 presentation.

20  
21 Dave, will you speak, generally, to the process for permit  
22 renewals? Right now, the shrimp fleet, if you've been chosen to  
23 have one of these devices on your boat, it becomes one of the  
24 criteria you have to meet to renew your permit. You have to  
25 have your data being transmitted, and so, now that we're not  
26 transmitting, what is going to be the timeframe for getting  
27 those chips in and being able to renew your permit? I have  
28 heard six months to a year, but I would like to hear it from  
29 you, Dave.

30  
31 **DR. GLOECKNER:** I think we still have to determine how quickly  
32 vessels need to get those chips in once we send the letters, and  
33 so I don't think -- That may be something more for Andy's shop,  
34 as far as how much time we're going to give them, and I don't  
35 think we've discussed that, but the guidance I gave to the  
36 permits shop was that I think we just give everybody a pass  
37 until we determine what the turnaround is on people getting the  
38 chips to us, and so I don't think we've quite fleshed that out  
39 yet, and I think, until we do, we just give everybody a pass, if  
40 their permit is coming up before then.

41  
42 **CHAIRMAN BOSARGE:** Okay. That sounds good.

43  
44 **DR. GLOECKNER:** I don't want to hold up permits because we have  
45 a problem with managing this interim method, and so I think  
46 we'll err on the side of renewing permits.

47  
48 **CHAIRMAN BOSARGE:** Dr. Frazer, do you have your hand up?

1  
2 **DR. TOM FRAZER:** Thank you, Leann, and so I just wanted to  
3 follow-up a little bit, and so there's a letter that would be  
4 sent to the individuals with instructions of how to get the SD  
5 card essentially to where it needs to go. My question is, is  
6 there are a time that goes along with that, when you expect to  
7 have it sent and received by, and, if it's not received, is  
8 there is a Plan B to follow-up with another means of  
9 communication, whether it's telephone or an email?  
10  
11 **DR. GLOECKNER:** Well, I think we have a compliance process that  
12 generates communication, and so I think that's probably what we  
13 would do, is follow-up by letter, if we don't receive the cards.  
14 I realize that there are some vessels that take thirty-day  
15 trips, and so I think we're probably going to have to allow for  
16 at least a month before we start sending those communications.  
17 Then, if we don't receive any communication back, that's, I  
18 think, when we'll start looking at --  
19  
20 **MR. ANSON:** Thank you.  
21  
22 **CHAIRMAN BOSARGE:** Andy, I see your hand up.  
23  
24 **MR. ANDY STRELCHECK:** Thanks, Leann. Just to add to this, I  
25 have talked to Kevin McIntosh, and Dave has talked to Kevin  
26 McIntosh, and he oversees our Permits Office, and we do intend  
27 to, obviously, waive the logbook reporting requirements.  
28  
29 Certainly, when the Center sends out these letters and is  
30 requesting, obviously, the data to be returned to us, we need to  
31 determine kind of a reasonable time period for that to occur,  
32 and if there isn't compliance, obviously, with that reporting  
33 thereafter, that would be when we would no longer waive the  
34 reporting requirement and would require them to satisfy that  
35 reporting before they could get their permit issued, but we do  
36 see, obviously, some timeframe between the letters going out and  
37 when the data gets reported to us before we would prevent them  
38 from receiving a permit, and, up until that permit, we would  
39 waive the permit logbook requirements.  
40  
41 **CHAIRMAN BOSARGE:** Thank you, Andy. Ed Swindell.  
42  
43 **MR. SWINDELL:** Thank you, Madam Chair. How many vessels, or how  
44 much individual data collection, are you having to do?  
45  
46 **DR. GLOECKNER:** I think this is on the order of 600 vessels, at  
47 this point.  
48

1 **CHAIRMAN BOSARGE:** All right. Well, this has been a good  
2 conversation, and I hope that, whenever you nail down this  
3 leeway -- I hope that you will look at no less than a three-  
4 month leeway, but I would take it closer to six months,  
5 honestly, just given the nature of our fishery and the fact that  
6 you're mailing things to us, mailing the first letter and then  
7 mailing the second letter to let us know you haven't gotten  
8 anything, and so I would give it at least that.

9  
10 If there's not any other feedback for this presentation, which I  
11 don't see any hands on the board, we're going to move on then to  
12 the next presentation, and so now we're going to start talking  
13 about options for how to replace these 3G boxes that are no  
14 longer viable, and so we have a few options, moving forward.

15  
16 The first presentation will be from Dr. Benny Gallaway on his  
17 pilot program using P-Sea WindPlot as an option moving forward,  
18 and that's Tab D, Number 7(b). I see it up on the board, and  
19 so, Dr. Gallaway, I will turn it over to you.

#### 20 21 **PILOT PROGRAM USING P-SEA WINDPLOT**

22  
23 **DR. BENNY GALLAWAY:** After a hiatus of over a decade, we find  
24 ourselves once more working with the shrimp industry to come up  
25 with a method for estimating shrimp fishing effort to replace  
26 the 3G ELB method.

27  
28 Very briefly, I'm going to reiterate a few points of why  
29 monitoring shrimp effort matters, what the recent history has  
30 been, and what the current problem is, from the industry's  
31 perspective, and then I will talk about an industry-led solution  
32 for monitoring shrimp effort, and this was suggested by Captain  
33 Steve Bosarge, and he said, why don't we use our existing  
34 navigational software, and it always works. We don't go to sea  
35 without it, and we can't get home without it, and it works. We  
36 started looking at that in our Phase 1, which I will very  
37 briefly give a summary of that, and, from that, we developed a  
38 Phase 2 proposal, which you'll hear about this morning.

39  
40 Shrimping effort does matter. First of all, it's needed to  
41 assess how shrimping impacts others. The two foremost examples  
42 are calculating takes and assessing potential for interactions  
43 with sea turtles and other endangered species, and it's used  
44 heavily in the red snapper stock assessments.

45  
46 On the other hand, we also need to know how others impact  
47 shrimping, and, by that, I mean artificial reef placement can  
48 impact shrimping, and offshore oil-and-gas structures can

1 certainly affect shrimping, as well as aquaculture siting. All  
2 these things can be located in areas which are heavily shrimped.  
3  
4 What we've learned is that vessel speed can be used to indicate  
5 fishing behavior. Shrimp trawling occurs between about two and  
6 3.8 knots, and, if you record both latitude and longitude and  
7 determine the date and time, the vessel speed can be easily  
8 determined. Recording these two standard data elements at ten-  
9 minute intervals, over the length of a trip, allows the amount  
10 of towing time, or effort, to be calculated.  
11  
12 In the early 2000s, we developed an electronic logbook that did  
13 this. Early versions required direct retrieval and replacement  
14 of the computer chips for researchers to obtain the recorded  
15 data, and it was very expensive, and you see that in the bottom-  
16 right hand, and you see the original one, with the little data  
17 chip sticking out of the little computer.  
18  
19 In collaboration with NMFS, a system was adopted for monitoring  
20 shrimp effort in the Gulf of Mexico and was later revised so  
21 that the recorded data could be sent via the Verizon 3G cellular  
22 network, and that's labeled as a cELB, and so if I use those  
23 terms.  
24  
25 The next slide shows the current problem for monitoring shrimp  
26 fishing effort, and the next slide is that the -- The current  
27 problem, as we've heard and will be shown, is that the cELB  
28 devices that record and transmit data, via the 3G cellular  
29 network, is no longer functioning. Verizon has discontinued  
30 this service. As described by Dr. Gloeckner, they can still be  
31 recording, but there is no mechanism for retrieval.  
32  
33 The industry solution, as mentioned previously, is why don't we  
34 just use the existing navigational software, and shrimpers  
35 routinely use the P-Sea WindPlot navigational software to  
36 determine their position and record their tow tracks.  
37  
38 The question was can we modify those so that we can record the  
39 information that we need for calculating effort without  
40 interfering with their normal operations, and so the Southern  
41 Shrimp Alliance requested us to explore whether that could be  
42 done, whether it could record the same information as the cELB  
43 in a way that would be compatible with the existing NMFS  
44 software routines that use that data to calculate shrimp effort.  
45 In other words, could we gather the data that would seamlessly  
46 fit into the previous data analysis software?  
47  
48 In the next slide, they funded us to develop a new method, and

1 we did that, and, over a four-month period, we worked with a P-  
2 Sea WindPlot developer to modify his software that would record  
3 the same information as the existing ELB program and send data  
4 in ten-minute intervals, and that's all we're talking about, in  
5 a way that would be compatible with the existing software  
6 routines that are used to calculate effort.

7  
8 The software was designed to be available free of charge to  
9 anyone already running P-Sea WindPlot, which we have determined,  
10 based on industry suggestion, and we've tried to confirm this,  
11 and we have yet to find anyone who does not use P-Sea WindPlot,  
12 and we know it's used by a very large portion of the offshore  
13 fleet, at a minimum. We devised a method to pair effort with  
14 landings also for each trip, and, thus, improve the matching for  
15 these values, so that we can get more robust CPUE estimates.

16  
17 The P-Sea WindPlot software itself has gone through several  
18 versions, and the present version is called 7.29, and,  
19 initially, the ELB was written for just this latest version,  
20 but, after discussion with workers in the marine electronics  
21 sector, we also decided to provide an ELB update to Version  
22 7.28, which some shrimpers are still more comfortable with  
23 using. The ELB component of the versions work in the same way,  
24 and the only differences are associated with the graphical user  
25 interface.

26  
27 The way this works is that, every time P-Sea WindPlot is turned  
28 on, a new ELB file is generated in a hidden folder within the  
29 computer's C drive. The latitude and longitude and date/time  
30 stamp are written to this file every ten minutes. If P-Sea  
31 WindPlot is turned off, or closed, for any reason, it's turned  
32 off or the power is lost or whatever happens, then the program  
33 closes the file, but all previously-written data are saved.

34  
35 When P-Sea WindPlot is turned back on, a new file is written, and  
36 data is again recorded. Upon the completion of the trip, a USB  
37 memory stick with a folder entitled "ELBprog" can be inserted  
38 into a computer, and a dialog box will automatically ask to  
39 download the files from this file with a .dat extension.

40  
41 After these files have been downloaded to the USB memory stick,  
42 the files that are still in the computer's C drive are renamed  
43 with the extension .old, and this allows us to maintain data on  
44 the computer as a potential backup, but will keep these files  
45 from being downloaded a second or third time on subsequent  
46 trips.

47  
48 In this very simple system, the USB memory stick is then popped

1 out of the computer by the captain and provided to the person  
2 who produces trip tickets and pays for the trip. The files from  
3 the memory stick and an electronic copy of the trip ticket are  
4 then emailed to the LGL staff, and that's just for the present,  
5 as we work out the procedures. Eventually, the procedures will  
6 be for all of these data to find its way directly to the  
7 National Marine Fisheries Service. Then, alternatively, even  
8 now, a trip ticket hard copy and the USB stick can be -- If it's  
9 not convenient to email it, it can be just simply directly  
10 mailed to us.

11  
12 The next slide shows how well the system works, and you take  
13 these data, which we did, and this is one of our test routes,  
14 and these location data are run through the effort calculation  
15 programs that we jointly developed nearly a decade ago, and it  
16 gives the results. From this, you can see the little blue  
17 circles indicate -- As seen here, the red circles represent  
18 trawling, and so you can see that you can get exact location of  
19 shrimp effort by stat area and depth zone.

20  
21 It works just fine, and we have run additional tests, and it's  
22 still working just fine, and there seems to be no more than the  
23 usual problems that you have when working on shrimp boats, power  
24 failures, the computer blew up, and it had to change it out to a  
25 new one, those sorts of things, which will always happen, but  
26 you will have that under any circumstance.

27  
28 On the next slide, we have provided a proposal, which we call  
29 Alternative A. A similar amount of funding would be needed to  
30 expand the number of shrimp boats running P-Sea WindPlot with the  
31 ELB update. This is where it's important to sell the program to  
32 the industry. Most of our time would be spent in close  
33 cooperation with those in the marine electronics industry, with  
34 P-Sea WindPlot software developers, shrimp boat captains and  
35 owners, and businesses responsible for issuing trip tickets.

36  
37 The purpose of this proposal, or this alternative, would be to  
38 build towards a fleet-wide rollout of this new method. As part  
39 of the software updates, the developer of P-Sea WindPlot will  
40 revise the program to allow captains to automatically add their  
41 old tracks and marks to the updated version. The reason for  
42 this is this makes it easier for them to integrate these data  
43 and encourage greater participation.

44  
45 Given that anyone who operates a vessel using the P-Sea WindPlot  
46 software can participate at no additional cost to them, we are  
47 going to work to initially install the software on twenty-five  
48 to fifty vessels, following the same protocols we developed in

1 Phase 1 to track the effort and landings data.  
2  
3 As we're developing this, the raw data will be provided to NMFS  
4 and the council, upon request, and summaries will be included in  
5 reports and requested presentations. Since that time, we've  
6 come up with what we call a Phase 2, and this shows the cost for  
7 this Alternative A, and the costs are essentially associated  
8 with salary, as we spread out through the Gulf of Mexico,  
9 through all the ports, coordinating with the owners and captains  
10 and everyone involved, from A to B, or A to Z, on implementing  
11 this program.  
12  
13 We will purchase several thousand USB memory sticks and prepare  
14 for use in advance and creating the appropriate folder structure  
15 within them, and then we'll compute the spatial distribution of  
16 effort, CPUE, and that will also require time, and so that's  
17 just a brief outline. The cost are mostly, at this stage, in  
18 salaries.  
19  
20 Following discussion with the industry proposal for monitoring  
21 shrimp effort with the agency and others, it has been suggested  
22 that, to be approved, the method must include near real-time,  
23 automated transmission of the effort data, for example at  
24 completion of each trip.  
25  
26 If we accepted this, this would require that we conduct a  
27 precursor research effort prior to the Alternative A that I just  
28 described. We call this Alternative B, and I will describe it  
29 in the next slide, but this study would need to be presented  
30 first.  
31  
32 We have estimated that this would be a little bit more cost of  
33 \$350,000 that would be needed to devise a method to develop  
34 software that will automatically transmit ELB data obtained from  
35 P-Sea WindPlot to a designated server. In essence, if it's doing  
36 this, then it's doing exactly what the cELB did, initially.  
37  
38 This would, once more, involve LGL's close coordination with  
39 everybody involved, from the marine electronics industry to --  
40 The people who actually service the boats is who I'm talked  
41 about, and the software developers, captains and owners, and a  
42 cell phone company, and we plan on using Verizon, to  
43 electronically transmit the electronic ELB data. One of the  
44 approaches that looks most promising, and is summarized, is, at  
45 the completion of each trip, the boat captain turns on a  
46 hotspot, which triggers the P-Sea WindPlot to email the .dat ELB  
47 file, and so as described earlier.  
48

1 As before, they are then renamed to .old, so that we don't have  
2 multiple uploads. Then the long-term -- If such a system were  
3 adopted, the long-term costs would be -- For a hotspot device,  
4 it would be about twenty bucks, when ordered in bulk of 500  
5 devices, and we would have to order -- That's no problem, and I  
6 think there are already 600 that are being used.

7  
8 The costs for the monthly fee for data transmission are pretty  
9 small, and it's about \$10 a month. Assuming that 577 boats are  
10 used to monitor effort, the first-year costs would be \$80,780  
11 for transmission costs.

12  
13 The next slide shows, again, the costs, which is, again,  
14 primarily associated with salaries, and I'm going fast, and I  
15 know you have copies of these, and so I don't need to dwell on  
16 it, I don't think. You can ask me questions later, if you would  
17 like, and then, again, significant time will be spent. All of  
18 these programs will require an initial get out there and work  
19 with the people and help them get it installed and make it work,  
20 pointing out to them how it benefits them, and then, also,  
21 computing the spatial distribution.

22  
23 The progress with this approach seems to be encouraging, in that  
24 we just got notification that it's very likely that the system  
25 could be approved through the VMS protocol and might be  
26 acceptable for all concerned, and so I think that's my last  
27 slide. We're pretty excited about it, but pretty apprehensive  
28 about getting out there and getting it done in an expedient way,  
29 and so time is of the essence.

30  
31 Also, I guess I should take into consideration that it appears  
32 that we have more time than we initially thought, because of, if  
33 the existing units are gathering data, and those data can be  
34 successfully transmitted, we have a little more time, but I  
35 still think it's urgent to get started on these, because it  
36 never goes as smoothly or as quickly as one hopes, or at least  
37 that's been my finding. That concludes my presentation.

38  
39 **CHAIRMAN BOSARGE:** Thank you, Dr. Gallaway. Are there any  
40 questions or feedback for Dr. Gallaway from the committee or  
41 others? I see Dr. Frazer's hand is up.

42  
43 **DR. FRAZER:** Thank you, Ms. Bosarge. Benny, I just have a quick  
44 question. In this Phase 2, Alternative B, and this is related  
45 to the question that was raised earlier, but where would you  
46 actually transmit that data to if the server is unavailable?

47  
48 **DR. GALLAWAY:** We would transmit it to our servers, with the

1 plans to, as soon as possible, transmit to the designated NMFS  
2 server, and so we would hold -- While we're developing it, we  
3 would transmit directly to ourselves, but we would have it set  
4 up to where, when NMFS has a server ready, we'll be prepared --  
5 When the system is completed, we'll step back, and it will go  
6 directly to them, and it will be theirs.

7

8 **DR. FRAZER:** Thank you.

9

10 **CHAIRMAN BOSARGE:** Tom, that's kind of why I brought up some of  
11 that discussion earlier about the servers that we used to have  
12 our data sent to that were turned off. They're still around,  
13 and they were turned off to be moved, and hopefully, at some  
14 point in the future, we can see about plugging those back in and  
15 running whatever procedures have to be run on them to get them  
16 going again. I see Andy Strelcheck's hand is up, and then Dale  
17 Diaz.

18

19 **MR. STRELCHECK:** Thanks, Leann. I just wanted to kind of add a  
20 few things. First, Benny, thanks for taking the time to present  
21 to us, and I'm always impressed by your work, and I really  
22 appreciate the industry outside-the-box thinking on this one to  
23 utilize existing equipment.

24

25 You alluded to kind of working with the VMS program, and we've  
26 been spending some time, internally within NMFS, to coordinate  
27 with our own VMS program staff, and we do believe these cellular  
28 devices are defined under our existing program and would need to  
29 go through that type approval process.

30

31 I wanted to just emphasize, to Benny and others, that we stand  
32 ready, obviously, to work with him and other vendors on working  
33 to get this approved, and I know a number of concerns came up  
34 during the Shrimp AP meeting, one in particular about two-way  
35 communication of these devices.

36

37 I think we got resolution already to some of those concerns and  
38 issues, and so it's just a matter now of making sure that what  
39 Benny and others are working on would qualify as a cellular-  
40 based device for transmission and type approval and whatever  
41 action, obviously, the council would take that would encompass  
42 this device and any other devices that could qualify under those  
43 requirements. I am encouraged kind of where we're heading, and  
44 certainly, Benny, I encourage you to reach out to our VMS  
45 program as soon as possible and start talking with them more  
46 directly with respect to approval standards.

47

48 **DR. GALLAWAY:** I was very happy to get that email, and I will do

1 so quickly.

2

3 **CHAIRMAN BOSARGE:** Dale.

4

5 **MR. DALE DIAZ:** Andy answered my question about two-way  
6 communication. Thank you.

7

8 **CHAIRMAN BOSARGE:** All right. Next, we have Mr. Ed Swindell.

9

10 **MR. SWINDELL:** Thank you, Madam Chair. It seems, to me, in the  
11 presentation you came up with something like an additional  
12 \$700,000 or so that is going to be needed for you to continue  
13 this project, and have you gotten the money assigned? Is it  
14 ready to go, and when is it going to be completed?

15

16 **DR. GALLAWAY:** To answer your question bluntly, no, we have  
17 received no funds to carry forward with what I just described.  
18 These are proposals we were asked to develop and submit, with  
19 the cost estimate, and that's what we've done.

20

21 **CHAIRMAN BOSARGE:** I will chime in there a little bit, Ed. If  
22 you remember, at our last council meeting, we made a short list  
23 of projects that the council might use some of our carryover  
24 funds to allocate towards the funds, certain research projects,  
25 and shrimp, the shrimp ELB, was one of them, and I think the  
26 other one was some research on some gray triggerfish, I think,  
27 research.

28

29 The council staff, I guess, is going to bring us some more  
30 information on the gray trigger during the next Admin/Budget  
31 Committee, and so what you see before you though -- The last  
32 time we talked, we were gearing our discussions towards possible  
33 funding of that Phase 2 Alternative A, which was where Dr.  
34 Gallaway has already proven the efficacy of using the P-Sea  
35 WindPlot program. In other words, he has shown that we can use  
36 the P-Sea WindPlot program to get the same data that the old  
37 cELBs were collecting, and it will replace them, and it will  
38 work.

39

40 What he was going to do next, on the order of \$327,000, I think,  
41 was to include more vessels in that pilot program, to try and  
42 get ready for a full-blown rollout by NMFS, and so he was going  
43 to be going to every port and installing the software on more  
44 vessels and talking with the captains and the fleet owners and  
45 the marine electronics guys and getting it all up and running on  
46 a wider swath of the fleet, and, that way, it would be a lot  
47 easier for NMFS to do their full-blown rollout.

48

1 However, since he finished that first phase, where he proved the  
2 efficacy, that the program will work, we have been informed, by  
3 NMFS and the Center, that it needs to have automatic  
4 transmission. Therefore, rather than scaling up what he's  
5 already done, his proposal is that he would ask for \$350,000 to  
6 implement an automatic transmission mechanism, because that's  
7 going to take a little more doing, to get that in place. If the  
8 council chose to fund that, it would be the \$350,000.

9  
10 Now, I guess the council could possibly choose to fund both  
11 phases, I mean alternatives, the electronic transmission piece  
12 for \$350,000 and then, after that, the scaling-up piece, which  
13 is \$327,000, and, like you said, that's going to put you right  
14 around that seven-hundred-and-something mark, but I don't see  
15 where the council has to do that, per se.

16  
17 The efficacy has been proven, and the thing that has to happen,  
18 for this to be implemented and available for the fleet, is the  
19 automatic transmission, which is the \$350,000. NMFS can then  
20 take it and roll it out and put it out there as an option for  
21 the fleet, and it would be a much more streamlined process if  
22 that other Alternative A was also carried out, where you  
23 essentially had Benny out there doing all the outreach and  
24 putting it on more of the vessels before the actual rollout, but  
25 it doesn't necessarily have to happen.

26  
27 What has to happen, for this to be approved, is this automatic  
28 transmission piece, Alternative B, for \$350,000, and that there  
29 is no funding for at this point. All right. Is there other  
30 feedback or questions? All right.

31  
32 **MR. ANSON:** Madam Chair, if I can make one comment, just for the  
33 record. I appreciate Dr. Gallaway putting this presentation  
34 together, and I appreciate his time to provide it and all his  
35 comments and the thoughts that went into this, and of course  
36 from industry, and just a general comment that just approaching  
37 with caution, myself, when we look at proprietary, or private-  
38 company, software or hardware applications.

39  
40 Particularly in this instance, and it's exclusive. The  
41 industry, pretty much, it looks like, already uses that, but  
42 just a little fearful, looking into the future, as to what  
43 impediments that might be for other companies that want to get  
44 into the market and whether or not the agency and the council is  
45 flexible enough to incorporate any additional companies into  
46 having their equipment approved, is all. I just wanted to make  
47 sure I said that. Thank you.

48

1 **CHAIRMAN BOSARGE:** Thank you, Mr. Anson, and I think the next  
2 presentation actually speaks to that, and so I think that will  
3 alleviate some of your concerns. Great segue, Kevin. The next  
4 presentation, if there are no other comments or questions for  
5 Dr. Gallaway, and I don't see any hands up, will be alternative  
6 options for consideration, Tab D, Number 7(c), and Dr. Gloeckner  
7 is going to take us through that presentation.  
8

9 **ALTERNATIVE OPTIONS FOR CONSIDERATION**

10  
11 **DR. GLOECKNER:** Hello again. I'm still Dave Gloeckner, and I'm  
12 still the Director of the Fisheries Statistics at the Center.  
13 Just as a refresher, and I think this has been presented before,  
14 but I just wanted to make sure we covered the bases here, and so  
15 the ELB records the location every ten minutes, using GPS, and  
16 so vessels were chosen to carry an ELB in 2014.  
17

18 The data that is collected every ten minutes by GPS is  
19 transmitted when the vessel is in non-roaming cellular range.  
20 Until then, it's stored, until it hits that range. Data are  
21 received, stored, and transmitted at this point, or at least it  
22 had been, to Galveston, and, once there, that gave us the  
23 ability to analyze that data and conduct assessments and  
24 analyses to support NMFS needs.  
25

26 The key characteristics of this cELB is it's a cellular-based  
27 system designed to monitor location and movement of vessels and  
28 send GPS system position reports to NMFS for an authorized  
29 entity.  
30

31 Now we can see where this is going, and so a couple of relevant  
32 definitions. In the federal regs, and under the CFRs, vessel  
33 monitoring system means a satellite or cellular-based system  
34 designed to monitor location and movement of vessels, using  
35 onboard VMS units, and it sends in GPS position reports to an  
36 authorized entity, which I think we can see the cELB does.  
37

38 There is also this other enhanced mobile transceiver unit,  
39 cellular based, and so an enhanced mobile transceiver unit is  
40 basically a VMS system that transmits and receives data, but  
41 that "C" indicates that it can do this via a cellular  
42 communication, except that it may not need a dedicated message  
43 terminal and display component at the time of approval, and so  
44 you may not need a VMS unit with a data-entry tablet attached to  
45 it.  
46

47 EMTU-C, the cellular-based unit, only needs to be capable of  
48 transmission and reception when in range of a cell network, and

1 so not continually, and only when you're in cell range, and the  
2 one-way transmission VMS units are no longer approved for new  
3 installations on VMS vessels. We see that we've got two  
4 definitions here that kind of define the cELB units that  
5 currently are deployed.

6  
7 We've got some units that are already approved in commercial  
8 fisheries, and South Atlantic rock shrimp has several, as well  
9 as Gulf finfish and some of the GARFO fisheries, West Coast,  
10 Alaska, Pacific Islands, and Atlantic HMS, and so any unit  
11 that's approved through the VMS approval process could most  
12 likely be approved in this fishery, if it's decided to go that  
13 route.

14  
15 We also have those units that were recently approved in the for-  
16 hire fisheries, and so, for Gulf for-hire VMS, we've got Nautic  
17 Alert, Omnicon, and VMS plus forms, so you can actually do a  
18 logbook, including catch and gears used and that type of thing,  
19 recorded on the Gulf for-hire VMS and forms, and so it's one  
20 unit. There are several of those that are available. Now,  
21 since we're only talking about collecting GPS location, you may  
22 not want to include those that also have forms, if it's an  
23 additional cost, and so that's something to be decided, I think,  
24 by the user and whether or not they want that capability or not.

25  
26 If we go on to the next one, this has a few prices. If we want  
27 to stick with the cellular, because it does tend to keep down  
28 the cost, the Faria FB was just approved, and it's around  
29 \$2,000, twenty-bucks a month, and then the Woods Hole Group NEMO  
30 is still undergoing approval, but it's considerably cheaper, at  
31 500-bucks for the unit, and about \$350 a year for the  
32 transmission costs.

33  
34 Now, the other units on here are satellite, and the transmission  
35 costs are maybe a little bit more, because it's satellite, but  
36 keep in mind that all the hardware is going to be probably  
37 reimbursable, and so there will be a reimbursement process, and  
38 we have talked with Headquarters about this, and it does seem  
39 like that is something that we've got the funds to accommodate.

40  
41 When we talk about type approval, we're talking about  
42 communications security, meaning that it's secure from tampering  
43 or interception, and it's transmitted by a secure means, and it  
44 prevents interceptions, spoofing, or viewing by unauthorized  
45 individuals. You also have to have field and technical services  
46 that are available 24/7.

47  
48 The unit durability and reliability, the unit, cabling, and the

1 antenna must be resistant to salt, moisture, and shock  
2 associated with sea-going vessels, and then protection of PII,  
3 and so the type approval holder is responsible for ensuring that  
4 PII and other protected information is handled in accordance  
5 with applicable state and federal law, and so there are some  
6 hefty requirements that go along with this.

7  
8 The reimbursement process, and so, once you purchase, install,  
9 and activate a type-approved VMS unit, you would contact the  
10 Office of Law Enforcement VMS Help Desk and initiate the  
11 confirmation process and obtain a four-digit confirmation number  
12 for reimbursement. You would complete and sign the VMS  
13 reimbursement request form and send that on its way, along with  
14 the federal permit and the vessel's registration, to the Pacific  
15 States Marine Fisheries Commission, and, if memory serves, I  
16 think I've seen estimates of thirty days to a month to have that  
17 happen and get the reimbursement.

18  
19 In conclusion, there are a lot of options out there to achieve  
20 the goal of providing this effort data. The agency prefers to  
21 write specifications for type approval, rather than require  
22 specific vendors, and I think that affords us the most  
23 flexibility, given the quick turnaround in technology that we  
24 see over time.

25  
26 Any option needs to meet type approval. The purchase, but not  
27 necessarily the installation, is often reimbursable, and there  
28 are some interesting developments on the horizon, with some  
29 projects that we've got ongoing that will attempt to put  
30 location devices on inshore shrimp vessels, and that would help  
31 us with our effort monitoring for the whole fleet, and so that  
32 would give us some more muscle in our analyses. I think that  
33 might be it.

34  
35 **CHAIRMAN BOSARGE:** Thank you, Dr. Gloeckner. Are there  
36 questions for feedback for Dr. Gloeckner from the committee or  
37 from others? Kevin, do you have your hand up, or no?

38  
39 **MR. ANSON:** I do not.

40  
41 **CHAIRMAN BOSARGE:** Okay. All right. I will give it just a  
42 second. Dave, let's hone-in on what we have available for the  
43 shrimp fleet. Can you go back to the slide that says possible  
44 options for quick type approval, and it has all those costs and  
45 the monthly fees associated with them? Now, I don't know about  
46 anybody else, but it's really small on my screen. While they're  
47 getting that up, I see Tom Frazer's hand is up.

48

1 **DR. FRAZER:** Dave, I just wanted to clarify that the hardware,  
2 and we have close to a thousand, rounding, number of vessels,  
3 and you have instrumentation, or hardware, estimates that are on  
4 the order of thousands, and so that equates to millions of  
5 dollars that are reimbursable, and the agency has the dollars to  
6 do that?

7

8 **DR. GLOECKNER:** That's what I'm told.

9

10 **DR. FRAZER:** Thank you.

11

12 **CHAIRMAN BOSARGE:** Thank you, Dr. Frazer. A couple of  
13 subtleties here in this table, and, yes, there is dollars in  
14 there, and so that jumps out at us, and there are some hefty  
15 costs of some of those units to buy them, and then, for the ones  
16 that are satellite-based, which are your true VMS, which that's  
17 the part that's reimbursable, in my understanding, and you have  
18 to get one of those satellite-based VMS.

19

20 They have a fairly hefty monthly fee with them, because it is  
21 pinging, and it's transmitting via satellite, and so, where we  
22 were paying \$17 to \$19 a month for our old service, for the  
23 electronic logbooks that the shrimp fleet has now, you're  
24 looking at -- When you look at these monthly costs, some of  
25 these monthly costs are \$150 to \$300 a month, and that's because  
26 it's satellite-based.

27

28 Even the cheaper ones that are satellite based, I see a \$100 to  
29 \$200 a month, and the bigger issue though, besides the cost, and  
30 you will see this borne out in the AP summary, is the fact that,  
31 right now, we have something that operates in the background,  
32 and we don't have to tell it to start capturing data or not.  
33 When that vessel is moving, it's capturing our data. As long as  
34 that vessel has power, it is capturing our data.

35

36 It captures it and, when it comes within a cellphone signal, it  
37 uploads it, and so it's fairly timely, but it is not real-time  
38 data. The reef fish guys, your snapper fishermen and people  
39 like that, that have a quota and in-season monitoring and all  
40 sorts of restrictions, they have real-time monitoring. They  
41 have a VMS, and that satellite pings to law enforcement, once an  
42 hour, and law enforcement can see where they're at.

43

44 Now, they're not using that VMS ping to collect effort data for  
45 them, and they're using it to validate when they're fishing and  
46 not fishing, and it can validate effort data, but it is not the  
47 source of their effort data, and so it's a real-time aspect that  
48 is the real delineation between those two columns, satellite

1 versus cellular, and, if you will remember, the last time we had  
2 discussions about implementing and requiring a VMS system, it  
3 was for the for-hire fleet, and, even for a fishery that has in-  
4 season monitoring and quotas, we chose not to require them to  
5 have a VMS.

6  
7 We gave them an option that was an archived GPS cellular option,  
8 and so I just want to make that distinction, because there was  
9 reservation from the Shrimp AP about going to any type of  
10 platform that was real-time reporting. There is just no purpose  
11 and need in our fleet for that level of reporting, and I see  
12 Andy has his hand up.

13  
14 **MR. STRELCHECK:** Thanks, Leann. From my standpoint, everything  
15 you just stated is well within the council's purview to decide.  
16 Certainly I appreciate everything you just said, and there isn't  
17 a need for satellite VMS devices, based on what you just stated,  
18 but I think the path the council needs to go down, at this  
19 point, is developing a framework action and explicitly laying  
20 out what the new reporting requirements are going to be for the  
21 shrimp industry, and, when I say reporting requirements, I think  
22 there's really only a couple of decision points that we might  
23 need to consider.

24  
25 One is the kind of type of NMFS-approved device that would be  
26 used, and it's not the specific device, but it's the cellular-  
27 based archival GPS device or satellite, which, obviously, isn't  
28 the preferred, and then, also, I think some decision points  
29 around the number of vessels and industry members that that  
30 requirement would apply to.

31  
32 Certainly I would look to Mara or Peter, or others, if they have  
33 other suggestions, in terms of what could be contained in this  
34 framework action, but I think it's pretty barebones, and what we  
35 would want to do is make sure that the authority that the  
36 council provides for these cellular-based devices is open to as  
37 many vendors that can qualify under the type-approval process,  
38 and then it's up to the shrimp industry members to, obviously,  
39 determine which devices are better for them, and that's why I  
40 made the comments about P-Sea WindPlot earlier.

41  
42 By getting Benny and others to work with our VMS program, the  
43 hope is that that would be a certified technology that could be  
44 approved, and, if that's their preference to use that, they  
45 could choose to use that. If they choose to use some other  
46 device, they could use some other device besides that. I think  
47 that's where the decision is before us, is to kind of how to  
48 move forward with a fairly simple, streamlined framework action.

1  
2 **CHAIRMAN BOSARGE:** All right. Thank you, Andy. Do we have any  
3 other questions or comments from the committee or the council in  
4 general?  
5  
6 **MR. DIAZ:** Leann, I've got my hand up, but it's not showing up  
7 yet.  
8  
9 **CHAIRMAN BOSARGE:** That's all right. Go ahead, Dale.  
10  
11 **MR. DIAZ:** Just a comment to Andy's point. I don't necessarily  
12 disagree with Andy that we need to do a framework action, but  
13 I'm just trying to think of the timeline. It looks like we've  
14 got something in place that's going to cover us from this year,  
15 but, if we do the framework action, and the turnaround on that -  
16 - I mean, we would be most of the rest of this year getting that  
17 approved, and I think we would be back, about this time next  
18 year, right here where we're at right now today, and so that  
19 would be my concern with what Andy is proposing, and it may be  
20 the way we have to go, but I think we have to at least think  
21 about that. I mean, if we did that, is there an option to do  
22 what we're doing this year again next year?  
23  
24 **CHAIRMAN BOSARGE:** That's probably a question for Andy or for  
25 Dave. It's my understanding -- I don't see their hands going  
26 up. Okay. So it's my understanding that there seems to be a  
27 good bit of excess memory capacity on these chips, and so it  
28 really is a question of how this process goes in getting the  
29 chip out that's in the machine and getting the fishermen to put  
30 a new chip back in it, so that it has something to continue to  
31 recording to. The question is how that process goes, Dale, and  
32 I think the opportunity is there, though. Dave or Andy, do  
33 either one of you, or Clay, want to speak to that?  
34  
35 **DR. GLOECKNER:** I think, the way the system is set up, and the  
36 large amount of memory these chips have, it will allow us to --  
37 If we can't get this done this year, it will allow us, probably,  
38 to carry into next year.  
39  
40 My concern is any new process that we introduce to data  
41 collection will have some glitches, and it's a matter of how  
42 long we allow those things to go on, because it could impact the  
43 quality of the data that we're using, and I would be more  
44 comfortable with getting a data collection process with less  
45 human intervention in it, to try to minimize some of the errors  
46 that occur when people have to start replacing chips and not  
47 putting chips in right, or putting the used chip back in and  
48 sending us a blank chip, and there are all those things that can

1 happen, and I would like to get a point, as quickly as we can,  
2 where we have defined the requirements for the data collection  
3 and have vendors available to use. I think that's where I'll  
4 stop with that, but I think we can get by for a while, if need  
5 be.

6  
7 **CHAIRMAN BOSARGE:** Thanks, Dave. I think that you and I are on  
8 the same page. I see Mara's hand up.

9  
10 **MS. MARA LEVY:** Thank you. Just to Dale's point, there is no  
11 other option. Meaning, the council needs to do something,  
12 because we're going to be changing the reporting requirements,  
13 because what's there now is not working the way it was intended,  
14 and so, the sooner you start, the sooner it gets implemented.  
15 Not doing anything isn't going to lead to any change.

16  
17 **CHAIRMAN BOSARGE:** Matt, do you have those reporting  
18 requirements, the codified text, what is required of us right  
19 now, handy, because I guess that's where I start getting  
20 confused, when we start talking about what we need to put in a  
21 document. If you could pull that up, the recordkeeping and  
22 reporting, and I think that would be helpful to look at that,  
23 because, if we are going to start a document, we're going to  
24 need a motion, and I think that will help us understand what  
25 we're looking at putting in this document.

26  
27 **DR. FREEMAN:** Ms. Bosarge, the admin staff are pulling that link  
28 up now.

29  
30 **MS. LEVY:** Leann, can I say one other thing, as they're pulling  
31 it up?

32  
33 **CHAIRMAN BOSARGE:** Sure.

34  
35 **MS. LEVY:** As I think I've mentioned before, what's in the  
36 regulations is relevant, but, also, there are things that are  
37 not in the regulations that are still applicable, though. Like  
38 the cost sharing is not in the regulations, and things like  
39 that, and so, in addition to the regulations, there is what was  
40 established in Amendment 13 and what was established in that  
41 most recent abbreviated framework action that did the cost  
42 sharing.

43  
44 **CHAIRMAN BOSARGE:** Thanks, Mara. All right. Staff is getting  
45 that pulled up for us, and I will see if I can take us through  
46 it. It's small on my screen, and so I'm going to read you the  
47 pertinent part.

48

1 Recordkeeping and reporting, electronic logbook reporting, and  
2 so the regulation, as it reads now, says the owner or operator  
3 of a vessel for which a federal commercial vessel permit for  
4 Gulf shrimp has been issued, and who is selected by the SRD,  
5 which is the Southeast Regional Director, must participate in  
6 the NMFS-sponsored electronic logbook reporting program, as  
7 directed by the SRD.

8  
9 In addition, such owner or operator must provide information  
10 regarding the size and number of shrimp trawls deployed and the  
11 type of bycatch reduction device and turtle excluder device  
12 used, as directed by the SRD, and compliance with these  
13 reporting requirements of this paragraph is required for permit  
14 renewal.

15  
16 That is the paragraph that speaks to the regulation on the books  
17 for electronic logbooks for the shrimp fleet right now, and so  
18 it doesn't specify, at this point, the type of device that we  
19 have to use. The old program was cellular, and it does not  
20 specify and say who is going to be selected, and it just says  
21 who is being selected by the SRD, and so I guess that's what I  
22 am trying to figure.

23  
24 This essentially covers what we have now, and it sounds like  
25 what we're going through, and so I can see where we definitely  
26 need something in this framework document that addresses cost  
27 sharing, because we're changing platforms, and you would need to  
28 go through not only the costs of possibly that P-Sea WindPlot  
29 program, but the cellular device that you currently have in  
30 testing that is not approved yet, and you're trying to see if it  
31 will work, and maybe the costs for that.

32  
33 I don't see where you have to specify cellular or VMS or other,  
34 and that's where I'm confused. We do an amendment to create  
35 regulations, and this regulation is on the book, and, right now,  
36 it does not prevent cellular or satellite or anything else, and  
37 so help me out, Andy. What else needs to be in the document  
38 besides cost-sharing, given that this is the regulation on the  
39 books?

40  
41 **MR. STRELCHECK:** Thanks, Leann. Certainly we can look to Mara  
42 as well, because I think the distinction here is kind of the  
43 statement "NMFS-sponsored", and so we were developing and  
44 providing the equipment, previously, and we are proposing to  
45 shift that model, obviously, to a type-approved device that can  
46 be selected by the industry, based on our current existing VMS  
47 standards, assuming that's the way the council goes. To me,  
48 that is a departure, or difference, from the existing program.

1  
2 In terms of the reporting requirements themselves, I would agree  
3 that I don't think there's a lot of details that we need to  
4 provide here, and a lot of what we're wanting to collect, with  
5 regard to effort, simply would be collected in those ten-minute  
6 ping intervals through the VMS device.

7  
8 The other, I guess, decision point, which is kind of reflected  
9 here, is does the council want to consider expanding or changing  
10 the requirements with regard to the selection process and who  
11 actually is required to report, or not to report, and, beyond  
12 that, I don't see a lot of different decision points, and I  
13 guess it gets back to Dale's comment, real quick.

14  
15 Yes, I certainly am concerned as well, Dale, in terms of us  
16 taking an extended period of time to work through a framework  
17 action. As Mara indicated, I think it's a necessary  
18 requirement, but certainly I would ask the council, working with  
19 council staff and NMFS staff, if this is a top priority for you,  
20 what do we want to prioritize, or de-prioritize, maybe, in order  
21 to make this completed more quickly during the 2021 year, and so  
22 keep that in mind as well, because I think we have some  
23 flexibility with regard to how we prioritize actions that we're  
24 working on.

25  
26 **CHAIRMAN BOSARGE:** All right. To move forward, it sounds like  
27 we need, at a minimum, a cost-sharing document, and it sounds  
28 like Andy has laid out maybe one or two other decision points  
29 that he thinks might should be included in the document.

30  
31 I will say this, Andy. If we are going to have a decision point  
32 in this document that spells out the type of device, i.e.,  
33 either cellular or VMS real-time satellite, I would kind of put  
34 it out there that I don't think that the VMS satellite-type  
35 device fits the purpose and need. However, if the intent is to  
36 put that in there, then I would like that action item to go  
37 through the ways in which the effort data can be collected from  
38 the shrimp fleet, so that, when you go through that, then your  
39 reasonable range of alternatives is from VMS and then down a  
40 step to a cellular electronic logbook, and then down a step from  
41 that would be the way that effort data is collected for the  
42 other Southeast penaeid shrimp fleet, which is through trip  
43 tickets.

44  
45 That really kind of puts out there that we are a step above here  
46 in the Gulf, and I don't intend to go to a trip-ticket system,  
47 but I think it needs to be laid out, because that is an  
48 alternative for collection of effort data in shrimp fleets in

1 the southeast, and so, if you're going to have that in the  
2 document, I would like that as an option as well.

3  
4 Then the other action item, Andy, that we haven't talked too  
5 much about, if we are going to go through this document  
6 framework process, is the fact -- The one big thing, to me,  
7 that's changing, as we move forward with our electronic logbook  
8 program, is our data has always been submitted to the Science  
9 Center.

10  
11 It is scientific data, effort data, and it is submitted directly  
12 to the Science Center at NMFS. However, this new program that  
13 NMFS is laying submits our data, our scientific data, to law  
14 enforcement, and then the Science Center has to get it from law  
15 enforcement, and so I think that needs to be addressed in the  
16 document, where this data goes and how it's used, that path,  
17 because we've got to find a way for our scientific data to  
18 continue to go directly to the Science Center, and so those are  
19 my comments on the document that we need to start, and I'm going  
20 to go to Mara, but, eventually, we're going to need a motion,  
21 sooner rather than later, from the committee on how to move  
22 forward. Mara.

23  
24 **MS. LEVY:** Thanks, and, I mean, I think that what would be  
25 helpful is for the committee and the council to make a motion to  
26 allow staff to start developing a document and clearly take into  
27 account what you're talking about, but I have found, throughout  
28 the years, that things come up that are unanticipated that you  
29 don't really know are an issue, or might need to be changed,  
30 until you get into the process.

31  
32 An IPT can certainly look at the current requirements and where  
33 the council is looking at going and put together actions and  
34 alternatives that seem appropriate for you to look at, and then  
35 you can always add or take away or whatever with those, but it's  
36 sort of hard to do it in a vacuum.

37  
38 **CHAIRMAN BOSARGE:** Thanks, Mara, and I think your outlook on it  
39 is just a little different than my perspective. Me, as an  
40 industry perspective, we have a very important data collection  
41 program for effort that is only halfway viable at this point,  
42 and we need to replace it with a new platform that does the same  
43 thing, right? This is not, oh, we want to expand everything and  
44 make it even better and more robust.

45  
46 We're in a pinch, and we simply want to take what we had and  
47 make it function again, like at 100 percent, like it used to,  
48 and I think the way you're looking at it is, well, we have a

1 data collection program that we're looking at making changes to,  
2 and so what are all the changes that we might want to make, as  
3 opposed to just continuing the system as it was, but on a  
4 different platform.

5  
6 You're thinking of it more, well, okay, do we want to go to a  
7 census-level of the fleet, and to make it where everyone  
8 reports, or do we want to change from cellular options to  
9 satellite VMS options, just a whole host of changes, and, me,  
10 I'm looking for simply keeping going what we had going, and so I  
11 think that's the difference in how we're looking at it. All  
12 right, and so we need a --

13  
14 **MS. LEVY:** To that point, Leann, quickly?

15  
16 **CHAIRMAN BOSARGE:** Sure. Go ahead, Mara.

17  
18 **MS. LEVY:** I certainly -- I do not think you need to necessarily  
19 consider satellite VMS. I mean, I think the council can  
20 certainly say that they're looking at shrimp vessels needing a  
21 type-approved cellular VMS, and I'm not coming at it from that  
22 you should like open every aspect to it, but the issue is it is  
23 changing, meaning there is no more NMFS-sponsored device.

24  
25 People are not just going to get one device and it's a go,  
26 because it is switching, and so, when you're switching, there  
27 are certainly things that you are going to need to look at,  
28 because it's not going to be the same program, because that's  
29 just not available at this time, and so I guess that's my point.  
30 Thank you.

31  
32 **CHAIRMAN BOSARGE:** Thanks, Mara. I see Dr. Porch's hand is up.

33  
34 **DR. PORCH:** Thank you. I didn't think you had seen it, but Mara  
35 made my point. We're not requiring, specifically, satellite.  
36 Either cellular or satellite would do, and so I think it's just  
37 fair to say that there's a number of options on the table. We  
38 just want to get -- Well, it's important to get the electronic  
39 transmission, and I think also important to have a system set up  
40 so that someone can't just turn off the unit and fish  
41 undetected. Thank you.

42  
43 **CHAIRMAN BOSARGE:** Thank you, Clay. We have Dale.

44  
45 **MR. DIAZ:** Leann, I would like to make a motion. It's very  
46 simple. If you want to help, feel free to jump in. **My motion**  
47 **would be to have staff start a framework document to set up**  
48 **reporting requirements for the Gulf of Mexico shrimp fishery,**

1 **federal shrimp fishery.**  
2  
3 **CHAIRMAN BOSARGE:** Thank you, Dale, and so, Dale, is your  
4 intention -- That's pretty open, and this is to replace the  
5 expiring 3G cELB program?  
6  
7 **MR. DIAZ:** That is my intention, and feel free to help wordsmith  
8 it. I am very open to changes.  
9  
10 **CHAIRMAN BOSARGE:** Okay. **Maybe to set up reporting requirements**  
11 **for the expiring 3G cELB program to transition it to a new**  
12 **platform for the Gulf of Mexico shrimp fishery.** What do you  
13 think about that, Dale?  
14  
15 **MR. DIAZ:** Thank you for your help, and I'm agreeable to that.  
16 We need a second.  
17  
18 **CHAIRMAN BOSARGE:** Yes. **The program to transition it to a new**  
19 **platform for effort reporting of the Gulf of Mexico federal**  
20 **shrimp fleet.** I think that will probably get it. All right.  
21 Dale, what do you think about that?  
22  
23 **MR. DIAZ:** I agree.  
24  
25 **CHAIRMAN BOSARGE:** All right. I will second your motion, Dale.  
26 How about that? Any feedback from the rest of the group on this  
27 motion? I don't see any hands up. Chime in if you have  
28 feedback. Carrie and Mara, does this give you what you need to  
29 proceed?  
30  
31 **EXECUTIVE DIRECTOR CARRIE SIMMONS:** Yes, Madam Chair, and we'll  
32 also include consideration of the P-Sea WindPlot, as we were  
33 directed at a previous council meeting, I believe the November  
34 council meeting.  
35  
36 **CHAIRMAN BOSARGE:** Thank you, and I believe the AP also passed a  
37 motion to that effect as well, which Matt will bring us through  
38 in a little bit of time here. Dave Gloeckner, you have your  
39 hand up?  
40  
41 **DR. GLOECKNER:** I just have a little concern of continuing to  
42 reference the 3G cELB program in the framework action. We're  
43 just basically setting up requirements for a data collection  
44 program that collects GPS position, right? Shouldn't we just go  
45 ahead and state that?  
46  
47 **CHAIRMAN BOSARGE:** Well, I think that's what we did. To  
48 transition it to a -- I think that's what the second-half of the

1 sentence says, is to transition it to a new platform for effort  
2 reporting of the Gulf of Mexico federal shrimp fishery, and so I  
3 think we captured that when we put that effort reporting in  
4 there for you.

5

6 **DR. GLOECKNER:** Okay. All right.

7

8 **CHAIRMAN BOSARGE:** Okay. All right. Thanks though. All right.  
9 Is there any other discussion on the motion? **Seeing none, is**  
10 **there any opposition to the motion? Hearing no opposition, the**  
11 **motion carries.**

12

13 I think -- Is there anything else on this -- Yes, we do. We  
14 have our -- Matt, let me turn it back over to you. You've got  
15 one more thing to take us through here, right?

16

17 **DR. FREEMAN:** Yes, ma'am. It's fine with you, I was just going  
18 to review, very briefly, a few of the AP comments, and then they  
19 had made three motions under this agenda item during the AP  
20 meeting. Is that okay with you, Ms. Bosarge?

21

22 **CHAIRMAN BOSARGE:** Yes, sir. Go ahead.

23

#### 24 **SUMMARY OF THE SHRIMP ADVISORY PANEL MEETING**

25

26 **DR. FREEMAN:** Just to reiterate some of the comments in the AP  
27 summary, we heard that there will be tremendous cost-saving  
28 opportunities by using P-Sea WindPlot, compared to installation  
29 of new technology, and we had folks confirm that P-Sea WindPlot  
30 is already present on a vast majority of the fleet, and we did  
31 hear some frustration from AP members in terms of the  
32 requirement for two-way communication on devices.

33

34 Three motions were made by the AP, and this is the first one.  
35 The first motion under this agenda item is the Shrimp AP  
36 requested that the council contribute \$350,000 of its unexpended  
37 Fiscal Year 2020 funds for the cost of LGL's proposed Phase 2B  
38 project to develop software that will automatically transmit ELB  
39 data to a designated server. The motion carried unanimously.

40

41 Dr. Simmons did note though that, should the council decide to  
42 pursue this project, it cannot provide sole-source funding to  
43 one entity over \$99,000, and that, instead, it would need to be  
44 a competitive process, with a call for proposals, review, and  
45 selection process.

46

47 The next motion here was requesting that the council write a  
48 letter to NOAA OLE notifying them that the Gulf of Mexico shrimp

1 industry should be exempted from the final rule documenting VMS  
2 requirements published on August 7, 2020, which specified that  
3 the enhanced mobile transceiver unit, cellular-based, be capable  
4 of transmission and reception, two-way, which is an undue and  
5 unnecessary regulatory requirement, since the shrimp industry  
6 only needs one-way transmission of effort data. This motion  
7 also carried unanimously.

8  
9 Following that, there was a request that the council and NMFS  
10 work closely, and in a timely fashion, with LGL to ensure the P-  
11 Sea WindPlot pilot program is compliant with the current NMFS  
12 minimum requirements for data collection and transmission for  
13 the Gulf of Mexico shrimp fishery, and that motion carried  
14 unanimously, and so I will turn it back over to you, Ms.  
15 Bosarge.

16  
17 **CHAIRMAN BOSARGE:** Thank you. I appreciate it. I believe we  
18 also have the chairman of the AP on the line, Mr. Corky Perret,  
19 which many of you know, and I was going to reach out and see if  
20 he had any comments that he wanted to add, as he was the one  
21 chairing that AP meeting. Mr. Perret, are you on the line?

22  
23 **MR. CORKY PERRET:** Thank you very much for allowing the AP to  
24 offer suggestions to the council. AP members are extremely  
25 concerned about the need for good, reliable data, and certainly  
26 they want to do whatever they can to ensure that we have a  
27 continuation of getting this data, as we have been in the past,  
28 and hopefully we can improve the system without adding a whole  
29 lot of undue costs and requirements and burden to NMFS and to  
30 the fishermen.

31  
32 One thing that has already been commented about is the benefits  
33 of this system, and one thing I would add is, with the country  
34 going to green energy, it looks like this data would also be  
35 very useful for possible siting of offshore windfarms.

36  
37 I can compliment the NMFS personnel that were involved with the  
38 Aquaculture Siting Atlas that's due out in August or September  
39 of this year, and they utilized fisheries, or fisheries  
40 information, from various Gulf fisheries, shrimp and snapper and  
41 so on and so forth, and they incorporated that in these atlases  
42 that are coming out, and hopefully that would also be used for  
43 any future siting of windfarms and things of that sort, and so  
44 we appreciate the council considering our recommendations.  
45 Thank you.

46  
47 **CHAIRMAN BOSARGE:** Thank you, Mr. Perret. Just to highlight a  
48 couple of things, and then we're going to move on here to our

1 next agenda item, and so the Shrimp AP did pass a motion  
2 requesting that the council use some of those carryover funds to  
3 contribute to the cost of the Phase 2B, the electronic  
4 transmission piece, the P-Sea WindPlot, so that it would  
5 automatically transmit.

6  
7 I assume, in June, the council will be revisiting the list of  
8 projects that we want to possibly spend that money on, and that  
9 project will be on the list, and hopefully we can come to a  
10 conclusion on what research we may fund, even though it will go  
11 out for proposals, what research we would like to fund, and I  
12 hope that will be on the list for consideration in June.

13  
14 Then the other thing is this motion that the AP made where they  
15 requested that the council write a letter to NOAA OLE, notifying  
16 them that the Gulf of Mexico shrimp industry should be exempted  
17 from the final rule documenting the VMS requirements that  
18 published on August 7, 2020, and I think one of the key things  
19 there was this two-way transmission piece that was going to be  
20 required.

21  
22 Andy spoke to that a little bit, and he alleviated some of our  
23 concerns, saying that a hotspot or cellular -- That would -- In  
24 its essence, that is two-way communication, and it can receive  
25 and -- It can send and receive.

26  
27 However, this process still sends our data, our scientific data,  
28 to law enforcement, rather than to the Science Center, and so I  
29 would ask NMFS to continue to look into the exemption for our  
30 fleet or find some other route that will allow our data to  
31 continue to be transmitted as it has been, in the sense that it  
32 was being transmitted to the Science Center and not to NOAA OLE,  
33 and then the Science Center has to get it from law enforcement.  
34 That seems just a little backwards.

35  
36 Then, finally, on that document that we're going to start, and I  
37 voiced this before, but it sounds like we will have an action  
38 item that determines the best mechanism for collecting effort  
39 data from the shrimp fleet, and I do want that to be a full  
40 range of reasonable alternatives, starting with trip tickets and  
41 then going all the way, as NMFS has said, to a VMS real-time  
42 reporting, but it needs to have that full range.

43  
44 That would be my only comments there, and we're going to move on  
45 now, if there are no other comments, which I don't see any  
46 hands. Matt, why don't you take us to our next agenda item on  
47 the Texas closure, please?

48

1 **BIOLOGICAL REVIEW OF THE TEXAS CLOSURE**

2  
3 **DR. FREEMAN:** The next agenda item would be the biological  
4 review of the Texas closure. The committee will be presented  
5 with the analysis of the Texas closure. The Shrimp AP  
6 recommendation will then be presented to the committee, and the  
7 committee is requested to take action and determine if the Texas  
8 closure should continue in 2021.

9  
10 **CHAIRMAN BOSARGE:** All right, Matt, and so we're going to have a  
11 presentation then?

12  
13 **DR. FREEMAN:** Yes, ma'am. Admin staff is pulling open the  
14 presentation for Dr. Masi on the Texas closure.

15  
16 **CHAIRMAN BOSARGE:** Thank you. Dr. Masi, are you on the line and  
17 ready to go?

18  
19 **DR. MICHELLE MASI:** I am. Hello, everyone, and thanks for your  
20 attention today. I am Michelle Masi from the Southeast  
21 Fisheries Science Center, and I am going to walk you through  
22 three presentations today, and so, to get started, I'm going to  
23 walk you through, first, the review of the 2020 Texas closure  
24 analysis.

25  
26 For a bit of history on the Texas closure, the Gulf of Mexico  
27 Fishery Management Council Shrimp Fishery Management Plan was  
28 implemented in 1981 for the EEZ fishery, and the goal of this  
29 was to increase the yield and value of brown shrimp harvested  
30 from offshore Texas waters. Historically, the closure has been  
31 occurring from mid-May to mid-July of each year, and, since  
32 1990, the nearshore has also been closed, in conjunction with  
33 the EEZ closure.

34  
35 On this figure here, I'm showing a bit of history for the  
36 offshore Texas brown shrimp catch for the months of July and  
37 August from 1981 to 2020, and so what you can see, in the  
38 figure, is that there's been an overall decline in the pounds of  
39 tails landed for the month of July, and that's shown by the  
40 orange trend line, and that makes sense, with the timing of the  
41 closure.

42  
43 Then, beginning in about the mid-1990s, there was a noticeable  
44 increase in the landings in August, and that's shown by the blue  
45 trend, and that corresponds with the initiation of the nearshore  
46 closure. In comparison to last year, in 2020, we see an  
47 increase in the pounds of tails landed in both July and August.

1 In this figure, I'm showing the monthly offshore Texas brown  
2 shrimp catch from May to August for this analysis year, 2020.  
3 What I've done here is I have separated out the catch into  
4 market size categories, by month, and the market size categories  
5 are color-coded at the top of the figure, with the largest size  
6 category shown on the left and the smallest on the right.

7  
8 What you can see, in the figure, is that catches are low from  
9 May to July, and that's due to the closure being in place, and  
10 then you see that the catches have ramped up a bit in August,  
11 and that's following the Texas opening.

12  
13 The take-away message here is that the majority of the catch in  
14 August is between the forty-one to fifty and twenty-one to  
15 twenty-five size count category, with very little catch falling  
16 into the smallest size count category of greater than sixty-  
17 seven, and so that suggests the Texas closure is effectively  
18 allowing brown shrimp to reach a larger size.

19  
20 Here is showing the annual percentage of the total Texas shrimp  
21 landings by region between May to August for each year since  
22 1981, and those Texas regions are upper Texas ports, and that's  
23 shown by the black trend line, middle Texas ports, shown by the  
24 orange, and lower Texas is shown in blue, and so, in this  
25 figure, there's been -- You can see there's been a general  
26 upward trend in the percentage of landings in upper Texas and a  
27 declining trend in the lower Texas region, and, also, we see a  
28 decline in 2020 for the upper and lower Texas ports, when  
29 compared to 2019. However, it looks like those 2020 landings  
30 were picked up in the middle Texas region, where there was  
31 actually a 15.5 percent increase in the landings in 2020.

32  
33 This figure is actually a snapshot of Figure 3 from the Texas  
34 closure report, which is provided in the meeting materials  
35 today. Over here, I'm just showing the offshore white shrimp  
36 catch in July of 2020, and, in this figure, the catch is being  
37 separated into those same market size bin categories we saw in  
38 the previous figure, which on this figure are color-coded on the  
39 right-hand side, and, just to remind you, the blue is  
40 representing the largest count size category of less than  
41 fifteen shrimp, all the way to the smallest size count category,  
42 which is greater than sixty-seven.

43  
44 What this figure is showing is that the pounds of tails for  
45 white shrimp in July of 2020 are primarily in the larger count  
46 size categories of fifteen to twenty and twenty-one to twenty-  
47 five.

48

1 This figure is pretty much a replica of the last figure, except  
2 here we're looking at August 2020, and what we see is that, in  
3 August, there is a small shift in the distribution of the shrimp  
4 being caught in the smaller size count category, but that most  
5 of the catch is falling into that fifteen to twenty size count  
6 category, shown by the maroon bar, and so this indicates that  
7 the closure is allowing white shrimp to reach larger sizes  
8 during the closed period.

9  
10 To summarize the Texas fishing trends, for inshore Texas brown  
11 shrimp catch between May and August, it was below the historical  
12 average, with 70 percent of the catch occurring in August. For  
13 the offshore portion of the brown shrimp catch between those  
14 same months, May to August, it was also below the historical  
15 average, but, between July and August, only 1.5 percent of the  
16 catch is in that smallest size count category.

17  
18 Summarizing the Texas shrimp landings by region, for the upper  
19 Texas region, it had the highest percentage of landings compared  
20 to the middle and lower Texas region, and we saw there was a  
21 15.5 percent increase in the proportion of landings in the  
22 middle Texas region relative to last year.

23  
24 To summarize white shrimp landings, in 2020, white shrimp catch  
25 off of Texas in July was above the July average, compared to  
26 previous years, but, for August, it was below the August  
27 average, compared to previous years, and most of the white  
28 shrimp caught off of Texas in July through August was in the  
29 fifteen to twenty size count category, and so, again, this  
30 suggests the Texas closure is doing a good job of allowing white  
31 and brown shrimp to reach larger sizes, increasing both the  
32 yield and the value for these species.

33  
34 The final slide is just a blank screen showing you that I am  
35 concluding this analysis and opening the floor to any questions  
36 or discussion. Thank you.

37  
38 **DR. FREEMAN:** Ms. Bosarge, if there's no hands up, we will need  
39 a motion regarding the Texas closure for this year.

40  
41 **CHAIRMAN BOSARGE:** Thanks. I was just rattling away on mute,  
42 and so thank you, Dr. Freeman. Yes, we will need that motion,  
43 and this is a decision point that we make each year, just to  
44 remind everybody, as to whether or not to continue the annual  
45 closure of federal waters in conjunction with the closure of  
46 state waters of Texas out to 200 nautical miles, and that's in  
47 an effort to allow the shrimp to get to a bigger size, which  
48 creates economic value for the fishery. Do we have any feedback

1 or any motions? Robin. Yay, Texas, talk to us.

2  
3 **MR. ROBIN RIECHERS:** Leann, thank you. I will move that we -- I  
4 apologize, because I'm not going to get the motion worded  
5 exactly right, but I move that we ask the Southeast Fisheries  
6 Science Center, or the Secretary of Commerce, to extend the  
7 closure out to 200 nautical miles, in conjunction with the Texas  
8 shrimp closure.

9  
10 **CHAIRMAN BOSARGE:** All right. That sounds good, Robin, and  
11 they've got some language on the board.

12  
13 **DR. FREEMAN:** Mr. Riechers, just to let you know, admin staff  
14 have put the previous motion you all have passed, if you would  
15 like to use that as a template.

16  
17 **MR. RIECHERS:** That's perfect.

18  
19 **CHAIRMAN BOSARGE:** Beautiful. All right. Robin says he likes  
20 what you have on the board, which is to recommend to NMFS that  
21 federal waters be closed out to 200 miles to run concurrent with  
22 the date that the State of Texas recommends for the 2021 Texas  
23 shrimp closure in the Texas Territorial Sea. Robin okayed that.  
24 Do we have a second for the motion? I will second the motion.

25  
26 We have a motion and a second. Do we have any further  
27 discussion on the motion? I will give it just a second, to see  
28 if any hands pop up there. I think most of the committee is  
29 fairly familiar with this discussion from previous years. All  
30 right. **If there's no discussion on the motion, is there any**  
31 **opposition to the motion? Hearing none, the motion carries.**

32  
33 Chairman Frazer, we're about ten minutes over schedule, and we  
34 have a couple more items on the agenda. How would you like us  
35 to proceed?

36  
37 **DR. FRAZER:** Thank you, Leann. I think, originally, I was  
38 planning on perhaps moving these items, but I think they're  
39 perhaps short enough that we can try to work through them, to  
40 make sure that we don't inconvenience Dr. Masi and keep her past  
41 her previous time commitment, and so, if you're all right with  
42 that, let's go ahead and try to knock out Items V and VI on the  
43 agenda.

44  
45 **CHAIRMAN BOSARGE:** No problem. All right. Dr. Freeman, will  
46 you tell us about the action guide for the next item, Gulf  
47 Shrimp Fishery Effort and Landings?

1                                   **GULF SHRIMP FISHERY EFFORT AND LANDINGS**

2  
3 **DR. FREEMAN:** Yes, ma'am. Here, the committee will be presented  
4 with the 2019 Gulf shrimp fishery effort and landings. The  
5 information from 2019 will also be presented on the percent  
6 effort reduction of the Gulf shrimp fishery in the area  
7 monitored for juvenile red snapper. The committee should  
8 consider the presentation and ask questions. This information  
9 does not require any formal committee action.

10  
11 **CHAIRMAN BOSARGE:** All right. Thank you. Staff will get that  
12 presentation pulled up. Dr. Masi, I assume you're still on the  
13 line.

14  
15 **DR. MASI:** I'm here.

16  
17 **CHAIRMAN BOSARGE:** All right. See if you can help us make up  
18 for lost time, once they get your presentation up there.

19  
20 **DR. MASI:** No problem. I will talk extra quick. Now we'll  
21 review the 2019 Gulf of Mexico shrimp effort estimates, and so,  
22 as Dr. Gloeckner showed, here's the schematic of how shrimp  
23 effort data was collected historically from the cellular  
24 electronic logbooks, or cELBSs, and, just a brief summary, you  
25 will recall that, as was mentioned previously, the cELBs log the  
26 GPS tracking data on some internal memory chips, and,  
27 historically, that data was then immediately transmitted back to  
28 us at the National Marine Fisheries by a cellular signal, once  
29 the vessel returned to port.

30  
31 Remember the cellular transmission portion of this process is no  
32 longer active, but the cELBs are still reporting the GPS data  
33 onto an internal memory chip, and so, for the purposes of this  
34 presentation, the 2019 effort estimates that I will show today  
35 are based on effort data that was immediately transmitted back  
36 to us at the Center in 2019.

37  
38 This figure is showing the 2019 Gulf shrimp effort distribution  
39 map, based on the cELB data, where the lightest-orange color in  
40 the figure is representing the tow hours, the lowest tow hours  
41 ranging from 0.4 to ten hours fished per square mile, and then  
42 the darkest-orange color on the figure is representing the  
43 highest number of tow hours per square mile.

44  
45 Generally, this figure is illustrating where the major shrimping  
46 areas occurred in 2019, and you can see that much of the inshore  
47 Texas and Louisiana waters had high levels of shrimping effort,  
48 inshore and offshore, with hotspots off of Louisiana and south

1 Texas, and then another hotspot off the Dry Tortugas there. In  
2 general, we do see the same distribution of shrimp effort across  
3 the Gulf in previous years.

4  
5 This slide here is showing the total offshore shrimp landings,  
6 with the blue trend on the left, and on the right is the total  
7 offshore effort, in twenty-four-hour days fished, and just a  
8 note, and you can see here in the bottom there that the total  
9 represents the offshore landings and effort for all the managed  
10 shrimp species combined, and that's brown, pink, white, royal  
11 red, and other shrimp.

12  
13 What you can see, in the landings figure on the left, is that,  
14 in 2019, the landings are at about sixty-five million pounds of  
15 tails, which is the lowest landings value on this time series,  
16 but it also corresponds with the lowest landings we've seen for  
17 this fishery since 1975, and there is a smaller, but still  
18 noticeable, dip in the total effort seen in the figure on the  
19 right, and, also, that is corresponding with the lowest point on  
20 that time series.

21  
22 This figure here shows the total offshore catch per unit effort,  
23 or CPUE, for the shrimp fishery, and so CPUE here is just a  
24 measure of catch over effort, and, in 2019, we see, based on the  
25 trend, that there was a decline in CPUE, but it does seem pretty  
26 consistent with the interannual fluctuations that are seen over  
27 the past fifteen years or so.

28  
29 On this slide, I'm showing the 2019 total shrimp effort and  
30 landings point estimate. The first row there is in relation to  
31 the offshore portion of the fishery, and I did show those two  
32 figures, where here is the point estimate, and so sixty-five  
33 million pounds of tails for the offshore portion, and effort  
34 reached roughly 59,000 twenty-four-hour days fished.

35  
36 Then the middle row there is in relation to the red snapper  
37 bycatch reduction threshold, and just recall that Shrimp  
38 Amendment 18 updated the shrimp effort reduction threshold to a  
39 60 percent reduction from the baseline effort years, and those  
40 are 2001 to 2003. In relation to that target, in 2019, there  
41 was a 76 percent decrease in shrimp fishing effort from the  
42 baseline years, and so the fishery was well exceeding the  
43 reduction required by the mandate.

44  
45 The bottom row there is the total effort, inshore plus offshore,  
46 in 2019, and that was roughly 86,000 twenty-four-hour days  
47 fished, and my last slide is just to acknowledge all the groups  
48 who are supporting these analyses, and also the effort data

1 collection program, and so I open the floor to questions and  
2 comments.

3  
4 **CHAIRMAN BOSARGE:** All right. Any questions for Dr. Masi on her  
5 effort and landings presentation? I don't see any hands up.  
6 Chime in if you have a question. If not, we're going to move  
7 right along to the next item on our agenda, which is the 2019  
8 Royal Red Shrimp Index. Dr. Freeman, if you will take us  
9 through the action guide, and then we're going to let Dr. Masi  
10 jump right in again.

11  
12 **2019 ROYAL RED SHRIMP INDEX**  
13

14 **DR. FREEMAN:** Certainly. Here, the committee will be presented  
15 with the 2019 royal red index relating landings to the ACL. The  
16 committee should, again, consider the presentation and ask  
17 questions. This information does not require any formal  
18 committee action.

19  
20 **CHAIRMAN BOSARGE:** All right. Dr. Masi, the floor is yours when  
21 they get your presentation up.

22  
23 **DR. MASI:** Thank you. This figure is showing the trend in royal  
24 red landings by year since 1994, and recall that the ACL for  
25 royal red was established in 2011, and that's shown there at the  
26 bottom, and so that's 337,000 pounds of tails, and that  
27 corresponds to the year with the highest level of landings on  
28 record for this fishery, which was 1994, and so the first point  
29 in that time series.

30  
31 Since 1994, as you can see by the trend line, the royal red  
32 landings declined from 337,000 pounds of tails to 118,000 pounds  
33 of tails in 2019, but there was a 17,000-pound increase in the  
34 pounds of tails landed in 2019, when we compare that to 2018.  
35 That actually concludes this presentation, and so I will open  
36 the floor to questions or comments.

37  
38 **CHAIRMAN BOSARGE:** Thank you, Dr. Masi. Any questions or  
39 comments for Dr. Masi on the royal red index? I don't see any  
40 hands going up. It did take a downward dive there on that last  
41 year. However, there are a whole host of species that took a  
42 downward dive in 2020, the year that never was, and so I will be  
43 anxious to see what happens in 2021, and my guess is that's very  
44 much driven by economics or the particular boat, or couple of  
45 boats, that decided to or not to fish for those royal reds this  
46 past year, because it's an extremely small fishery, and so I  
47 think that might be some of what you're seeing right there, but  
48 time will tell, and we'll see in 2021.

1  
2 If there's nothing else, that's gotten us a little further down  
3 the agenda. Dr. Frazer, would you like us to do the last agenda  
4 item on the rest of the Shrimp AP summary?  
5

6 **DR. FRAZER:** Yes, I think so. We'll go ahead and do that, and  
7 then we'll take a break for lunch, and then we'll come back at  
8 1:30, and so we'll let Dr. Freeman go ahead and summarize the AP  
9 summary.  
10

11 **CHAIRMAN BOSARGE:** All right. Sounds good. Matt.  
12

13 **REMAINING ITEMS FROM THE SHRIMP ADVISORY PANEL MEETING**  
14

15 **DR. FREEMAN:** We've got four remaining motions that were made by  
16 the AP to cover. One, the committee has already addressed  
17 through a motion, which is that the Shrimp AP made a motion to  
18 request NMFS continue with the Texas federal closure in the  
19 coming year, in conjunction with the Texas state closure in  
20 2021, and that was carried unanimously.  
21

22 The next was that the AP requested, from the Science Center,  
23 information on the years 2000 through current on white, brown,  
24 pink, and royal red species and the number of active, as well as  
25 the valid and renewable, permits in the Gulf of Mexico. That  
26 motion carried unanimously.  
27

28 **CHAIRMAN BOSARGE:** Matt, while that motion is on the board, just  
29 to clarify, what they were wanting there is for -- When they get  
30 the presentation that Dr. Masi just gave us on effort and  
31 landings, they were hoping to see some of that number of  
32 permits, active permits and things like that, included in that  
33 presentation, to give them a little more context and understand  
34 better maybe what's driving some of the trends that they're  
35 seeing, and so it wasn't necessarily for a separate presentation  
36 on permits.  
37

38 **DR. FREEMAN:** Yes, ma'am. They had asked that Dr. Masi begin  
39 incorporating that into her future presentations, and she said  
40 that she would be able to do so.  
41

42 **CHAIRMAN BOSARGE:** Thank you.  
43

44 **DR. FREEMAN:** Certainly. The next motion relates to a  
45 presentation that the AP received on aquaculture opportunity  
46 areas, and this is on page 8. Here, the Shrimp AP requests the  
47 council, in its consultations with the Secretary of Commerce, to  
48 take into consideration the comments submitted by the Southern

1 Shrimp Alliance to the NOAA Office of Aquaculture on December  
2 21, 2020 regarding the request for information on identifying  
3 AOAs in the Gulf of Mexico, and that motion carried unanimously.  
4

5 Then the last motion relates to a presentation that the council  
6 will receive on Wednesday afternoon on conducting a Kemp's  
7 ridley sea turtle stock assessment, and this motion is the  
8 Shrimp AP requests the council to support the conduct of a new  
9 stock assessment of the Kemp's ridley sea turtle population  
10 according to the modeling approach presented to the AP by LGL  
11 and for the council to communicate that support to NOAA. That  
12 motion carried unanimously. As I mentioned, the council will  
13 receive that presentation on Wednesday afternoon, and that  
14 summarizes the motions, Ms. Bosarge.  
15

16 **CHAIRMAN BOSARGE:** Thank you, Dr. Freeman, and so, the  
17 aquaculture area discussion, I guess that will come up at a  
18 future meeting, in Sustainable Fisheries, and if you will make  
19 sure that those comments from the shrimp industry make it into  
20 our briefing book, to keep us on point there, and then, the  
21 presentation we're going to get at Full Council, I look forward  
22 to seeing that, on the possible Kemp's ridley sea turtle  
23 assessment, and I will bring up some more context from the  
24 Shrimp AP there, when we get to that point.  
25

26 Dr. Frazer, I think that finishes us up. There was no other  
27 business added to the agenda when we adopted it. Is there  
28 anything else from the committee at this point? Hearing none,  
29 the committee is adjourned.  
30

31 (Whereupon, the meeting adjourned on April 12, 2021.)  
32  
33

- - -