SOUTH ATLANTIC FISHERY MANAGEMENT COUNCIL

JOINT GOLDEN CRAB AND DEEPWATER SHRIMP ADVISORY PANELS

Daytona Beach Resort
Daytona Beach, FL

April 25-26, 2018

SUMMARY MINUTES

Deepwater Shrimp Advisory Panel Members

Michael Merrifield
Marilyn Solorzano
Nancy Jones
Laurilee Thompson

Golden Crab Advisory Panel Members

Robert Palma
Nuno Almeida
Rim McGurl
Howard Rau Jr.
Theresa Coppa
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Council Members

Charlie Phillips

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Dr. Brian Cheuvront
Dr. Chip Collier
Kimberly Cole

Observers & participants attached.

The Joint Golden Crab and Deepwater Shrimp Advisory Panels of the South Atlantic Fishery Management Council convened in the Daytona Beach Resort, Daytona Beach, Florida, April 25, 2018, and was called to order by Chairman Mike Merrifield.

MR. MERRIFIELD: If we could get seated, we're here for the Joint Golden Crab and Deepwater Shrimp Advisory Panel meeting. The first thing we'll do is go around the table and say your name and where you're from and which panel you're on, and if you want to start, Howard.

MR. RAU: Howard Rau, golden crab fisherman, Fort Lauderdale, Florida.

MR. MCGURL: Timothy McGurl, golden crab fisherman, West Palm Beach.

MR. ULRICH: Glen Ulrich, South Carolina, Golden Crab AP.

MS. THOMPSON: Laurilee Thompson, Dixie Crossroads Seafood Restaurant, Titusville, Florida, Deepwater Shrimp AP.

MS. COPPA: Terri Coppa, golden crab.

MR. ALMEIDA: Nuno Almeida, golden crab commercial fisherman.

MR. PALMA: Robert Palma, golden crab fisherman.

MR. MERRIFIELD: Mike Merrifield, Cape Canaveral Shrimp Company, Deepwater Shrimp AP.

DR. COLLIER: Chip Collier, South Atlantic staff, lead for shrimp and coral.

MS. SOLORZANO: Marilyn Solorzano, commercial fisherman, shrimper.

MS. JONES: Nancy Jones, commercial shrimper, deepwater shrimp.

MR. MERRIFIELD: The next item is to approve the minutes, and there were several different minutes in the briefing book, and I guess the one that we're approving is the last one, and I think for the Deepwater Shrimp, and it was a Joint Shrimp and Deepwater Shrimp AP meeting, correct?

DR. COLLIER: Yes, that's correct. If you guys could just approve that one, it would still have to go to the Shrimp Committee for its final approval, but just as least having you guys as a section approving it and looking at the notes while it's a little fresher in your memory.

MR. MERRIFIELD: Any motion to approve those?

AP MEMBER: **I will make a motion to approve**.

MR. MERRIFIELD: Is there a second? There's not many of us here, and somebody has got to second it. Laurilee, do you want second the approval of the minutes?

MS. THOMPSON: I will second the motion.

MR. MERRIFIELD: Okay. Any discussion on that, on the minutes? The minutes are approved for the Deepwater Shrimp portion. We will do the same thing for the Golden Crab. Is there a motion to approve the minutes from the last Golden Crab AP meeting? Will somebody make a motion?

AP MEMBER: **I will make a motion that we approve the minutes of the last Golden Crab AP meeting.**

MR. MERRIFIELD: Do we have a second?

AP MEMBER: Second.

MR. MERRIFIELD: Any discussions on that, on the minutes? Okay. They're approved.

DR. COLLIER: This next is we're going to allow for public comment at the beginning and end of each of these advisory panel meetings. In addition to providing public comment at the meeting, we also provide an opportunity for people to provide public comment online, and, if you looked up here, I had a little link that was listed, where it's actually a public comment form, and so we're going to have these for not only -- Well, it canceled before the meeting started. I believe it canceled an hour before the meeting started.

It allows the opportunity for the public to comment on anything that you guys are discussing at the AP meeting, and these are also available for the council meetings in general, and so, if you would like to comment, you can do it through an online form. Then there is a report that's listed, and I checked before we got started, and there were no entries found, and so, right now, there's no online public comment, and now we can ask to see if anybody in the crowd would like to provide comment.

Seeing none, the next item on the agenda is to go over updates to recently submitted or under development amendments, and we have been pretty busy lately. This is a seven-page document that just has short excerpts from each of the fishery management plans or amendments that we're working on right now. They're organized by fishery management plan. If you have any questions and details, you can get with me, or I can direct you to the appropriate person that's working on the amendment, and I don't have all the information, but I would be glad to help you in any way I can.

We had a mutton snapper amendment that was recently approved, and it became effective in February of 2018, which was changing the size limit and changing the commercial trip limit and establishing a spawning season, a reduction in the commercial trip limit during the spawning season.

Red snapper, Amendment 43 was looking at establishing an annual catch limit for red snapper, and that is under review by the National Marine Fisheries Service. Red grouper, there was an adjustment to the ACL, and this is an abbreviated framework. The new ACL is coming from the stock assessment, or it is based on the new stock assessment for red grouper, and we're looking at a reduction in the ACL for that species, and it's mainly due to the reduced productivity of the stock.

We have two visioning amendments that they're working on in the snapper grouper fishery, and one is for recreational management measures. This has a variety of actions in it. One of the big things is it's looking to modify the aggregates for the recreational fishery to better represent how the fishery is currently prosecuted, and, from there, there is different management measures for these different aggregates, whether it's a deepwater species, shallow-water species, or grouper species.

Then there is a commercial visioning amendment, where they're going to be establishing different items for commercial fishermen, and these were recommended during the visioning meetings that we had. You can see the list of them, and they're for deepwater species as well as amberjack, greater amberjack, red porgy, and vermilion snapper.

In Amendment 46, this is considering private recreational permit and reporting for the snapper grouper fishery. We have a for-hire permit moratorium for the charter boat fishery, and that's under development. Then best fishing practices and powerhead regulations are under development, and they're going to be reviewed at the June council meeting, as well as rebuilding for red grouper.

There is a yellowtail accountability measure amendment that's being considered right now under Regulatory Amendment 32, and then we have sea turtle release gear and revisions to the snapper grouper framework, what this is looking at is allowing additional items to be used or added to the sea turtle release gear requirements, and this is not adding new regulations, and it's actually adding more flexibility in which gears would be allowed for sea turtle release gear, and, to make this move more quickly in the future, they have to consider adjusting the snapper grouper framework.

There is a consideration for a commercial trip limit for dolphin under the Dolphin Wahoo Fishery Management Plan, and we're going to be talking about this item for golden crab, shrimp, and coral, which is the access area transit provisions and the golden crab VMS, and there is also some interest in king mackerel annual catch limits and re-designation of boundaries and the mixing zone.

When the last amendment for king mackerel went through, there was, I guess, a slight oversight, and the king mackerel fishermen want the line adjusted to better match how the fishery had been managed before. Atlantic cobia, there is a consideration for removing Atlantic cobia from the South Atlantic -- Removing Atlantic cobia, and so cobia is an interesting species, where it has two different genetically-distinct stocks, and they were working on the definition or defining where the boundary for cobia existed, and there is a zone off of Florida where there is different -- I guess they were calling it a zone of uncertainty, not knowing where the delineation between the two stocks exist, and so they're looking at that. For the Atlantic stock, they are considering transferring management to the Atlantic States Fishery Management Commission. Maybe I was a little confused on that. That might actually be Amendment 31, because that is under development.

Spiny lobster, the amendment that's under development is trying to update the procedure for coordinating with Florida and bully net regulations, and that's Spiny Lobster Amendment 13, and you can see all the information that's there. For generic amendments, we do have a South Atlantic for-hire electronic reporting amendment, and this would require electronic reporting in the charter boat fishery, and that has been submitted to National Marine Fisheries Service, and the National Marine Fisheries Service is currently accepting public comment on that fishery management plan.

They're going to be considering, as an amendment under development, a comprehensive recreational accountability measure amendment addressing some of these issues, revising and essentially allowing more flexibility in managing the recreational fisheries, and I think that's all of them. I know I went through that really quickly, but there is much better details in the document. If you have any questions, please let me know.

MR. MERRIFIELD: The next item on the agenda is to look at the Joint Coral, Golden Crab, and Shrimp, and there's really two amendments here though, right? It's 10 and 11?

DR. COLLIER: It's three amendments, because it has coral in it too, and so it's golden crab, coral, and shrimp. It's 10, 11, and 10.

MR. MERRIFIELD: Okay.

MS. SOLORZANO: Mike, is there any copies of those amendments here for us to review while we're here?

MR. MERRIFIELD: In the briefing book.

MS. SOLORZANO: I didn't get a briefing packet, other than I got an online thing, but I don't have it with me.

MR. MERRIFIELD: Yes, it's online. You can go to the briefing book online, and it had the templates for basically the things that we're going to be talking about in there, the actions that are in there.

MS. SOLORZANO: Are there any more of these? I am old school.

MR. MERRIFIELD: Okay. If you want to go through the overview of that, Chip, we'll get a better understanding of that.

DR. COLLIER: In the overview, it's listed that the council staff will brief the AP on draft options. The council requested that staff begin development on an amendment to address a request from the Golden Crab Advisory Panel for additional access areas in the Northern Zone and from the deepwater shrimp fishermen to revise the eastern edge of the Oculina Bank, expanded in Coral Amendment 8. In addition to those two actions, the council requested that we add two other actions to consider, and one is an option to revise VMS, or to require VMS, on golden crab vessels, and the other is to review transit provision language for shrimp trawlers. As we go through, I have these separated into four actions, and I have some questions at the edge of each of the actions.

MR. MERRIFIELD: Are there any discussions first, before we start going through that document and looking at the different actions that are there, or how do you want to proceed, Chip?

DR. COLLIER: It's entirely up to you guys. I can go through the background on why the council is considering some of these and where we came up with some of the ideas, and then you guys can provide us feedback.

MR. MERRIFIELD: Okay. Let's do that then.

DR. COLLIER: Okay, and so we're starting off with the purpose and need for this. As you can see, the purpose for the action is it's the previous description of the action prior to the council's recommendation. We're going to wordsmith the language to include those new options, but, currently, it's listed as the purpose of Coral Amendment 10 and Shrimp Amendment 11 is to modify access areas for the golden crab and rock shrimp fisheries while maintaining protection of deepwater coral.

Then the need for Coral Amendment 10 and Shrimp Amendment 11 is to increase access in the golden crab fishery and better achieve optimum yield and modify access in the rock shrimp fishery and provide protection of essential fish habitat and coral.

Some of the background begins describing the importance of the coral habitat areas of particular concern, where they were started and the description of life history of some of the coral and coral reef bioherms, or coral mounds, and then it goes into the golden crab fishery. It's a limited entry fishery, and it typically operates off of Florida, although we do have three zones, the Northern Zone, the Middle Zone, and the Southern Zone.

The golden crab trap fishery cannot be fished in less than 900 feet in the Middle Zone and Southern Zone, and, up in the Northern Zone, it's the 700-foot line. When you see a map of the areas that the golden crab fishery is closed, that zone that's being presented, it's a line based on these depth contours. In addition to the zones that I talked about, there is also a small vessel sub-zone. Within that small vessel sub-zone, the vessels must be less than sixty-five feet and permitted to the fishery in the Southern Zone.

Going into some of the information that we looked at, one of the big documents, or two documents, we looked at was from Betty Wenner and Glen Ulrich from 1987 and 1988, which was a two-year investigation of potential golden crab fishery areas off of Georgia and South Carolina. In the area, they documented that they caught generally higher densities of crab in areas with mud and clay bottom compared to areas with either coral rubble or hard bottom.

This has also been observed in other areas, and there is a paper by Reed et al., I believe in 2016, that described the exact same trend, where you're more likely to catch golden crab on mud bottom than you would in any hard substrate, and that was -- They were doing observations from submersibles.

Then I have -- They also described -- Back then, there was a vessel that was operating called the Heavy Duty II, and it was operating in 1984 and 1985 off of Georgia, and the fishery did not take off, as they described it, due to a lack of capital and a lack of suitable markets, and then a new fishery operation started in 1987, and there have been landings from the South Carolina area since then. I believe there were four years with commercial landings of golden crab. I can't describe how much those landings were, because it is confidential, and it was one vessel, but I can indicate that there were landings.

That was one of the issues that you guys had discussed, and the council had discussed, in the development of these zones and access areas for the golden crab fishery, was they wanted to make sure, historically, that there was a fishery in that area, and that was some of the discussion there. When the council decided not to go forward with an access area in this very northern part, and

what I'm talking about is up here off Georgia and South Carolina, the reason they didn't do that is because they did not have all the great of representation of where the fishery had occurred and where the golden crab might be.

What we did was we took some of the information that was provided, and we mapped it out based on the locations that were in the report, and, here, these gray circles represent actual densities of crab catch in that survey, and you can see, the larger the circle, the more crabs that were caught. The smaller the circle, the fewer crabs that were caught, and so, in general, the highest density of crabs were caught in this area.

There is a black dot that is right here, where my cursor is pointing right now, and that indicates a coral mound that was identified during the study, and so, in a finer look at this area, this is -- In the pink, that's that 700-foot-contour closure line, and so golden crab fishermen can't fish within that, and then, to the right here, you can see this little pink there, and that is the coral habitat area of particular concern, the Miami-Stetson area, and then these blues indicate the probability of coral, based on a model by Kinlan et al. in 2012, and then the black dot represents actual observations of coral listed in the Southeast Deep-Sea Coral Initiative, and that portal is online, and I have it available for you, too.

This is information of where the coral is, and then I added to this all the information that I had from the Wenner and Ulrich study, and what I have represented here is -- The green empty triangles represent areas where there were no -- There were trap sets, but no catches of golden crab, and then the yellow indicate catches of golden crab, and you can see that, in this plot, there is generally more golden crab were caught to more of the central portion of the map than in the northeast portion. There also tended to be a higher probability of coral areas and actual observations of coral in that area.

MR. ULRICH: I should just point out that a lot of those, or some of those, no-catch areas may have been cases where the gear was dragged by the current, and it was moving during most of the soak time, and so whether that means there were crabs there or not is kind of up in the air. Thanks.

DR. COLLIER: Yes, and, if I say anything wrong with this, you know the study much better than I do. In addition to this map that we have, a static map, we also have a tool that was put together for you guys and this incorporates all the information that we have available for rock shrimp and golden crab, and so it's all the different datasets that have been mapped and have been incorporated into different areas, and so we have the mapped areas for the deepwater snapper grouper MPAs, special spawning management zones, and we also have different dives, dive logs, so you can click on certain spots that are in here, and I will zoom in, but I just want to go through some of the information that's included.

We have the Oculina Experimental Closed Area, the Oculina Habitat Area of Particular Concern, we have the shrimp fishery access areas, the golden crab fishery access areas, the deepwater coral, the spawning SMZs, and we have the -- I don't have these turned on right now, but the suitability models for scleractinian coral as well as oculina coral, and the reason those aren't turned on right now is because it's a probability map, and, when there is zero probability, it covers up everything else, and so I will turn those on in a little bit, but the majority of the things that you're seeing right here are the multibeam mosaics that are available, and that provides basically the depth information, and it also gives you some indication of the rugosity of the bottom.

AP MEMBER: Is that available to the public?

DR. COLLIER: This is available to the public. If you go into your document, it's going to be under the rock shrimp map. It's that map right there. If you just click on that link, you can go to this and play with it. I wanted it available for you guys, so that we can talk about potential areas and make sure we're getting the exact area that you guys want, and, also, you guys can see what information is available for that particular habitat.

As we narrow down, based on the information that I had put together, considering the access area in this Northern Zone and thinking that the fishery would want to be operating similar to the area where the Wenner and Ulrich study had indicated golden crab were, you can see where these areas actually line up and where the deepwater MPA is as well as some of the habitat area, and so, as this gets a little messy, let me get rid of some of these areas.

As it gets a little clearer, you can see that there is high rugosity here, which is likely indicating coral habitat, but, if you zoom in too far, it goes away, and so be careful. These are all just represented by yellow dots right now, the areas where golden crab were observed or golden crab traps occurred.

MR. RAU: Do you have bathymetry on this chart?

DR. COLLIER: I just turned on the bathymetry lines. It's not that fine detail, but you can see there is some indications here, and, any depths that are listed, I believe they're listed in meters, and so essentially multiply it by three. We can come back to this map after I go through some of the actions, and we can talk about what we actually want to consider as an access area for this Northern Zone or if you guys want to consider an access area for this Northern Zone.

In addition to the access areas, there was some discussion of requiring VMS for golden crab fishermen, and that was discussed in Golden Crab Amendment 6. That did not go forward, and there were several actions that were listed within the Amendment 6 for the golden crab fishery, and so we just wanted to see if VMS is something that you guys would like to see in the fishery or not.

Going into some of the background for the rock shrimp fishery, as I had mentioned, the expansion of the Oculina CHAPC occurred just recently. In 2015, I believe it became effective, and that was through Coral Amendment 8, and the area was expanded due to the observation of coral mounds in the area.

The Deepwater Shrimp Advisory Panel requested the line move westward, because they had indicated that there was no coral in the area, and they also requested that this area be mapped. There was some mapping done in 2017 to try to address some of these issues, and then we have some historical landings for the rock shrimp fishery, and I had also had a table up there for the golden crab fishery as well.

Let's actually jump back to golden crab for a second. The ACL currently for golden crab is two-million pounds, and, if you look at the landings right now, we haven't approached the two-million-pound limit, and it's been going down in recent years, and so we're not at -- At least according to

this ACL, we are not approaching the ACL, and so we're not actually worried about closing down the fishery due to reaching the ACL. For the commercial rock shrimp landings, I just have 2008 to 2017 provided here, and, over this time period, 2017 was one of the better years. It was the second-best since 2009.

One of the main reasons that we developed that online tool that I had shown you before -- I realize that this image and trying to work on this narrow band in the Oculina Bank is going to be very difficult to visualize in a static map, and having you guys have the ability to zoom in at different levels is going to make it much easier, so we can get on the same page and make sure we're talking about the exact same area.

Then the final thing that we're going to be talking about in this proposed amendment is shrimp trawl transit provisions. In this past year, we had a closure in the EEZ off of Georgia and South Carolina due to cold water temperatures. Those cold water temperatures, that was established a few years ago to close the fishery when the states request the fishery be closed or certain data triggers are met, and some of those data triggers are the abundance of shrimp in fishery-independent trawls as well as if a temperature gets below a certain level. The reason it closed is to protect overwintering white shrimp and to protect the spawn for the following year.

That action, that closure, was triggered this past winter, due to that prolonged cold snap that we had, and there were observations in South Carolina where the temperatures, the ocean temperatures, had dropped below the trigger for greater than seven days as well as the abundance of shrimp in the Georgia trawls was much lower than the average, and I believe, in some of those areas, it was as much as 97 percent below the long-term average, and so it was a significant drop-off of the white shrimp population.

When these transit provisions went in place, National Marine Fisheries Service actually looked in-depth at these transit provisions in those closed areas, and it was realized that some of the fishermen might not actually be able to store their gear according to the regulation. Currently, the regulation reads that you would have to store your net and doors below deck, and some of these vessels can't do that. What we did was actually grab all shrimp transit provisions, and we're considering whether or not we should modify them, and you guys are an excellent group to talk about whether or not we should modify them.

These are the actions and alternatives, and so the first action is adjust the golden crab access area in the Stetson-Miami Coral Habitat Area of Particular Concern, and, with all of these, Alternative 1 is going to be no action, or the status quo, and that means we would just keep what we have right now.

Alternative 2 is create a new allowable golden crab fishing area within the CHAPC boundaries of the Northern Zone. In this figure, I have drawn a potential area that could be considered. Do not consider this a definite area. I am not a fisherman, but I just did it based on the previous positive catches in that golden crab study, and so, if you guys have actual zones that you would like considered, please let me know, and we can begin to develop the options for this. Where we are in this fishery management plan is we are just at the beginning. We are not even to the scoping phase, and so we are in the very early stages.

MR. MERRIFIELD: Do we have any questions or any comments on that?

AP MEMBER: What area is this that we're looking at?

DR. COLLIER: It's going to be this area right in here, and so it's just east of Georgia. This is the Georgia/South Carolina line, and this is the Georgia MPA. Is this the appropriate area that you guys want to consider, or did you want another area?

AP MEMBER: Not seeing depths, it's kind of hard to tell. The charts we have are a little different. Do we know what the depth is there?

DR. COLLIER: Let me see. This is going to be around 1,200 feet right here, and I wish this had better information on it, but --

AP MEMBER: That's too shallow.

DR. COLLIER: That's too shallow?

AP MEMBER: Yes.

MR. MERRIFIELD: Were there specific areas that you guys had discussed for opening up that you had in mind or --

AP MEMBER: The last meeting we had that pertained to the fishing areas, we kind of just asked them to give us as much as we can, or they can, and then we would modify.

MR. MERRIFIELD: So, within a depth range, you were asking just what's available within --

AP MEMBER: How much they can open, instead of just taking everything that they took, and let's mark where the coral is and make smaller boxes around that, rather than closing off such a large area. I believe the Northern Zone was, at one time, the largest fishing zone for golden crab, and it's not like that anymore, obviously.

MR. MERRIFIELD: Chip, is that the only area that has potentially little interaction with coral or, I mean, what are we --

DR. COLLIER: The reason I had focused in on this area was because that was the area we had information for as far as presence of golden crab. Those landings back in the 1980s, we did not have exact information on where the fishery was being prosecuted. I just assumed it was going to be in the same general area, and I see Glen is reaching for the microphone.

MR. ULRICH: As far as I know, the commercial activity that occurred after our study was completed was in the same general area, but, however, we only went down about due east of Brunswick, and that was primarily just from travel constraints from our base in Charleston, and so there's a lot of area still in the Northern Zone that has never been explored, really, from a scientific standpoint, and so there's a lot of area that should be looked at.

AP MEMBER: These historic landings of golden crab, is it golden crab in general or is it allowable males, because you could go in 1,200 feet and potentially get full traps of females.

MR. ULRICH: Actually, our catches were almost exclusively males. We caught very few females in that 1,200 to 1,500-foot strata, and the only time we really got significant numbers of females is when we went out onto the just -- We just kind of ran out onto the Blake Plateau into about 2,500 feet of water and sat out there, and that's where we picked up some females. I don't know how well that -- That was very limited sampling, but, like I said, it was primarily males in the area where we were fishing.

DR. COLLIER: What I'm going to do now is put on the probability or habitat suitability for the corals, and this is a model that was done in 2012, and it looks at the probability of coral. As you get to warmer colors, it's indicating a higher probability, and so red indicates a very high probability of coral. Blue indicates no probability for these species of coral.

This represents -- This online tool has it for the entire area, and you can see exactly where the probability is. Since this tool or this model has been developed, they are continuing to work on this model and come up with a more refined model, but I believe this is something that we would be working with. In addition to that information, we would be looking at the presence of the observations of coral, similar to where these black dots are, and so what those do is indicate the observed coral in that area, and so I would definitely -- No matter what, I would like to get some ideas of what you guys think are a good area for us to consider with this.

AP MEMBER: Like I had mentioned, maybe a more accurate chart with bearings and depth and bathymetries, so that we can have a better idea on what we think would be good fishing grounds rather than just opening up what we really don't need open.

DR. COLLIER: So a nautical chart? Is that what you're -- Which kind of chart would be best?

AP MEMBER: Yes, a nautical chart.

DR. COLLIER: Do you guys mind giving me like five minutes, and I think I might be able to pull that up on this.

MR. MERRIFIELD: Sure.

MR. RAU: When we originally did this, developing the HAPC access areas, we were given a tool by the South Atlantic, and it was the ArcGIS, and we could put it in our computers and we could run -- We could look all through the bottom, and a lot of bathymetry was done through it and the coral areas were placed, and so we were able to draw our boundaries of where we wanted to fish, and that might be a very useful tool, if we could duplicate something like that.

DR. COLLIER: So you would want to be able to draw them on a map like this, similar to this? This is an ArcGIS map that has probably the similar information that was provided to you guys in the past.

MR. RAU: Yes, you would want to be able to draw on it, but you want to have good bathymetry. You would want to have all the coral areas, so you knew where their concerns were. It sounds to me like we're going to need to spend a little more time with the charts and different formats to look at what's the right depth ranges for you and where the least probability of interaction with

coral is going to be and identifying what those areas are going to be. I don't know that there is any one person or if we just as a group need to figure out what that's going to be.

AP MEMBER: Typically, we're in 1,800 to 2,200. In some cases, we could be in as shallow as like 1,700 and as deep as 2,300. If you go and look, it seems like that was the area that the coral seemed to like the best, all the way up the line there, and so, ideally, we would like to -- As golden crab fishermen, we would want to try and get as much allowable fishing grounds between that 1,600 to, in playing it safe here, 1,600 to 2,400 feet, that strip all the way up.

DR. COLLIER: Okay, and the reason I focused on this shallow area was because the study was saying that the male golden crabs were in the shallower water up in that northern zone in comparison to the observations they had of the females, and that's why I focused on that area, but, yes, we can look into this other area.

MR. ULRICH: On one of the bathymetric charts that we used, and not the standard navigational charts, but there is a series of charts that is -- I can't remember all the designations, but they designated that area where we did most of our sampling, or where we caught the best crabs, as the Carolina Sea Channel, and it drops down off of that mud bottom, starting at about 600 feet on our to 1,200, where the golden crab seem to be most abundant, from there out to about 1,500, and then it starts sloping back up onto the edge of the Blake Plateau, and that's hard bottom, and that's where you start really getting into the serious coral mounds, but I can't speak for the rest of that Northern Zone, and so that's something that needs to be looked at.

AP MEMBER: I think we've seen, throughout the years, that the crabs -- I mean, I can remember catching goldens in 700 feet of water, but I think we've seen them move out deeper in later years.

MR. RAU: Roger was the one that put that chart together, and I'm sure they still have it, and it could still be a useful tool.

DR. COLLIER: Yes, I will get that chart from him and provide it to you guys. In the meantime, you guys can look at this one, and we can begin to address some things, and I'll try to figure out exactly which tool he was using to draw with.

AP MEMBER: Can you determine soft and hard bottom, or is it just where the multibeam is, or is it --

DR. COLLIER: Yes, this is all the multibeam that's been available. There are some observations of what's in that area. Like I said, there is some observations of coral in some of these areas, and I can get those added on to this map.

AP MEMBER: You guys are looking for primarily soft bottom?

DR. COLLIER: Yes, and one of the things that we are lacking is a good description of all these bottom habitats in the Blake Plateau. You can see some of these areas are mapped, and these high-rugosity areas are, in all likelihood, either hard bottom or coral bottom, and so those likely would not be ideal candidates, but, if they are candidates, please let me know, because I am not a golden crab fisherman. I'm just coming into this pretty new, and so any recommendations you guys have

to help me get the best areas for you, and then we're going to be taking it to the Golden Crab AP for their consideration as well, and we'll likely have another meeting with you guys afterwards.

MR. MERRIFIELD: Nuno, you would like to look further south of this too, down to where your zone stops?

MR. ALMEIDA: Where we have the box now, and is that what you're talking about?

MR. MERRIFIELD: Yes, where you have the box, and don't you want to look north from that box up to here, and so you would want more?

MR. ALMEIDA: I was just talking to Terri here about that, where -- I don't know if it's possible to refine what they had taken down in the southern part as well.

MS. COPPA: I believe he's talking about the experimental closed area. I have a question about the parameters given to the scientists, and so, according to this study or whatever, on the map, it doesn't seem like there were any dives or anything in that area that we're referring to, on the circle with the Xs, and the -- Let me see if I can describe it better.

The Oculina Experimental Closed Area, if you put that up on the map and not -- I'm sorry, but it's the dives from 2000 to 2004, and if you just put those two up on the map -- There is so many that you have to take off there to be able to clear up the maps for what we're talking about. Pretty much, it's only two -- I only have two things checked on the map, and that is the dives from 2000 to 2004 and the experimental closed area and the Oculina HAPC. Then, when you pull up the maps, and I think you're still in the Carolina area, and I'm down off of Cape Canaveral.

You've still got a lot of cloudy stuff on there. The videos, I'm taking off, and I see. I didn't have the dive logs in there, and so there are some dive logs, and the dive logs are some of the ones that were conducted in that area?

DR. COLLIER: That's correct, and then, if you also click on this, underneath there, there is an option for the deep-sea coral database, and, in there, you will find a lot more of the observations of coral.

MS. COPPA: Okay. I've applied that. What I am still seeing here is, in the experimental closed area, there is a large section just to the inside of the Gulf Stream that I have nothing conducted, and this would be -- Unfortunately, I don't know how to put the longitude and the latitude on here, and so I can't give you some type of reference, other than mine says -- It's just north of Cape Canaveral to the inside of the Gulf Stream, but what am I seeing when you have these very dark-orange spots? What are they? Are they closed? I am trying to just compare the closed areas with the proven dives. I am not really looking at golden crab. We all know how much golden crabs we catch and where we catch them, and so we don't need the golden crab information on there. We're basically more worried over the coral, so we can see it on the map.

DR. COLLIER: Okay, and so the circles right here are going to be dives, and so you can see that it's Station JSL, which means Johnson Sea Link.

MS. COPPA: Where did you get those dives, because I don't have them on my map yet.

DR. COLLIER: Once again, I believe that's coming under -- Let's see. That was the Sea Desk dives, 2000 to 2004.

MS. COPPA: Right. That's what we've got on there now.

DR. COLLIER: It's right at the boundary between the middle zone and the northern zone.

MS. COPPA: Okay. I've got those on here.

DR. COLLIER: Then, if you go north, there's a few more.

MS. COPPA: That's deeper than we want to go, to the best of my knowledge. The main thing we're looking at is just inside the Gulf Stream there, where there is a large strip of possible opening it back up.

DR. COLLIER: So you mean to the west of let's say the boundary between the Middle Zone and the Northern Zone, and is that what you're referring to?

MS. COPPA: I am to the northern section. There we go. Right up in there, where you've got the green.

DR. COLLIER: Okay. There has been some mapping in this area, and it's right on the edge up here that there's been some mapping, and we also had some mapping done in 2017 that included that area, or at least the -- This was going to be the eastern edge of the Oculina boundary, and it's going to be a little bit shallower, much shallower than that 900-foot contour line or the 700-foot contour line that's currently established for the golden crab fishery.

AP MEMBER: Are you looking at that for a golden crab zone, where the cursor is? Is that a depth they want? Don't they want to be out on that bathymetric line? Move it our further. Continue that box. Continue their northern zone and continue that up within those two bathymetries. Is that correct, Nuno?

MR. ALMEIDA: Right. Yes.

DR. COLLIER: So this is the boundary you guys would like us to follow and try to look into using that as the indicator of potential golden crab habitat?

MR. ALMEIDA: Correct.

AP MEMBER: I have a question for Glen. What type of traps were you guys using back in them years when you were doing the experiment?

MR. ULRICH: We used a trap called a fathoms-plus, a nesting trap, and it had two funnels, and it was a plastic trap, and then we also used a -- It was called a Florida lobster trap, and that was also injected-molded plastic with a top funnel on it.

AP MEMBER: The reason why I asked is because we did stumble, years ago, into a bunch of offshore lobster gear, and it must have been there a long time, because it had coral substance on it.

MR. ULRICH: That could have been some of Gunner's stuff, or Bobby Brown's.

AP MEMBER: It was black with lobster hoops it. It was like your offshore lobster trap in New England, but it had the lobster funnels in it, a side entrance.

MR. ULRICH: The fathoms-plus traps we used had the side entrances, one on each side, and then the Florida lobster trap was a standard size Florida trap with a top funnel, and it had a wooden top, and that's the two gears we used.

AP MEMBER: I was just curious, because these were all wire, and they were set up where anything that would go in it would die, because it didn't have any biodegradable rings or anything like that on it, but the traps were all intact, surprisingly.

DR. COLLIER: So considering this area and going northward between this depth contour zone, how far north do you want it to go?

AP MEMBER: As far as we can. That same contour and same depth, or maybe a little wider at times, and I don't know. Right back up to where the permit used to say it went to the Virginia border.

MS. COPPA: I believe it still says it, but they just don't print it on our permit. There is no law that has changed it.

DR. COLLIER: When you said potentially extend it, do you want to go in shallower or deeper water, in what direction?

AP MEMBER: Just the same contour, just like it is there, the same depth, and just extend it as far north as we can, just like it's been -- Just like it is now further south, and you didn't just take it away, like you did when you go to that -- Where it's no longer orange, but it was just like cut off, because we're traveling -- We're adding, at times, three days just because we have to travel to that legal ground all the way up there, and, between weather and what have you, it's just been difficult. It's every bit of a six-day trip at times. Would you like me to get up and point at the screen?

DR. COLLIER: Yes, that would be great.

AP MEMBER: Go all the way to Virginia.

DR. COLLIER: Go all the way to Virginia, and so this area right here is currently not closed. I mean, there is a depth profile that you guys are closed. It's got to be deeper than 700 foot. I am not aware of any regulations that we have considered right now.

AP MEMBER: Well, we weren't aware of this ten years ago either.

DR. COLLIER: Good point.

AP MEMBER: You have to understand that there is eleven permits, and, today, there is only three full-time vessels, or maybe four, that are fishing on the east coast legally. I mean, you put another boat or two in this fishery, and where are they going to go, not to mention some of us even up-fitted boats and purchased boats counting on the grounds that we had prior to getting cut off here. Like I said, I mean, a three-day fishing trip today is six days plus, if the weather doesn't blow them in earlier. That's a lot of pink.

DR. COLLIER: Yes, it's definitely a lot of pink, but there have also been observations of coral in these areas, and these corals can be extremely long-lived, up to 2,000 years.

AP MEMBER: I understand, and that's why we're here. We're here to work with each other, because, I mean, potentially there is going to be probably a lot more, and so let's call it all pink and just not go to work. I don't feel as if this is a give-and-take here. It's kind of like -- The way I see it, I think it's just going to get worse for us.

MR. MERRIFIELD: The question to ask is to open up that whole strata, right, and so then you would have to go and look at what the probabilities of coral are and then, based on -- What is that percentage of probability that you would say that we can't open up that area, because it's got a 90 percent probability, or we can this area, because it's got a 20 percent probability, or how does that work?

DR. COLLIER: When the council was developing these access areas, it was based on historical fishing activity in the past, and so they wanted to protect any potential coral habitat that was out there and, recognizing that some of these CHAPCs had been fished in the past, they didn't want to impact the fishery as significantly. Based on what these CHAPCs were indicating, they wanted to have access in, like I said, historical access areas, and so they created the Northern Zone, Southern Zone, and Middle Zone based on what the fishermen had indicated of areas where they had fished, and trying to limit the expansion of the fishery is essentially what they were trying to do and protect coral from --

MR. MERRIFIELD: Herein lies kind of the problem with allowable fishing areas, because, once you have an allowable fishing area, that's it. I mean, really, how do you get more allowable fishing -- If the fishery moves, if the climate change or whatever you want to call it happens and the fishery moves, you're out of luck, because you don't have the opportunity to go look to see where they are or where they went or what are alternatives to the fishery, because you only have allowable fishing areas, and so that's the predicament you're in, but, at this point, I think all you can really do is say here's what we want, and we want this strata all the way up to Virginia and now let's start paring it down, which is the opposite of what happened to you.

AP MEMBER: That's exactly what I was going to get at. I mean, you all just saw the landings in the previous years, and some may say it's the BP oil spill, and others may say it's this atmospheric calendar or whatever, but how do you leave your fishing ground alone to allow them to come back if you don't have anywhere else to go? What do you tell your employees, that we're not going to go for a month?

We have nowhere else to move, but, going back on that, the strip, and I understand that it may be thicker in some areas, and perhaps we can make a jog or go around or skip a couple of areas where

you think it's thicker, but I can't see why we can't work together here again and open it all back up so it's uniform with the other zones.

DR. COLLIER: If we're looking at creating different zones within this area, what size zone is ideal? If it's not going to be continuous, is there a minimum size that it should be, like fifty miles by thirty miles or something like that?

AP MEMBER: The best way would be to determine the depths, and, ideally, we want to be like 1,600 to 2,400, but, again, if there is coral more on the deep side, we will make a little jog there, and so it won't be allowable to go as deep in certain areas or as shallow in other areas, but at least give us the same contour that you did further down in the south, because we have sixty-plus miles or whatever it is, and I don't remember offhand, where you can't go anywhere but just steam all the way up north of Georgia, northern Georgia there, where it kind of cuts off.

MR. MERRIFIELD: I might be wrong, but I think what he might be asking is what kind of a space do you need in order to drop your traps down into, and so, if you've got spots, and then you've got a high-probability coral area and so you've got to skip over something, what are the size areas that you would need?

AP MEMBER: Again, it all comes down to the depths, and so, if you tell me you're going to go like a mile wide and it's on 1,600 or 1,700 feet, I will respect wherever the coral is, and we'll stay away from it, but, if there is probability that you can open it and make it wider in certain areas, so that we can accommodate that depth between 1,600 and 2,300, or maybe 1,700 to 2,300.

AP MEMBER: I think that within the strip of bottom that he's talking about, if there is areas that are identified already as high potential coral, then we would automatically just chop that piece off and, given that we could be able to identify that new area and give up the whole entire region from there up, then that's a good wash for what we need and to protect what's already identified.

We already know that, outside of that boundary, there is no potential for exploring, because it's too costly or whatever, and so anything within that strip that we already know, we identify it, and we box it off or whatever, and then we just try to get that strip back all the way up to the Virginia line.

AP MEMBER: Yes, and, basically, we steam on that contour, and we can set a trawl before it and then, after so many miles, we can set another trawl after it, north and south of it, and we can just stay away from wherever there is potential coral.

MS. COPPA: I am not quite sure whether you're getting another ridge we would like to more open and boxing off the coral. In other words, we would put up with more of twenty sections smaller, and am I close, than putting up with the entire -- First of all, that entire area is not suitable for coral, just like it's not suitable for crabs, and so that's why I'm saying if you can identify the areas and we can agree to more sections, but, like he was saying, to add three more days to a trip, with fuel and things like that, basically it's taking a profit, and so you're fishing for nothing, and so they're going to have to fish harder and things like that, and it's not conducive to either, because then somebody might be tempted to go into some area when we don't really -- I mean, as owners and stuff, you don't want that to happen, and, there again, the VMS is not the answer.

I've had it on the scallop boats, and I've had it on the clam boats, and I've had it on all of those, and, the way it's set up, it only pings every so often, and you can go into the closed area and make a circle and come out before it ever pings again and knows you're in there, and so VMS is not the answer. You want the closed areas, and we'll work together, and I think we can box them off and make it work for both of us.

MR. ULRICH: I would like to see more actual data on the position of the coral when you're coming up with regulations that impact where or how people can make a livelihood, and I'm not real comfortable with probabilities, like there might be coral here or there could be coral here.

AP MEMBER: Thank you for that, Glen.

MS. THOMPSON: If you look at the zones that have already been identified as allowable fisheries, you've got chunks taken out, and you've got separate zones. In the southern end of it, where you have allowable areas, I agree, and I think that you could identify areas where they shouldn't be fishing in that depth contour all the way up to Virginia. Opening up a little tiny box right in the middle, I don't think that's going to help the fishery. They need to be able to move around and look for crabs all up and down.

You can look at how the allowable areas have been chopped, where they are allowed to fish now, and so why can't they do that in that depth contour all the way to Virginia and just box off the areas where the coral is?

AP MEMBER: Let's keep in mind also that we're already challenged in having to be staying off of cable that's out there, and they keep deploying more and more cable to Europe, and we've got a pile of bombs over there that we can't fish near, because we don't want to know what that would be like, and then occasional wrecks that are out there, and so, again, whatever we can do to get some more ground here would be great.

DR. COLLIER: If we were to create additional allowable access areas in the CHAPCs, is an area that's twenty miles long by two miles wide too small to consider?

MS. COPPA: I don't think you got my point. We want it open and closed coral areas. I think that's what we're after, just the sections that the coral is conducive to grow or is growing that we can stay out of.

DR. COLLIER: Right now, the CHAPC, the habitat area of particular concern, has been identified, and that's going to take a lot more than it seems what the council is willing to consider, but maybe Charlie can speak to that, and I don't know. Can you speak to the consideration of creating -- Can you explain that? What they want to have is actual areas where coral exists and have that as areas that would be --

AP MEMBER: Instead of the potential coral areas, just within that strip and all the way north. I'm just asking for a piece of the pie.

DR. COLLIER: Right. I understand that, and we're looking at this here, and Glen had asked for actual observations of the coral, and these are point observations of coral that have been done over the years. Some studies have been with dives, and some of this data goes back to the 1950s, and

so I'm not sure about the accuracy of exactly where it is, but this is the information that's available through that deep-sea coral initiative, and so it's all online, and it's all public data, and I'm just trying to figure out -- If we are creating boxes, similar to how we have in the past, and I know you guys don't like that idea, but I am trying to think within the box that we're currently in, the management box that we're currently in, this is how they've defined these zones, is access areas.

AP MEMBER: May I walk up to the screen again?

DR. COLLIER: Sure.

AP MEMBER: We have the orange strip down here at the bottom, and so we can cut out where this is -- The site here, and we can come up around this here, in between, and then, over here, we'll just say, okay, we can't fish in there, but then we'll get another strip right in between all of these.

AP MEMBER: Again, you're really targeting soft bottom though? That's what you're looking for, right?

AP MEMBER: It's hard to say soft bottom, because it's within that depth of range. It's like earlier he was saying that if something happens that you go shallower or deeper, and deeper than that is not -- Even if they're there, you can't get to it, and, shallower than that, it's up on the rocks anyway, and we don't -- Anything within that strip, that contour, all the way up, we know that there is going to be potential of coral within that area within already what we already know, and so, if we already know that those coral sites are there, we can make one -- It's the same as the bottom that he was pointing at on the south end.

You start right there within that contour of 700 to 2,400 and all the way up to the Virginia line. Then, wherever there is already coral identified, and it seems like a lot, but you're only really talking about a couple hundred feet of area that you could have like a jog to the north for half a mile and then you skip that whole area that is already identified and have like -- It doesn't have to be exactly the whole thing, but the reason could be all mapped out with points, just like those corals are, and you could have a straight line where it goes half a mile and you just skip everything that's already there, and you identify those areas, but then we create, within those coral areas, an area that is suitable for the data that we already have. That way, we could set an area and separate what we already know, where we don't want to be there anyways, and create that jog that he is talking about, because from 700 feet to 900 feet, you're only talking about a couple hundred feet, and there could be points that could be mapped out.

MR. MERRIFIELD: Maybe the first step in the iterative process might be just to say that we would like that contour, and then we would have to come back, after looking at some of these probabilities, and say, well, this area is a definite no and this area is a definite no and then how can we come up with boxes out of that.

AP MEMBER: Not only as a box, but as a continuous box, and it will never stop.

AP MEMBER: What they want to do is take like the whole way from here all the way up to Virginia in a straight line and open it up, and that's what I think all the fishermen want, is more bottom.

AP MEMBER: Is this all coral here, those orange spots? Is that coral or hard bottom, or is it some other --

DR. COLLIER: The hotter the colors, the general higher probability of coral being in that area.

AP MEMBER: But there was orange on the last chart, and were those coral?

DR. COLLIER: Those were observations of coral.

AP MEMBER: Not hard bottom?

DR. COLLIER: Not hard bottom, no.

MR. PHILLIPS: Chip, do you have observations that don't show coral where you could overlay that, which might help them figure out where they have seen coral and where they haven't seen coral, and I don't want to be -- I am afraid if you ask for too much that you might not get anything, and so we need to ask for something that is reasonable and that still helps you all.

AP MEMBER: Basically, what you're saying is we don't want to happen what happened two or three years ago, where we had a meeting in Fort Lauderdale -- Was it two years ago, the last one, in Fort Lauderdale? Three years ago, and they said what will it take to modify this, and we said, well, and I think you were there too, Chip, right?

They said, well, you all can ask for everything and then see what comes back, and we said, well, let's open it all the way back up, and here we are two years later, and, again, we don't have to -- We don't have to exceed more than what we're going to use or utilize, but, if there's a dot here and there, so be it. Let the world eat crabs rather than the farm-raised stuff that we're getting every day.

AP MEMBER: There is a lot of other areas that used to be open that we're not even considering of opening, and so there is tons of acres that we don't even -- We wouldn't even ask for, because we know it's going to be extremely hard to get to those places, and those historic places that we have the basis of all this study is -- Because history never got to the point of studying other places, and that's why we we're using what we know now, the small community of fishermen that there is, knowing that, within that boundary, we know we're going to catch it, and that's basically it. We're willing to give up all of the exploratory area that we're never going to be able to explore, because we're just going to give all that potential and non-potential area for coral to be there forever, because we would not want it back.

MR. PHILLIPS: I'm not sure that I want to go that far.

AP MEMBER: Well, I mean, that's what's really going to happen. If we could get that strip that we know where we could fish at, and there is one site that's a fifty-foot rock that's in the middle of the way, but yet there is twenty miles of ocean to the left and to the right of it, and it's just whatever is there is there, and it's always going to be there, and we could create boundaries, because it's really impossible to just make boxes and straight lines and not have to -- It's an ocean out there, and so it's going to have bottom and soft bottom and coral and everything within that strip, but there is a lot of other real estate that's just going to be given up.

MR. PHILLIPS: I agree, but I'm just trying to figure out something that we can define as well as possible to make the case, and I think you all know that I pushed really hard to try to get you to this table, and I want you all to be able to fish as much as possible, and I know you all don't want to fish in the coral. I know that, and so maybe if Chip can find the points that don't show the coral and the ones that do, maybe it will show a little bit better picture on exactly what you need to ask for.

AP MEMBER: Yes, and I think if we could identify -- Within what we're looking for, if we could identify what's already there, we could definitely pinpoint a better accurate area of exactly what we're looking for and keeping in mind that everything outside of that has just been -- It's going to be protected.

MR. PHILLIPS: It may be another twenty years before it ever really gets mapped, and so we're doing the best we can with the information we have.

AP MEMBER: Why is it always that the few commercial fishermen that are here are considered ignorant under government dealings? It's like we come in and we know -- We're not going to go and get on the coral intentionally, and they should sacrifice some to let us work, because there is just a few of us, and we're not so stupid that we're going to go out there and destroy our equipment on coral. We know where it is better than any of the scientists in this room know where it is, and so, if there's a rock in the middle of twenty miles, we know where that rock is, and none of us is going to go get on that rock. Give us the benefit of the doubt and let us go to work.

AP MEMBER: I think it would be beneficial to work together and let the golden crab -- Let the fishermen add information each year. Say, well, we found more coral here that you guys didn't know about, and how about if we were to give you 20 percent more information every year to add to it, and, like you said, this is going to go on long after all of us are gone, and let's make this a better fishery for those in the future.

DR. COLLIER: With that, I mean, there is exempted fishing permits, and you can apply through National Marine Fisheries Service, and you can explore certain areas, and I'm sure they would want to do it in some kind of scientific design, where you guys would participate and help them to identify certain areas that could have golden crab. They obviously don't want you to put pots down in an area that potentially has coral, because, once you put it down, the coral is not there, and so they don't want you exploring some of those areas, but I think exploring something like an EFP to address some of these concerns would be an excellent opportunity.

That way, National Marine Fisheries Service, the fishermen, and the scientists, are working together to better define fishing areas that the fishermen can work with, and, at that point, we can begin expanding and do it in a kind of rigorous way that is not hurting the habitat that the Coral AP would definitely be concerned with as well as the council, and so that's potentially one way to address some of these issues.

AP MEMBER: Going back on working you all, of course, which we all are willing to do, and, like that gentleman there said, it could be twenty years later, but I think my first meeting that pertained to coral was in 2007 with Gregg Waugh down in your neck of the woods there, and I think that gentleman is right.

We're going to work on this for twenty years, and it will probably be twenty years until we get it back, but, the way they took it, it was one, two, three. The one meeting that I didn't go to, they took that all away, and there was gear there, and there were fishermen that fished that area, and so for them to say that there is no historic landings and nobody fished there -- Because they did. Guys came and lost their shirts, or a hurricane came and took out their wheelhouse or they had to give up or whatever the case was, but they pushed too fast, and we will never be able to get it back in the timeframe that they took it away. Again, two years ago, we were talking about this, and I appreciate you, Chip, and I know you're doing everything you can, but we need it back, and I think we need it like yesterday.

AP MEMBER: Two years ago, at that meeting, I gave a list of about ten people that had been historically fishing in that area.

DR. COLLIER: That area you're referring to is the area north of the Northern Zone?

AP MEMBER: (The comment is not audible on the recording.)

DR. COLLIER: Okay. Thank you. I might be asking you for that list again, or it should be in the minutes. All right. Mike had stepped out, but maybe we can take like a five-minute break, and then you can beat me up over VMS for a little bit.

(Whereupon, a recess was taken.)

MR. MERRIFIELD: Could everybody please get a seat, so we can get started again?

DR. COLLIER: The second action that's targeted at the golden crab fishery is monitoring systems for golden crab vessels. Right now, we have three alternatives for this. The no action alternative is to not require vessel monitoring systems. Then we have Alternative 2 and Alternative 3, and the difference between these is -- One would be to require it for all vessels that are engaged in the golden crab fishery, and that's Alternative 2, and then Alternative 3 is just vessels in that Northern Zone.

Under each of these, there is different sub-alternatives, and it was requested that we add additional language into I believe Sub-Alternative 2b, where it actually identifies that, if there is funds available, that NMFS would pay for it, but it's not guaranteed to have funds in it, and so they want to have that cautionary language in there of if there is funds.

MR. MERRIFIELD: This is the time to comment on whether you want VMS or not, golden crabbers.

MS. JONES: I will comment. VMS on the boats would be ineffective, because it's the traps that would be in the areas not wanted, and so the VMS is not going to do anything. The boat could be wherever, but the traps are what is fishing. It's not like shrimp boats, where the trawls are attached to it and it has to go with it.

MR. MCGURL: I would agree with that. It's very different. I think of being at sea and close to a HAPC in legal fishing areas and setting up a round of watches at night for the guys and trying to

make the boat as stable as possible in not good conditions and somebody going a sixteenth of a mile over the line, just holding a storm course, and that not being a good thing. You want safety to take precedence when no illegal fishing is taking place, and I could see a problem with that.

AP MEMBER: Yes, I'm with Tim on that as well. I don't think VMS is beneficial at all to our fishery. We have boats that do this part-time, and I just don't see the need for it. There are eleven permits, and they are owned by half of the fishermen, a total of maybe six or seven individuals.

MR. RAU: You could be setting gear, and you could be in a closed area when you set the gear, but you get a mile drift. In that mile drift, you're into your fishing area, your allowed fishing area, and, also, you could be hauling, and the gear is up off the bottom, but you could be drifting into a closed area. You could actually be hauling in a closed area, but the traps are in the allowed area, and so I'm definitely against the VMS.

AP MEMBER: I am totally against the VMS as well, for obvious reasons.

MR. MERRIFIELD: The opposition is because there is -- Especially if you're going to make smaller boxes or have small boxes, it's that, if you have geofencing, it's very likely that you could end up outside of an allowable drop area and then you could be flagged as being illegal when in fact you may not be, and so there's a lot of -- Whereas, in the shrimp fishery it's different, but in you guys' fishery, there is just a lot of play in where your drift is and what your storm conditions are and what your rate of speed is. I mean, for the shrimp fishery that has the VMS, or at least the rock shrimp fishery, rate of speed is a big deal. The pinging is only considered to be fishing when it's right around three knots or less or something like that, but, in you guys' case, you could be out there managing a storm and be going three knots or less, or at the drop speed, whatever that is.

AP MEMBER: Correct, Mike, and keep in mind that retrieving our gear, we have a 3,500-foot cable, plus when you hook on to that gear and you're hauling back, like Howard says -- I mean, the boat can look like it's in a closed area, especially now that these strips are getting small, and the gear is on legal, allowable fishing grounds.

MR. PHILLIPS: I've got a question, and I think what I'm hearing is you all are assuming that boundary is -- You can't cross the boundary. There is a no transit across the boundary line, and you're worried about going across the boundary line and being illegal. If you've got a boundary line, but you can still transit across it as you needed to to work and set your gear, are you going to have the same opposition to VMS?

For example, if you need to be set upstream or something and you're in a closed area, but you're setting upstream and so your traps land in an open area, would you have the same opposition if the VMS basically was not going to put you in jeopardy?

AP MEMBER: How do you delineate then?

MR. PHILLIPS: I'm just asking the question. I mean, you could have a buffer of a mile or something or two miles.

AP MEMBER: In some places, like I was telling you earlier, your gear could be at 1,800 feet, and, if your line is at 900, and you got tangled up and you have to let go of 200 or 300 feet to

untangle, you're in the situation that the VMS machine is now an obstacle, and it's something else that you've got to worry about, instead of something that could help you into what the fishery is all about, but it's something that you're going to have to worry about where am I at and did I cross over or did I not and did I do this, and it's all these scenarios, which the VMS machine has no beneficial points to it in our fishery whatsoever, none.

MR. PHILLIPS: What I'm saying is the VMS will not be used as a legal tool to tell you where you can go or if you need to set or if you're tangled up and you're getting your gear --

AP MEMBER: I understand, and so what's the purpose of us having it then?

MR. PHILLIPS: It still gives you effort.

AP MEMBER: But what's the purpose of us having it on the vessel installed and paying fifty-bucks a month? How is that beneficial to our fishery? What do we get out of it?

AP MEMBER: I can see this VMS working for us. In fact, this would be a brilliant system for us to have, and I think, like Marilyn was saying, we can help you all if you give us a free-for-all and everybody puts a VMS on their boat and we all go fishing and then we'll tell you where the coral is. We will do the pinging and say, hey, there is coral here. Give us everything back, and we can have VMS, and we will close our own areas. Of course, we know where most of it is, and so we'll stay away from the obvious, but then I think VMS will be great. This way, you will know exactly where it is, and I know it's an honor system, but --

MR. MERRIFIELD: Maybe you should just talk about what the benefits of the VMS are.

DR. COLLIER: I will be the contrarian then. In talking with law enforcement the other day, there are some definite benefits of a VMS system. One is, if there's a problem with the vessel and it has an issue, it can be identified where that vessel is pretty quickly. It helps the Coast Guard in search and rescue situations.

AP MEMBER: We have all that already. We have all the communications and satellite phones, unless I mean you all are going to pay for a $20,000 tow or something like that, like AAA?

DR. COLLIER: Some of the other information that could be gathered are, you know, these areas are definitely important to the fishery, and this is areas that our fishermen go to all the time. You can use an economic analysis, and, currently, we don't have information like that for the golden crab fishery. We have zones where you guys fish, and then you guys tell us exactly where or different areas that you guys have fished in the past.

You can see how it's pretty difficult for us right now, and we really have no information on how the golden crab fishery operates and what typical depths that they're operating in, if they move seasonally or anything like that, and so there are some limitations on the economics, or some benefits on the economic side.

Law enforcement definitely indicated that it would be difficult to use VMS as the only source of information for writing a ticket. They said, because the traps actually would not be at the same location of where the vessel is, that probably would not be a beneficial thing, but what it would be

beneficial for is trying to find out or observe where fishermen are fishing, when they're potentially coming in, making sure that they're abiding by all the regulations.

MR. MERRIFIELD: I will say this about VMS. Where it helped the rock shrimp fishery is in determining -- It's a different kind of fishery now too, and so it's hard to compared it exactly the same, but, if you pull up this chart here that shows VMS dots, it shows you where effort does -- It does show you where your efforts are, and then, if they say they want to close an area, at least it gives you something to --

One of the reasons that we're here today for the Deepwater Shrimp AP is because, when they drew the last northern expansion of the Oculina HAPC, it took away some of the fishing area, and we're trying to get that area back, and it clearly shows that it is an area that we concentrated fishing effort, and so that's why we're here, is to pull that back. I don't know in your fishery if it would do that or not, but it did help. The northern expansion was about two to three times what it is when it was initially proposed, and we were able to dwindle that down, because we could show effort based on VMS data.

AP MEMBER: At my cost, thank you very much.

MR. MERRIFIELD: Well, yes, but we do have transit provisions in our fishery, and I don't know how to compare that to your fishery though.

AP MEMBER: In our fishery, it's totally different. I mean, it's just -- There wouldn't be no data from the VMS that will help us in any which way in the future that I see at this point.

AP MEMBER: Except they would have closed a lot more rock shrimp bottom had they not had the VMS data, and so, if they're looking to shut down more bottom in the future, the fact that they have the VMS data that proves that you were fishing there could be helpful if they ever try to take away even more bottom from you.

MR. MERRIFIELD: I mean, it could be -- If you want to open up that corridor going north, and I don't know what your probability with having that happen is, but, if you were able to get that, with the contingency that VMS would show in that corridor where you were actually concentrating effort, then that would be areas that they would be able to determine are unlikely to have coral and are likely to be good areas for allowable golden crab fishing, and I don't know. I mean, I'm not trying to sway you one way or the other, because I understand the reluctance.

AP MEMBER: Nothing that's going on with the coral now has anything to do with the VMS. I mean, the coral is there, and the fishery is going to just try to expand within that area, and nothing of the VMS system is going to benefit us in any way into the future as far as opening up new areas, which has nothing to do with the VMS. It's nothing to do with safety, but it's just an expense for us, and that's all I see of it. To pinpoint what's already there, we already know what's there. I don't know, but I just don't see anything with it.

AP MEMBER: I'm with all these guys here. I mean, it just potentially can harm us, as far as them pinning us where we may be in the wrong, but we're not.

MS. SOLORZANO: We have VMS on the rock shrimp boats, and it's got its pros and cons. It did save us from getting a larger area closed, but it also, when we didn't have it, we had historical bottom that we've had in the past, and why can't you present that with your computers and different things that show where you are and say that I've been dragging here, which we tried to present to them before we had VMS, and nobody wants to look back that far at the history.

If you went back to say the 1980s, we rock shrimped lots of this area, but no one wants to hear your history. They only want to see the VMS data, which it did help us, and it's helping us hopefully to open some more bottom, but they're not going to look past your -- When the history comes up ten years from now, they're going to say well, there is nothing -- This is your history, and this is what you get, the VMS data.

AP MEMBER: I mean, I don't think they could just go back and base it on that you don't have a VMS machine and that's why you can't get it. I mean, there's other ways of logging what we do now other than having an expense with a machine and just in case. There's a lot of other -- Like landings.

AP MEMBER: Marilyn, what you're saying is it was like a negotiation strategy?

MS. SOLORZANO: They came in and offered us -- They said, okay, if you do VMS, we will come back, and Charlie may have remembered, and Laurilee may have remembered, but we're going to give you the word that was lovely and well-used last time of "buffer zone". That ended up being closed, and nobody even recalls the word "buffer zone", but buffer zone was used by -- I'm going to say the other side.

It was used a lot, but then when it came up to say, well, we negotiated and put VMS on, and so can we get some of our buffer zone back, it was no, and so we're in here now, many years later, trying to get a little bit of the bottom back that was closed wrongfully in the last closing, but, anyway, we could go on with that all day. It's an expense.

AP MEMBER: Looking here around the table, everybody is against it that's representing the golden crab commercial fishermen themselves, and so where do we go from here?

MR. MERRIFIELD: Your preferred option is no action.

AP MEMBER: Thank you.

DR. COLLIER: I will take that information back to the council.

AP MEMBER: Should we motion this?

DR. COLLIER: Sure.

MR. MERRIFIELD: Okay. Is there a motion for this action?

MR. ALMEIDA: **I motion.**

MR. PALMA: I will second it, for no action.

DR. COLLIER: Does that look like a good motion, and does it cover what you guys are trying to say?

MR. ALMEIDA: Yes, that sounds good.

DR. COLLIER: **The motion reads: Recommend removing the action for VMS in the golden crab fishery from the draft options paper.**

MR. ALMEIDA: Correct.

MR. MERRIFIELD: Any discussion?

AP MEMBER: To Nuno, what if they were to open that up, that whole strip? Would you be willing to use a VMS for that whole strip, taking into consideration some of the --

MR. ALMEIDA: After hearing the story about the shrimp fishery here, and, as I said earlier, I don't feel as if there was ever a give-and-take here, and so I'm not comfortable with that. No, I'm not, unless they came to us and said, hey, you know, this is what we've got, but, if somebody is going to hug that tree, and they're going to love that tree and water it, guess what, I don't think they're going to give up that dot that's right in the middle of that ground that we need to open up, because they don't want us to go around it or near or whatever.

MR. MERRIFIELD: Any further discussion? **All in favor of the motion. It's unanimous.**

DR. COLLIER: Were there any opposed? Were there any abstentions? Okay. The motion passes. Okay. Now we're going to switch gears and go into Action 3, which is adjust the Oculina Bank Habitat Area of Particular Concern boundary. We can go back to that ArcMap, and you can zoom in, and you can see the area that was mapped. It's this light-colored area, and you can see it up here. In this portion, you will see a rapid change from orange to red to yellow. That's a potential indicating of coral mounds.

Then there's some additional habitat mapping that's been done in this area, and so I believe this was an area that you guys wanted looked at with additional mapping after the CHAPC was identified, and so I'm trying to pull up that map, so it shows up where the HAPC is. Unfortunately, it's a similar color, but you can see it in this lighter color here, with the mapping starting right on this eastern boundary of it. Right now, we have two alternatives, and one is to not modify and two is to modify. If you guys want to modify it, any information that you can provide would be very beneficial.

MR. MERRIFIELD: The history is that, in the last coral amendment, this northern expansion was put into place, and, if you look at the VMS chart that we had up earlier, the eastern edge was heavily -- It had a lot of VMS dots on it, and so the whole eastern edge there was a very heavily-utilized rock shrimp area, historically, and since VMS.

What happened was, at the last -- We had been through a couple iterations of developing this area, and it started out as a very large area, and we, through VMS and through our trawl track data, were able to get it pared down to a smaller area and not eliminate the rock shrimp fishery from that area,

but, on the eastern edge, there were still a lot of VMS dots that are within the boundary that was created, and then we had a fisherman come in, or actually a few fishermen that came in, that said that that was a very important area to the rock shrimp fishery, and we requested for that boundary to be moved.

Well, it was pretty late in the cycle for having that amendment moving forward. It had moved forward pretty far, and so, at that meeting, they said that they would review this at a later date and that they were going to go ahead with the boundaries as defined, and, just recently, and thank you to Charlie Phillips, he brought this up as an action item that they said that they would review this, and so here we are.

At that meeting -- I mean, we did present an option for a boundary with coordinates at that time, and so, basically, what we're looking to do is to implement those boundaries, those specific points, and I don't know -- At this point, does this just become an allowable trawl area, since it's a HAPC, or are we changing the -- I guess we're not allowed to change the boundaries of a HAPC?

DR. COLLIER: Because this is an amendment of all three fishery management plans, that was one of the considerations, was to actually change the boundary of the HAPC.

MR. MERRIFIELD: Okay, and so I guess is there different options for this action of implementing this, because one is to change the boundary of the HAPC, and another would be to make it an allowable trawl area within the HAPC.

DR. COLLIER: That could be two different options, yes.

MR. MERRIFIELD: I don't know if one is better than another, but I think our preferred would be to change the boundary of the HAPC.

MS. SOLORZANO: Yes, I agree. Better and quicker. We need it done quickly, and so which would be the fastest way, and Lord knows we don't move quick.

MR. MERRIFIELD: I wanted to address a couple of comments that came up in the council meeting from Doug Haymans, and I've got to find that document.

MS. SOLORZANO: Let's not make it nauseating. That might be your comment.

MR. MERRIFIELD: Basically, his comment was that the last year's landings were so high that there would be no need to expand -- Why are we looking at expanding the rock shrimp fishing area where they can fish, and I think Charlie made an attempt to answer that question back then, but we wanted to basically just respond to that and say that, especially in this last year -- Most of the rock shrimp caught this last year were not offshore, and so this is a record year, but they were not caught offshore. They were caught inshore of the Oculina, and so it had no impact one way or another on this year.

However, in previous years, that was a highly productive area, but it just really depends on water temperature and whether they're being pushed inshore or offshore of the Oculina reef, and so a small strip like this can make a major impact on the amount of landings. Marilyn, did you have a comment?

MS. SOLORZANO: Yes, and we caught rock shrimp from twenty-five fathoms out to seventy, and we had a really long rock shrimp year this past season, and you're going to see a large difference in landings over the past few years. In some of those years, we didn't have a lot of landings, because most of the boats were working on white shrimp. That's one of the reasons.

Another reason is, last year, we had the big storm, which stirred things up and probably moved things around, but the closed area -- One of the comments was no one can say that closing it didn't make it better, and I can tell you that it didn't, and all the other guys that fish out there can tell you that that closed area did not make last year better, and so that was one of the comments that was made, and I wanted to rectify that.

MR. MERRIFIELD: Right, and that was one of the other comments, was that, maybe by closing this, this made a difference in the fishery and it made it a more productive year, and that did not make the difference in closing this area, and we really -- I don't think that there's really a good understanding of what does cause a good year like this to come along. If you look at the cycles, there is definitely a cycle where you see this occur, but I am not sure -- I don't think anybody could say for certain that having that HAPC there makes or breaks or determines how good or how bad of a season we're going to have.

AP MEMBER: Excuse me, Mike, but I'm just curious as to what makes -- What you guys would consider a bad year, like 2014 and 2016 or 2012? What do you guys think happened in them years where the landings were so low?

MS. SOLORZANO: We were fishing more for white shrimp and inshore shrimp. You're going to go where you get the most money, and, some years, you're not going to get paid well.

MR. MERRIFIELD: Some of it is economic opportunity that's driven, and so some of it is definitely that, and some of it is just differences in the water conditions that are taking place. We've had a whole area that used to be highly productive south of the box, and that seems to have been decimated by conditions down there, from runoffs and things like that out of -- I mean, I don't think anybody has caught anything down there, south of the box, in years now.

MS. SOLORZANO: Yes, it's been a few years that it hasn't been productive down on the southern end.

AP MEMBER: What kind of runoff is it? Is it like discharge or --

MR. MERRIFIELD: One year, we had an Okeechobee water release that came out, and the winds were just right that it kept it south long enough, and then, when it drifted north, it went right over those rock shrimp bottoms, and we had large algae blooms down at the bottom that the net would be completely full. You would touch the bottom and it was full, and you would have to pull it up.

AP MEMBER: I wonder if that's what made this coral grow so much.

MS. SOLORZANO: Potential coral.

MR. MERRIFIELD: Anyway, the point is that I don't think we know, but I don't think that a sliver of bottom or even closure of that entire northern HAPC made a difference. In fact, I think most of it was caught south of that northern HAPC this year, on the inshore side, and so it's just -- I think the landings said it was right around two-million pounds this year, or I actually probably think it was a little higher than that, than what it's indicating, because I know we unloaded over a million pounds at our dock alone, and there's two docks to the north of me that unloaded quite a bit as well.

MS. SOLORZANO: Another reason that we had a little more production this year is we had a few more boats that hold permits in the Gulf that came around and worked in our fishery, and so we had more boats fishing. In those years when they don't have a good season in the Gulf, some of them will more migrate to the east coast and work all of our fisheries, whether it's white shrimp or -- It's similar to those of us that go to the Keys, but those were additional efforts placed on them as well. Some of those bad years though, they were because there were just -- You guys know, with crabbing and anything else, you're going to have good years and bad years.

MR. MERRIFIELD: I just wanted to answer those issues that came up in the meeting, and so do you have the coordinates that we submitted last, in the last -- I would think they would be in Amendment 10, Coral Amendment 10.

DR. COLLIER: Yes, and I can look for them. If not, I will get back with you, but I'm sure they're on the record somewhere.

MR. MERRIFIELD: Okay, and I can provide them if we need them, but they were the ones that we submitted last, and we were just too far along in the cycle to stop and readdress it.

DR. COLLIER: Are there any other alternatives that you guys would want to consider beyond that?

MR. MERRIFIELD: You opened it up.

MS. SOLORZANO: Just open it all up and trust us. We'll do what's right. We're not stupid. Okay, and so, that being said, it's highly unlikely to happen, but I can ask for even more openings, and I'm with these guys over here. Open up some of these closed areas that we historically used before there was VMS and let us go to work. Now, I know I'm getting a lot of smiles and frowns around the room, but nobody would expect me to ask for less. Charlie knows me, and he's over there laughing, and Charlie stands good for us.

I've got to ask. I would rather ask and be told no than to sit back and never say a word, and so I think we have some pretty good equipment and electronics and things on the boats in this day and time, and you can't compare it with the 1960s, 1970s, 1980s, and 1990s. We're capable of doing a lot of things and finding a lot of stuff, and we know where we have fished in the past. We would bring in old paper plots, and nobody wants to see them, but the history was there, but just nobody wanted to see it. With that being said, we will take all you will give us.

MR. ULRICH: I've got a question. I was curious if there was any fishery occurring in South Carolina and Georgia at the present time and if that area is open.

MS. SOLORZANO: Thank you. He was going to answer that. They closed it out to the twenty-five miles this year, and that's the issue with transiting through. There is no trawling, and it's just closed, and we're kind of sitting high-and-dry in the water, because we work South Carolina and Georgia, and Nancy knows this well, and it's the same situation. You can't go to work, because you can't work outside where the white shrimp would be spawning, and then they would go on outside of the three miles and you could utilize them, because they're just going to go out there and die anyway.

AP MEMBER: How far offshore is the rock shrimp bottom off of Georgia?

MS. SOLORZANO: The rock shrimp bottom? It's a pretty good ways out there.

AP MEMBER: Is it more than twenty miles?

MS. SOLORZANO: Yes, and we occasionally do that, but not in recent years.

AP MEMBER: They had a survey that they did in South Carolina back in the late 1970s and early 1980s, and there were a number of the local inshore shrimpers that would fish rock shrimp during the offseason, and the fishery, as I remember, was primarily between say 150 and 250 feet. It was not a particularly deepwater area, and does that track with what you all see now?

MR. MERRIFIELD: Yes, it's about 180 to three-hundred-and-so-many feet around both sides of the Oculina Bank, but there is some fishery off of Savannah up there, a rock shrimp fishery, and it's not -- I wouldn't say it's accessed real frequently, but it is occasionally. You're right there at Savannah, and you're right there at Georgia/South Carolina.

MR. PHILLIPS: I talked to Glen at the break, and he was telling me about their old paper fathom meters and how they could see coral, and then -- When I shrimped back in the early 1980s in the Gulf, we used the same paper fathom meters, and we could see loggerhead bottom, and we knew exactly where to work and exactly where not to work. Of course, we didn't have high-tech plotters hooked to them like they do now, and you can actually get stuff with black boxes and bottom-building machines, and maybe Marilyn can talk about exactly what they can do with their fathom meters and how they can build their maps and know where they're dragging and what kind of bottom they're dragging in, and maybe that might help you all figure out some ways to ask for some area, if you can explain how your gear works and how you can prove that this is what my fathom meter says and this is the chart that would go with it, and so maybe you can explain that, please.

MS. SOLORZANO: We use a WinPlot program that is hooked -- A lot of it is all hooked together, but you -- These guys all know about depth and sonar and all this, and you can see the bottom so clearly now in comparison to the old paper fathom meters that we used to use, your depth and your hardness and your softness, and, when you get your system set up for you and you're used to seeing that, it's right there, and it's 24/7, right beside you, and the captain knows where he's going, and he's got that hooked in with his computer that is also giving him where he has worked in the past.

With your depth finders and your machines, and a couple of the boats actually have sonar on them now, and so they can visually see more and ahead, and so you're not going to go put yourself and get in coral, because there is just -- It's just no one is going to do that. It's expensive, and it's

damaging, and it's just not something that anyone in any rock shrimp that is going to work that kind of depth of water is not going to be equipped with the equipment. They know what's there now, and it's not the same as it was even fifteen or twenty years ago, and it's just progressed far more, and I'm sure there is going to be more even ahead.

MR. MERRIFIELD: I have some of those old charts, old plotted charts, and of the experimental area, where they used to go through there before it was closed, and it's all depth contoured, and it's very specific, and that's why, in Coral Amendment 10, we did have a -- We did have an action to look at opening up some of the offshore of the reef that was in the HAPC and maybe a portion of -- I don't know it was an experimental area or not, and I think it might have been, but it was quickly shut down, but it was based on the fact of those charts that there were trawl tracks before that area was created that was on that roll-down.

MS. SOLORZANO: Yes, we had the paper plots that would show -- You could see the heavily marked-in areas, and we knew where we were going, and then computers came along and made it nice and easy, and some of that was even in old LORAN, and then it went to GPS, and so I'm really old.

MS. THOMPSON: Some of the most productive rock shrimp bottom was on the offshore side of the original Oculina Bank Experimental Closed Area, and then they just -- When they expanded it, they just took the line further north and included all of that offshore area, but, if you look at your map, Chip, the orange dots that indicate the coral are on the inshore side of the Oculina Bank HAPC, and then, when they did the northern expansion, they brought it further west, and you can see very clearly where offshore of the Cape that the northern expansion -- As it goes north, it came a lot further to the west than what the southern was, and so all that offshore bottom on the rolldown that's in the original Oculina Bank HAPC -- It's all fishable. There is no coral there. There is no orange dots there on your map. We would like to see all of that opened back up again.

MS. SOLORZANO: Thank you, Laurilee.

MR. MERRIFIELD: So you're talking about as other options or other actions? I mean, I don't --

DR. COLLIER: That would be another alternative to consider. It would be under the same action. Glen had asked earlier about rock shrimp landings in other states beyond Florida, and so I pulled up landings from 2001 to 2016, and I pulled it up by state for the Atlantic coast, and you can see non-confidential -- These are all non-confidential landings, and so, the last time non-confidential landings of rock shrimp occurred was in Georgia in 2003.

MS. SOLORZANO: The reason that's probably -- I don't know if those landings are because that's where they went into the dock with them at or if that's where they actually fished at. Sometimes the landings -- For instance, my boats may work off of Canaveral, and we'll check that box, but we'll land them in Duval County.

In Georgia, those boats may have went into Georgia and actually fished in Florida, and they may have fished Georgia, and I don't know, because there was some rock shrimp -- There is an area up there that is worked, but it could have been boats back -- Because, years back -- We've gotten better with trip tickets through the years, and so, with that being said, more people turn in landings now, and the fish houses and dockside facilities are really good at turning in their stuff now, where,

ten years ago, fifteen years ago, a lot of people just didn't report the landings in the way that they should have or could have.

DR. COLLIER: I was thinking that we could potentially use the permits to look into this, but I don't think the permits were required at this time period, and so I can't actually use that.

MS. SOLORZANO: That can go in the same direction. The shrimp caught in Georgia may be landed in Florida, and so just to get that not confusing when anyone -- Especially years back with landings, because now the trip ticket system is very intricate on the area you worked, the depth you were in, versus the county you landed in or the state you landed in.

MS. THOMPSON: Would the landings from last year include the boats that took them home to the Gulf and unloaded them, although, with the way that Marilyn is explaining the way the tickets are now, it's area fished, but, if they didn't fill the ticket out that way, it could have gotten put in as like Alabama rock shrimp or Louisiana rock shrimp instead of east coast.

MR. MERRIFIELD: That's a good question, because the trip ticket software -- I don't know how NMFS is getting the data from the Florida system, and so the Florida system will say that -- The boats will say where they caught the shrimp, what the depth was, and so you can tell if it was inshore or offshore, and you can tell if it was Georgia or Florida or the Keys, which would be Gulf.

MS. SOLORZANO: You have the Atlantic Keys, and we have to log into the trip --

MR. MERRIFIELD: I would guess those numbers that you have are something like that.

MS. SOLORZANO: I do the trip tickets for my boats, and it gives you -- As Laurilee said, it gives you the zone you fished in, and you have to check that box, and so even if they take it back over and they land it, that's why I don't know -- When he said "landings", landings is not necessarily area fished, and that's what we're trying to imply, I think.

MR. MERRIFIELD: Was that South Atlantic numbers, Chip?

MS. SOLORZANO: In years past, it could have been more rock shrimp caught if they went to the Gulf and unloaded, and so you're only pulling up South Atlantic landings and not --

DR. COLLIER: I am not exactly clear on how this landings query works, just because I didn't write the code for it, and so I'm not positive exactly whether it's using area as state of landings or area fished, and --

MS. SOLORZANO: It may be using state landings and not area fished.

DR. COLLIER: I can look into that.

MR. MERRIFIELD: Okay, and so I guess we've got to get a couple of motions here. I don't know how we want to do these, as separate or as the same, but I know that our preferred change to the northern expansion, the HAPC expansion, is to move it westward per the coordinates that were submitted, but not utilized, in Coral Amendment 10, I believe it was, or was it Coral Amendment 8?

MS. SOLORZANO: Since that's already up in discussion, should we go ahead and just get that one done and then make another amendment for the rest, because it will take -- To get all of it approved in one amendment, it will be basically an act of Congress, probably.

AP MEMBER: I have a question. These motions that we're going to be voting on will be separate from one fishery, which is a dragging fishery, versus a trap fishery, and so we'll be voting on any motions of boundaries being changed in separate motions?

MR. MERRIFIELD: They're different amendments, right?

DR. COLLIER: It's all going to be addressed within one amendment to several different --

AP MEMBER: Because a dragging fishery is totally different with the bottom versus a trap fishery, and so that's why I'm wondering why you want to do it in one amendment, like a motion, that we're going to be addressing them, like a group.

DR. COLLIER: Although the fisheries are prosecuted differently, essentially the subject matter is very similar. It's going to be addressing some of these coral habitat areas of particular concern and trying to work within them, and so it is different, and we recognize that, but --

AP MEMBER: Will it be in the motion that we realize that they are separate in the form that one fishery drags the bottom and the other one sets traps and raises it without dragging the bottom, which is very important when it comes to coral.

DR. COLLIER: Right, and, because these actions are --

AP MEMBER: Because, if you expand, you could give us some areas that maybe -- If it's an expanse that can be worked with small groupings of traps versus somebody that needs the room to drag and lift and all that, and I have seen both sides, and done both sides.

DR. COLLIER: So, yes. If you look at the way that the draft options paper is set up right now, each of these are independent actions, and so, when we were analyzing the data, or analyzing the impacts, different things like economic impacts and biological impacts, they're all done independently within that action. Then it would be summed up at the very end of the amendment, and so, yes, they would be considered separately. The council would have the opportunity to go forward with certain actions and not go forward with other actions. Then, within each action, they can go forward with alternatives under that action. Does that -- It doesn't look like it made any sense.

AP MEMBER: No, but it's just that's the part of it -- This is only shrimp.

MR. MERRIFIELD: That is to a specific action in the amendment.

AP MEMBER: Okay, and it's just to the shrimp.

MR. MERRIFIELD: It's an action in the amendment that is specific to changing the border for the rock shrimp fishery.

AP MEMBER: That's what my main question was, because I didn't understand that. Will we be doing a similar one for our edge, a motion?

DR. COLLIER: I think you guys covered it pretty well within the golden crab fishery, where the depth zone was between -- It was 1,600 and 2,400 feet and looking at that depth range within there and trying to figure out potential areas.

AP MEMBER: Okay.

MR. MERRIFIELD: Really, what we want to do is we want to move the east boundary of the northern expansion westward, per the coordinates -- The east boundary of the northern expansion westward based on recommendations made by the rock shrimp fishermen in -- Was that 2015? Was that Coral Amendment 10?

DR. COLLIER: It was 8.

MR. MERRIFIELD: Does that sound like what we want for this action?

MS. SOLORZANO: For this action, but we need to figure out how we're going to get the next set of --

MR. MERRIFIELD: That's another option, and so this describes that option, and those coordinates were given to me by Lee, and so --

MS. SOLORZANO: That's one of my sons, and so yes.

DR. COLLIER: Okay. **The motion reads: Move the eastern boundary of the expansion in the Coral Amendment 8 westward based on recommendations made by rock shrimp fishery, and it was approximately done in 2015.**

MR. MERRIFIELD: **You probably want to add "northern" in front of "expansion", because there were several expansions in that amendment.** Okay. That's the motion. We have a second. Is there any discussion? **All in favor, raise your hand; anybody opposed; any abstentions. The motion stands.**

The best way to probably approach this one, if you want to approach it, is to ask for allowable trawl areas in the southern end of the original or the eastern edge of the original Oculina HAPC.

AP MEMBER: You want it on the eastern side of the Oculina Bank HAPC as well as the eastern side of the Oculina Bank experimental closed area.

MR. MERRIFIELD: If you look, this is the experimental area, and this is the Oculina HAPC, and there is where the trawl tracks stop, where they used to continue, and so it's a -- They tried to make this vertical north and south, and that's why we've had to come back and make changes to this over time, is because the reef actually does not go north and south.

MS. SOLORZANO: That was one of those cases where we were supposed to patrol ourselves with VMS, and then they still came back and took more bottom.

MR. MERRIFIELD: At least now, with the geofencing and things like that, we're able to make these things a little bit more contoured to the area that you actually want to close, but, back then, they didn't have that option, and so that's why it's a square north/south box. I guess we can put this in there as another motion that we would want to have considered again, and I don't know how you want to word that.

DR. COLLIER: I can make it sub-alternatives to have it adjusting the eastern edge of the expansion, or it could be considering creating an allowable trawl area in that, and so that could be sub-alternatives for that alternative.

MR. MERRIFIELD: This is not an expansion though. This is the original box.

DR. COLLIER: I am talking about just trying to define it, the area south of the expansion.

MR. MERRIFIELD: South of the expansion. Got you. Sorry.

MS. SOLORZANO: Some of this area, by the way, got expanded out when they created the buffer zone. I think, originally, there was only something like twenty acres of coral, and then they grew into this that we think we found more, and there is potential coral, and there might be potential potential coral, and it just escalated to where a lot of traditional trawl grounds were lost.

MR. MERRIFIELD: Okay. Do we need to vote on this motion?

DR. COLLIER: If somebody could make it.

MR. MERRIFIELD: Could somebody make this motion? Do you want to make this motion?

MS. SOLORZANO: Sure. **I will make the motion.**

MR. MERRIFIELD: **Marilyn has made the motion to add alternatives to consider adjusting the eastern edge of the Oculina Bank south of the northern expansion in Coral Amendment 8.**

AP MEMBER: Is it south or is it --

MR. MERRIFIELD: It's the southern piece, but it's the eastern edge. The northern expansion, that was the previous motion. This is a different motion to go now south into the original Oculina HAPC and provide for allowable trawl areas where traditional rock shrimp occurred.

MS. SOLORZANO: Where traditional shrimping had originally occurred before we started --

MR. MERRIFIELD: Right, and so Marilyn has made the motion. Do we have a second?

AP MEMBER: I will second it for discussion, but I think we need to be more specific, because they could adjust it further east. They could say that they're adjusting the edge. We want to adjust

the eastern edge of the closed area further west. We want to move it west. Either that or get an allowable trawl area, whatever is more palatable to the council.

AP MEMBER: Maybe to include traditional trawl areas or historical trawl areas.

AP MEMBER: Yes, that's good.

MR. MERRIFIELD: I really don't think you're going to get an adjustment to the eastern edge, but if you want to -- You may want to do another alternative that says you want allowable trawl areas.

AP MEMBER: Yes, a separate alternative.

MR. MERRIFIELD: And leave it intact.

MS. SOLORZANO: Yes, that's what I thought we were doing, because I said, if we add it to it, we'll never get this done, but, if we make this a separate request, then we may have a snowball chance in hell, but we can try.

AP MEMBER: Would it be just worded the original HAPC, the original box?

DR. COLLIER: That actually gets a little confusing, and so the name changed. Originally, the Oculina Experimental Closed Area was called the Oculina Bank, and that was the original Oculina Habitat Area of Particular Concern, and so it would just focus you on that bottom area, and so I was trying to make sure that we covered everything. We can put them in as essentially sub-alternatives and under the same item for the council to consider.

MR. MERRIFIELD: The motion would be to have allowable -- To reestablish historical rock shrimp trawl areas in the Oculina Bank, and one option would be to move the boundary, and the other would be to have allowable trawl areas.

MS. SOLORZANO: (The comment is not audible on the recording.)

MR. MERRIFIELD: The one request is that you want the allowable trawl areas, or you want the trawl tracks restored where there was historical rock shrimp fishing, and that's the request. There is two sub-alternatives of how to do that. One is to move the boundary, and the other is to leave the boundaries alone, but have allowable trawl areas.

DR. COLLIER: If you look at what I have on the screen right now, and I know this isn't necessarily dealing with rock shrimp, but, if you look at Alternative 2, we have Sub-Alternative 2a and Sub-Alternative 2b, and that allows a comparison of things that are very similar to each other, and this would be essentially very similar to each other, where it would be a sub-alternative. 2a would have that first alternative that you guys are talking about, and then the second one would just create an allowable trawl area, and those two could be analyzed very similarly.

AP MEMBER: Yes, but we don't want those to be tied to the original request of the northern expansion.

DR. COLLIER: Under this, we would have -- I will show you that --

MS. SOLORZANO: We don't want them picking just one sub-alternative. We want the one that gives us the northern -- The one from 2015 that we gave you those pins, and that is separate from this next request, so that they don't say, well, you're only getting one, and this is going to be it, and it's definitely not going to be the other one, and then you lose all of your chances, if that makes any sense.

DR. COLLIER: This is essentially what it would look like, is you would have Alternative 2, which was that first thing we talked about, that eastern edge up on the expansion, and then the Alternative 3 would be on this southern part that you guys were just talking about, and so this is the structure that I am envisioning. It would have to go through the IPT in order to get it all through, but this is how I would envision setting it up right now.

AP MEMBER: I was a little concerned about the wording there, where it says, "trawl area in the Oculina Bank", that people might get the impression that they would be trawling on coral.

AP MEMBER: It's actually offshore of the coral.

AP MEMBER: Right, and so stipulate that the setting of the boundary was imprecise for the original HAPC?

AP MEMBER: The Oculina Bank Experimental Closed Area actually ended up being offshore of where the coral actually was, and the rock shrimpers weren't fishing in the coral, and so then they expanded that, and then they did expansions to the north, and I think they adjusted the boundary to the experimental closed area and shifted it inshore.

There was like two little legs that used to stick out, and then they extended the line straight down to include all of the coral, but you're right that we don't want to -- We don't want to give them the impression that we're trawling in the Oculina Bank, and so can you put it back up again, the wording, Chip?

AP MEMBER: In the Oculina coral.

AP MEMBER: Well, it's actually -- We want an allowable trawl area in the Oculina Bank HAPC. It's within the Oculina Bank HAPC and not actually on the coral, but it's still inside what is now the HAPC, even though the HAPC doesn't include a lot of coral.

MS. SOLORZANO: Should we word it that due to recent studies showing that there is not coral on the eastern edge?

AP MEMBER: We had a joint meeting with the coral committee in -- It was at Cocoa Beach, and I don't remember how many years ago, and the coral committee actually agreed that there wasn't coral in that part of the HAPC and that they didn't have a problem with us removing the boundaries, but those minutes somehow mysteriously weren't recorded, and so there is no record of the whole afternoon part of that meeting.

MS. SOLORZANO: Yes, they said they lost those minutes. I was at that meeting, and I remember.

AP MEMBER: The recorder never got turned on. That's what they said.

MR. MERRIFIELD: Okay, and so does this meet the motion as we want it to be presented to the council? Who is making this motion?

DR. COLLIER: **Marilyn indicated that she was making the motion. The motion reads: Add an alternative to consider adjusting the eastern edge of the Oculina Bank HAPC south of the northern expansion in Coral Amendment 8 further west to include historical trawl areas and add an alternative to consider an allowable trawl area in the Oculina Bank HAPC south of the northern expansion in Coral Amendment 8 further to the west to include historical trawl areas.**

MS. THOMPSON: I think they're two separate things. I think they need to be separated. It's going to be either one or the other.

DR. COLLIER: We can add both of these as alternatives.

MS. THOMPSON: All right, and so we'll keep the motion the way it is, but the way it's going to be submitted is two different alternatives?

DR. COLLIER: That's correct.

MS. THOMPSON: I will second the motion.

MR. MERRIFIELD: Any further discussion? Actually, I think was Laurilee's father that actually was a proponent of creating this HAPC in the first place, because he believed that this was a very viable rock shrimp nursery ground inside the HAPC itself, or inside the coral. If there is no other further discussion --

MS. THOMPSON: We always believed that the coral needed to be protected.

MR. MERRIFIELD: Yes. We'll take a vote. **All in favor of the motion the way it is; any opposed; any abstentions. The motion passes.**

MS. THOMPSON: Then, Chip, I just want to make sure that you have the right wording in your alternatives, too, because we added Oculina Bank HAPC to that second part there. Remember where you put it in the alternatives, in the sub-alternatives?

DR. COLLIER: That's just an example of what it was going to look like.

MS. THOMPSON: Okay.

DR. COLLIER: Going back to the draft options paper, the transit provisions for the shrimp trawl fishery, there are -- As I had mentioned, there were issues identified with the current closure of the shrimp fishery, or closure of shrimp, off of Georgia and South Carolina out to twenty nautical miles, and it was identified that some of the vessels would have a difficult time storing their gear below deck, and so we wanted to look at all transit provisions for shrimp trawl fisheries, and we

have -- At least in the South Atlantic region, we identified four different transit provisions that are on the books, and it's dependent on what kind of managed area it is.

I just described the transit provision right now for the cold-water area closure, and it reads as if you possess brown, pink, or white shrimp. It may be possessed onboard a fishing vessel in a closed area provided that the vessel is in transit. All trawl nets with a mesh size less than four inches, as measured between the centers of opposite knots when pulled taut, are stored below deck while transiting the closed area. For the purpose of this paragraph, a vessel is in transit when it is on direct and continuous course through a closed area.

Now, that is a very large area, and it extends from the border of the current closed area, cold-water closed area, and it goes from the border of Georgia and Florida all the way up to the border of North Carolina and South Carolina, and so that could be a very long trip, and should it be continuous through there? Some of the discussion at the Law Enforcement AP said we might want to get rid of the continuous transit and we might want to consider whether or not they need to be able to anchor, because they might end up sleeping out there one night or something like that.

Another option that is currently on the books is for the MPAs, and these are the deepwater marine protected areas. In this, it describes that transit means non-stop progression through an area, and you will notice that it doesn't say a direct and continuous course, and there is also a difference in what stowed gear means. A trawl net, or try net, may remain on deck, but the doors must be disconnected from such net and must be secured.

Similarly, there is similar language in the spawning SMZs, and these areas were recently closed and identified as potential areas where spawning might occur for snapper grouper species. These are very small areas, much smaller than the deepwater marine protected areas, and I believe between all five areas that it's like twenty-one nautical miles that are closed throughout, ranging from North Carolina all the way down to Key West.

Then we have the regulation for the Oculina Bank HAPC. To fish or to possess rock shrimp in or from the area, except a shrimp vessel with a valid commercial vessel permit for rock shrimp that possesses rock shrimp may transit the area if fishing gear is properly stowed. For the purpose of this paragraph, transit means a direct, non-stop continuous course through the area, maintaining a speed of five knots, as determined by VMS and a VMS ping rate of one ping per five minutes. Fishing gear appropriately stowed means that doors and nets are out of the water.

The council also wanted us to look at different areas, different management areas, and so we included language that is from the Gulf of Mexico. They have protected areas there as well. For their protected areas, transit means non-stop progression through an area. Fishing gear appropriate stowed means a trawl net may remain on deck, but the trawl doors must be disconnected from the trawl gear and must be secured, and then, for closed shrimp areas, they had slightly different language, or different language. A vessel that does not have a valid South Atlantic -- I changed what language was in the Gulf into South Atlantic, and so this is Gulf language that I have converted, but a vessel that does not have a valid South Atlantic shrimp permit, as described in Paragraphs A and B, may possess shrimp when in transit in the South Atlantic EEZ, provided that shrimp fishing gear is appropriately stowed. For the purpose of this paragraph, transit means non-stop progression through the South Atlantic EEZ. Fishing gear appropriately stowed means trawl doors and nets must be out of the water and the bag straps removed from the net.

Then there is two more alternatives that we added in there, and these are for transiting in the northeastern part of the Atlantic Coast, and so vessels may transit the area, provided that bottom-tending trawl nets are out of the water and stowed on a reel and any of the other fishing gear that is prohibited in those areas is onboard, out of the water, and not deployed. Fishing gear is not required to meet the definition of not available for immediate use, and I will show you what "immediate use" means. That's defined in their statutes, and then they also have, in the Northeast, that a vessel may transit the area, unless otherwise restricted, provided that its gear is stowed and not available for immediate use, as defined below.

A vessel may transit the area provided that there is a compelling safety reason to enter the area and all gear is stowed and not available for immediate use, and I will scroll down and show you what "immediate use" means. Hold on one second. Not available for immediate use means that the gear is not available for fishing and is stowed in conformance with one of the following methods. Nets, below deck stowage, and the net is stored below the main working deck from which its deployed. The net is fan-folded and bound around its circumference. On-deck stowage means the net is fan-folded and bound around its circumference. The net is fastened to the deck or the rail of the vessel, and towing wires, including leg lines, are detached from the net. These are different regulations that occur throughout the eastern side of the United States.

AP MEMBER: That's an awful lot of work.

DR. COLLIER: Those stowage requirements?

AP MEMBER: Yes. Taking leg lines and door lines and all that off -- I mean, when you put them back on, you have to make sure that you've got them lined right back up right, and you have to watch your crew, because they will be -- It's a mess.

MR. MERRIFIELD: What do we need to do here, Chip? Do we need to determine in the -- Because we defined this in Coral Amendment 8, and so are we just relooking at that, or do we need to say -- Do we need to try to figure out something that is going to consolidate these into one, or what were you looking at trying to accomplish here?

DR. COLLIER: What the council was really looking at was do we need to have a consistent regulation for what transit means for the shrimp trawl fishery, and the second part they were looking at is do we want to adjust the language for that cold-water closure area, the transit provision from that, and, in talking with the Law Enforcement AP, they did indicate that there were differences in the areas and recommended that some of these areas not be adjusted, because there are reasons why we have different regulations for those areas. However, they thought that, for that cold-water closure, Alternative 2, like it's written for the MPA, might be a good option. That's the one where the trawl doors must be disconnected from such net and must be secured.

MS. SOLORZANO: "Appropriately stowed" means down below, according to your other thing, and do you know -- They don't know how much work is involved in that, but a lot.

MR. MERRIFIELD: Frequently, the way -- Why don't you describe how normally they would be transiting or in some directed motion, not fishing, that assures that they're not fishing?

MS. SOLORZANO: First off, they're out on the outrigger, and they're tied up in the rigging, and the bags are hanging over the deck. You're clearly not with the intention to drag, because you have lifted everything and cleaned it up and jacked it up, and you're running, and it's pretty evident what you're doing. You're not planning to drag. That in itself is a fifteen or twenty-minute process just to get them up and get that -- If law enforcement comes to you, if your nets are trailing in the water, you have intent or you have been doing it, and it's pretty evident, and so, if they're up in the air, if they're jacked up or tied up and the bags are hanging there and they're not dripping water from being trawling and fish falling out of them, you're probably innocent.

It takes a little time to do that. To pull everything on the boat and take everything and unhook it and store the doors -- I mean, that's -- Appropriately stowing the doors down below and the nets is a lot. Even unhooking them and rolling them up into this fan ball and securing them in a lot more -- It's hours of work, and what if you're in rough weather or people can be harmed by doing that?

Very often, the guys just jack everything up, and sometimes you'll slide your doors in and sit them on the deck, if you're going to make a long run, but you don't go unhook everything. That's like no one is going to go unhook the leg lines and unhook the wire cables, wire ropes, which, if somebody wanted to complain about that, they could say your cables are hooked to your doors. They could go really into a big -- They could open a huge can of worms with that wording, and it's just crazy.

MR. MERRIFIELD: The try net, what about the try net?

MS. SOLORZANO: The try net, that's pretty easy to get that on there, and it's a loose net, and you can pull it in and set it on the deck. The try net, yes, you can have that on the boat not a problem, but you don't want to unhook everything. It's a lot of work, and most people that are running a long distance are either jacked up, and they may have their doors sitting in the rack, but they don't have them unhooked and stowed, and they're just sitting in the rack. They are not intending to work with them in the door rack. Stored down below, I don't even know where you could --

MR. MERRIFIELD: But onboard and not on the outriggers.

MS. SOLORZANO: Right, and that would be onboard, but that's not always the case. Most guys have got them out until they get to the mouth of the channel or inside, before they ever start --

MR. MERRIFIELD: This is why we've got to be specific. I mean, can the doors be on the outriggers or have they got to be in the racks or on the deck or --

MS. SOLORZANO: It depends on the weather situation. If it's too bad to send somebody out there to pull them in, you're not going to send crew -- You're not going to go out there and you're not going to start pulling this stuff in if the weather is really rough. You can run on up until you get insider where it's calmer and then put your men to work, or women to work, and bring it in.

MR. MERRIFIELD: So what assures law enforcement that there is no fishing activity?

MS. SOLORZANO: Out of the water. The bag straps, that was a Gulf issue, and, if you don't have any bag straps in your bags, you are not going to put your nets in the water. That's a pretty good --

AP MEMBER: You are not catching anything. It's just funneling straight through if the bag straps are out.

MR. MERRIFIELD: I am just trying to get the questions out there that need to be asked, so that he can write down the right notes that says this is how --

MS. SOLORZANO: I mean, you could pull the bag straps out.

MR. MERRIFIELD: The bag straps is a good thing, because the bags won't hold anything without a bag strap.

MS. SOLORZANO: That's easy enough to do with rough weather. It's easiest to do, of the alternatives.

MR. MERRIFIELD: If the bags are hanging, yes, it's easy to pull the bags.

AP MEMBER: Is that the puckering string on the cod end?

MR. MERRIFIELD: Yes. Do you need more information, or do we need to make a motion here that says what we think should be the definition?

MS. THOMPSON: Well, you've also got -- Like, for the rock shrimp, you've got a provision for VMS ping rates, but the inshore boats don't have VMS, and so, if you're trying to get it all into one motion, do you remove the VMS requirement for rock shrimp boats, or do you put in a sentence that says rock shrimp boats must have the VMS and must be running at five knots?

DR. COLLIER: Well, I think what we can do is recognize that these areas should be treated differently and maybe not consider recommending changes for the Oculina Bank HAPC and maybe not consider making changes to the spawning SMZs, because those areas are so small that they aren't likely to be impacted, and then the deepwater MPAs -- I am not certain if fishermen actually go around those or if they even transit them. If they're not going around them or transiting through them, is there a need to change the regulation for them?

MR. PHILLIPS: When I talked to John Wallace about this, I think that this suggestion was doors out of the water and nets in the rigging, and I don't think he would have a problem with having the bag straps out, and that would cover all of the boats under all of the conditions, and so I think that's what John was leaning towards. Thank you.

MS. THOMPSON: So then you wouldn't need the provision for the VMS at five knots, which sometimes you can't run five knots when it's really, really rough, and so everybody would be the same. I like that.

MR. PHILLIPS: Everybody would be the same, because, like you said, a lot of the boats don't have VMS, and so that regulation like that would cover everybody under any kind of condition.

MR. MERRIFIELD: That changes the regulation then, because we have geofencing that increases the ping rate once you enter a HAPC.

MS. THOMPSON: It would save us money.

MR. MERRIFIELD: It would save you money on ping rates.

MS. SOLORZANO: We had the situation this past year where the boats were running in, and they called me and said, you know, we're transiting across the bottom, but I can't make five knots. They were near it, and I said, well, we can call in, but, yes that has occurred.

MS. THOMPSON: **I will make a motion that we go with the language that Charlie just presented.**

MR. PHILLIPS: One other thought is you may want to talk about transit without stopping, because they did make a note that it's a large area, and, if somebody wants to anchor up, they may need to, and so you may want to consider that in your motion.

MR. MERRIFIELD: I don't think anybody, at this point in time anyway -- Marilyn, would there be any need -- I mean, nobody anchors in the HAPCs, and so our transiting is specifically going across a HAPC, and so you would not want to anchor in a HAPC, and so I don't -- It's very long, but it's very narrow, and so, most times when you're transiting, you're just shooting straight across and anchoring on the inshore side, and so --

MS. THOMPSON: I think Charlie is referring to the cold-water closure, which is like two states long, but I think that, if a boat is anchored and its doors are out of the water and its nets are hanging in the rigging, it's pretty clear that it's not fishing. **I would amend my motion to include the language that boats can anchor as long as the doors are out of the water and the nets are hung in the rigging and that the bag straps are removed.**

MS. SOLORZANO: Yes, because a lot of them you can't get -- Sometimes you've just got to stop, and you can't make the run.

MR. MERRIFIELD: Is that a second to the motion?

MS. SOLORZANO: I will second the motion.

MR. MERRIFIELD: Any discussion? All in favor, raise your hand --

DR. COLLIER: Hold on one second. I wasn't all that clear. I am trying to get the language that you --

MS. THOMPSON: Should you just remove the words "non-stop", or do you need a whole sentence about how the gear needs to be if you're anchored?

MR. MERRIFIELD: Does that sound good?

DR. COLLIER: **The motion reads: Transit means direct progression through an area unless anchored. Fishing gear appropriately stowed means trawl doors out of the water, nets hanging in the rigging, and bag straps removed.**

MR. MERRIFIELD: Okay. We'll do that again. We've got a second from Marilyn.

DR. COLLIER: You would want this for all areas?

MS. THOMPSON: Yes.

DR. COLLIER: Okay.

MR. MERRIFIELD: This is a definite change to the last provisions.

DR. COLLIER: I know there will be some concern on trying to identify what is trawling around the Oculina Bank, and I am just bringing that up as a discussion point.

MS. THOMPSON: Well, we identified trawling as the forward motion of I think three-and-a-half knots, or three knots, something like that. It's been discussed and discussed and discussed.

DR. COLLIER: Less than three knots, yes.

MR. MERRIFIELD: But that would be -- So what's the concern?

MS. THOMPSON: Well, the five knots was to differentiate between transit across the reef and trawling, and so --

MR. MERRIFIELD: Right, and here we're saying the trawling -- If you're transiting, your gear is -- Transiting is direct progression.

MS. THOMPSON: Yes, but the VMS satellite can't tell whether your gear is in the rigging.

MR. MERRIFIELD: So do we need to address that transit, which would keep that ping rate increase in place? I mean, does that still need to be in place?

DR. COLLIER: I will need to think about that some more and really read into exactly how everything was created and why it's there, and so I can give you a better answer next time, and we can definitely put this in and consider it. As we further develop any of these actions and alternatives, we're going to get more description and more details on why they're there and the pros and cons of each one.

MS. SOLORZANO: The situation is now that the boats are trying to get -- This cold-water closure is happening now, and people are needing to transit and move through. Is there any sort of emergency ruling that can be allowed to let these boats go ahead and transit through and not cite them, because they're running home and there's a nor'easter blowing and you're not going to deck everything and unhook everything and store it down below, and they're coming from Key West to South Carolina?

What would you -- These guys are going to run through those areas, or Georgia, and they're going to be coming home, a lot of them, soon, with shrimp onboard, because a lot of them are going to bring them home and unload them. It's getting that time of the year, and so this is an immediate situation, and I know you're not going to give an immediate answer, but that's something that should be addressed now.

DR. COLLIER: What I will do is tonight I will look at the requirements for emergency action and try to pull those out and see what those requirements are. It's not up to us whether or not it meets the requirements of emergency action. It's up to the National Marine Fisheries Service, but I can pull those up and provide them to you, and we can look to see if it actually meets those definitions.

MR. MERRIFIELD: We need to vote on this. **All in favor of this motion as it stands; any opposed; any abstentions. It's unanimous.**

DR. COLLIER: All right. That's all I had on that one.

MR. MERRIFIELD: Let's take a short break, and then we'll come back for this presentation on some of the research that's been done.

(Whereupon, a recess was taken.)

MR. MERRIFIELD: We're going to continue on now with a presentation on the Southeast Deep Coral Initiative.

DR. COLLIER: Unfortunately, Daniel could not give this presentation, and he would do a much better job than I, but I will go through it for you guys. More or less, the Southeast Deep Coral Initiative, it's occurring in the South Atlantic region and the Southeast region. It's occurring from 2016 to 2019.

It's part of the Deep Sea Coral Research and Technology Program, and it came about after the reauthorization of the Magnuson-Stevens Act in 2009, and that was the first year it had started, and it's to develop science to address fishing and other threats to deep-sea coral, and what we're talking about with deep corals is greater than 150 feet, and, generally, these corals aren't photosynthetic coral, or azooxanthellate. What they want to do is integrate expertise across NOAA, and what it does is it provides funding for studies and fieldwork initiatives.

These initiatives are three to four-year efforts, and a lot of the initiatives, what they're doing is research expeditions, usually on NOAA vessels, and sometimes it will be just mapping trips, and some trips will include an ROV, such as the Jason, and that's described here, or pictured here, and what they're doing is looking for coral and species associated with coral.

The Deep-Sea Coral Research Program initiatives, they have occurred throughout the seven different regions, and the first one occurred here in the Southeast Region from 2009 to 2011, and that was just done in the South Atlantic region. In 2013 to 2015, the work was done in the Northeast region, and, from 2010 to 2012, work was done on the west coast, from California to Washington, and then, in 2012 to 2014, work was done in Alaska. Then the most recent work was done in the Pacific Islands, from 2015 to 2017.

The initiative that's currently going on is going on from -- It started in 2016, and it will continue through 2019. In addition to just the South Atlantic area, they have added work to be done in the Gulf of Mexico as well as the U.S. Caribbean. They recognize that this is a huge area and they cannot cover the entire area, but what they're hoping to do is focus on high-priority areas, and they have identified the high-priority areas as areas where fishing is occurring as well as areas where there is potential energy extraction or development.

One of the programs that they've been working on, and I'm think that I am going to be talking about this slide properly, but this is -- They have been working with the deep-drop fishermen in the Caribbean to identify important coral habitat areas and the potential impacts of fishing on those deep coral habitat areas.

They did a survey of scientists, in order to identify some of the high-priority areas, and it included council members and NOAA scientists and academic scientists and people from the Southeast Region as well as people throughout the United States. What they want to do is they start off first with a review, one, of the management priorities, and this can come from the councils or the sanctuaries, and it also looks at past data that's been collected, and they do data-mining, looking into federal agencies and academia.

The next part, which they're working on now, is they have completed some of their review, and they are beginning to collect some of the data. That mapping data that I showed you earlier from 2017, that was some of the information that was collected under this program, and they're going to continue to collect more information. The Okeanos Explorer is going to be going out in the Southeast region beginning I guess next month, and they're going to do a second trip later on in June. The first trip is associated just with mapping, and the second trip is going to be associated with mapping and ROV work.

They are going to continue to map, survey, and collect samples. Then, after that, they're going to communicate, both internal and external, and they're going to have meetings, seminars, and reports, and then external publications, and all data will be publicly available. Some of the communication is presenting at meetings just like this and getting the information out to you guys and making sure that it's available.

Other areas where this information is publicly available, it will be published in the literature, and they have developed some ID manuals for some of the deep-sea species, and then they also have databases, such as those I guess pictured down there at the bottom, and one is actual locations of coral, and then the second one is the locations of mapping data that is currently available, and so all of this information is publicly available on databases.

Then what the final goal is, it's to contribute to management recommendations. What they want to do is make information that's available and relevant for management, and so there has been some -- In the science plan for the Southeast Deep Coral Initiative, they have identified some management issues, research questions, and expeditions and projects.

The first one, as I mentioned before, was looking at some of these deep-dropping issues and the potential impact to deepwater coral, and that's being done in the U.S. Caribbean. What they're doing there is actually working with fishermen, and the fishermen are taking drop cameras and

dropping into the area to potentially identify coral that they're fishing around and potential impacts to the coral.

In the Gulf of Mexico, they have some high-priority areas identified here, and some of these areas are potential areas where fishing might be occurring as well as potential areas for energy production. In the South Atlantic, these are some of the high-priority areas that we have identified. Once again, these are areas for fisheries that we have mapped here, and there is also the potential for energy production in the South Atlantic region. Going deeper into all of our marine protected areas, or protected areas, we have the marine protected areas, and we have CHAPCs as well as the spawning special management zones.

These are areas that were identified as deepwater research priorities. Going from north to south, we have some areas in North Carolina, North Carolina Canyons, and then going down to the Savannah Banks, Charleston Bump, Stetson Bank, Blake Escarpment, Blake Ridge. Going further south to Oculina Bank and then further south from there are sites within allowable fishing areas with probable deep coral habitat of Abaco Bank, Bahama Bank, Florida Straits, Portales Terrace, Agassiz Valley Canyons, and then Deep Reefs of Cuba.

In each of the different regions, there were priority research questions, and, a lot of times, you can think of like large-scale questions, essentially in data-limited situations, like we tend to have in the Gulf of Mexico, the South Atlantic, and the U.S. Caribbean. Some of those data-limited questions are exactly what species are in the area, what is the location of the ecosystem, what are the fishery impacts, and what are the human impacts?

Then, as you get more information, you can begin to develop what is the accuracy of habitat models, and so we have some of the habitat models that have been developed for the Gulf of Mexico and South Atlantic, and they are also interested in genetic connectivity of the species, and they also want to understand the community structure drivers and then human activity, buffers, and distances in the Gulf of Mexico, and then we're also looking at differences inside and outside of MPAs in the South Atlantic.

The main strategy here is to, one, consider management relevance, research priorities, and whether or not these are achievable, and, ideally, what you're going to do is hit a spot that has overlapping of all three.

Some of the research projects, there's been some data mining done, and this is going to be done for all areas, and the leads for the data mining are listed here. Work has been done to develop some deep-sea species guides as well as continue to develop the geodatabase, and some modeling is going to be reinitiated.

As I had mentioned before, we were looking at a model developed back in 2012, and there are additional techniques that are available now, and so they're considering new modeling techniques for the South Atlantic region. They want to establish some environmental monitoring, and then there is some opportunities for fishery and citizen science to be conducted, and I talked about that Caribbean pilot project with the drop cameras.

In the South Atlantic, they're looking at Harbor Branch Oceanographic Institute, HBOI, and some of their data from 1986 to present, and they're also looking at data from the Nancy Foster in 2011,

the NOAA Ship Pisces in 2010, and then the Edwin Sea Link in 2005. Then, in other regions, they're looking at similar datasets.

This is the deepwater species guide that's been developed, and you can see that there are several different species here. I believe this document is available online, and I can send it to you guys. Here is a geodatabase for existing and protected areas, and we also have -- As you saw before, we have the distribution for previous submersible dives, and we also have museum and visual records and habitat suitability models. All of those are included in that tool that I presented to you guys, and so you can extract all of that information, or look at that information, whenever you want.

We also included multibeam bathymetry, and they have information on satellite bathymetry, place names, and pipelines and platforms. Those are all included in the geodatabase, and it's providing modeling support to conduct habitat suitability models. One is doing the field testing of existing models to calibrate it and then also develop new models for the U.S. Caribbean. For fishing, they want to do models on fishing activity as well as surrounding areas around those proposed protections.

These are a couple of different monitoring devices that they're looking into. Some are looking into what habitat conditions are and putting out little platforms to monitor habitat conditions over time, and other ones are looking at in situ models, where they go out sampling and will take environmental data as they are sampling the area.

As I mentioned before, this is an example of the drop camera, where they were working with fishermen in the U.S. Caribbean to identify important coral habitat areas, and so some of the fieldwork -- These are some of the areas identified. It's the R/V Manta, and they did some ROV work around the Flower Gardens, and they also did some ROV work and mapping conducted from the Nancy Foster in Pulley Ridge, and they did some mapping off the Oculina Bank with the Nancy Foster, and then, finally, up in the North Carolina Canyons, they did some ROV work aboard the Pisces. In 2018, the Okeanos Explorer is going to be in the South Atlantic region, and there is two different proposals for 2018 as well as two proposals for the Nancy Foster in 2018.

If you guys want, you can listen as they're doing some of this work. They're going to be doing some of the live work with the ROV on the Okeanos Explorer, and so you can listen in and ask questions of the scientists as they are doing the work, and there's also going to be opportunities for Teachers at Sea as well as undergraduate scholarship work. I will send out the dates of when they're going to be doing those.

This is a list of all the partners that they have so far. They have been really good about reaching out to the councils and working with the councils in order to make sure that the data that is being collected is relevant for management, and, with that, I will do my best to answer any questions, but I tried to hit the highlights.

MR. MERRIFIELD: Any questions about the research? I have a question of all you guys that are out there on the water. What are you seeing in terms of the Gulf Stream rate of flow? I have been hearing a lot of things about it slowing down, but I'm not sure we're seeing that on the water. Are you guys seeing how fast the Gulf Stream is traveling?

AP MEMBER: It seems normal for the time of year. I haven't noticed any change.

AP MEMBER: (The comment is not audible on the recording.)

MR. MERRIFIELD: I have heard actually that it's been running faster, above five knots. I mean, everybody that I talk to is like it's above five knots a lot. I was just curious.

DR. COLLIER: That is an interesting question, because there are definitely some scientific publications that have come out recently indicating that the overall Gulf Stream has slowed, and it's the entire gyre and not just in the South Atlantic region, and Roger and I were talking about fishermen, and I used to work a lot with snapper grouper fishermen, and they were indicating that the currents seem to be increasing.

MR. MERRIFIELD: Every report I get, that's what I'm hearing, is that it's above five knots, and it's probably cyclical, and we're in a cycle now where I think it's faster and not slower.

AP MEMBER: Some of the things that were mentioned today was about the coral, and you had mentioned that there is some historic areas that you used to be able to fish in that are now in the closed areas, and I'm seeing, of course, pictures, and I see lots of orange dots, and you're saying that a lot of this research can be found on the internet as to where -- It will give longitude and latitude and what coral species they saw and things like that, and I would like to get that information. The other question is there has got to be a growth rate of this, because I've heard reports that they're actually trying to grow it in farms here, and they're like farming it, and is that possible?

DR. COLLIER: I know they are working on transplanting like Elkhorn and Staghorn coral that are endangered species, and so those are shallow-water. I am not aware of any work being done for some of the deepwater corals.

AP MEMBER: Yes, because I was wondering the rate of growth, because we're looking at stuff here, and if it's already -- If there is some historic fishing, it must grow at a fairly advanced rate, if there is ten years or twelve years and not like hundreds of years.

DR. COLLIER: It's generally thought that these things grow very slowly, some of these deepwater species, where it's like a centimeter a year, if that, and so, yes, it's going to be variable among species and then whether or not these -- Some species don't even form coral mounds and what they're doing is they're just individual sprigs, kind of like these that are shown up here, where they are branches of coral, and so they're not making those huge mounds, and something like a black coral -- Those things have been aged up to over a thousand years.

AP MEMBER: Yes, because these type of fan corals, we get them all the way up to Cape May in New Jersey and Maine.

MR. MERRIFIELD: Okay. If there is no other further questions, I think we're finished with that section. Does everybody want to adjourn at this point and then re-gather in the morning at nine o'clock? Does that sound good to everybody? All right. The meeting is adjourned until nine o'clock tomorrow morning. Thank you.

(Whereupon, the meeting recessed on April 25, 2018.)

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APRIL 26, 2018

THURSDAY MORNING SESSION

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The Joint Golden Crab and Deepwater Shrimp Advisory Panels of the South Atlantic Fishery Management Council reconvened in the Daytona Beach Resort, Daytona Beach, Florida, April 26, 2018, and was called to order by Chairman Mike Merrifield.

MR. MERRIFIELD: We'll start with regulations for removal.

DR. CHEUVRONT: Thank you. Just to give everybody a little update on what we're talking about here, you may remember that, a little over a year ago, President Trump issued an Executive Order that was looking to reduce the regulatory burden on the American people through regulatory reform, and the way that that got translated, that people heard about, was that, for every new regulation, they needed to remove one, and so it was basically like the Snapper Grouper SG 1 permits. You have to buy two to get one to get into the fishery, and it's sort of the same thing they were talking about with regulations here.

However, there is a dollar value that was attached to that amount, and, any single regulation in fisheries, we don't have a single one that would meet that threshold, and I think it's about a hundred-million dollars that was the requirement. However, what happened is this got filtered through all levels of government, and the Department of Commerce, through the National Marine Fisheries Service, NOAA Fisheries and all, they have requested that all councils look at regulations that can be removed.

The way that this can be done is, just because it may be a fisheries regulation that could be removed, it doesn't mean that it would be used to help offset another fisheries regulation. It could be anywhere within the Department of Commerce, and so just, because of -- We may be looking at some fisheries things that could be done, or it could apply to NOAA Weather. It doesn't have to stay within fisheries, and so they're just looking at combined values and things.

The councils were asked to get to NMFS their plan for how they were going to do this by last December. Then, by June of this year, they were to then file their results of the work that they have done, and so what we have done is we got that plan in place in December, and the council staff, the technical staff, for all the species that they work with, they went through and identified any regulations that could be removed, and we're looking at ones that are unneeded and unnecessary or outdated. That was the primary thing.

The council also requested that we start looking at rules that need to be modified as well and just sort of looking at the whole process as a general rules review, looking at things that just aren't right, and I will show you some of the things that we came up with. Anyway, we're at the point now where we are speaking to all of the advisory panels, and we're going to be talking with the SSC next week, and we're compiling it all, and I've been keeping a running list of all of these

things, and I wanted to show you what I've got so far that involves shrimp and golden crab, and then we'll talk about whether there are other things that you all would like to recommend.

The first thing that we have that clearly is -- That could probably be removed because it's outdated are some of the initial regulations that went into place to establish the controlled access in the golden crab fishery, and it had to do with the establishment of permits and things and how you appeal if you didn't get a permit initially and things like that. That's all done and gone, and that's not going to happen again, and so those regulations, and those are the ones that I have outlined here in this document, and this document was included with your briefing book materials. We can get rid of these, because they are simply outdated.

Now, there are some other things that the council is looking at changing, and some of it will have to be done through the management plan process, but one of the things that I want to point out is that, in terms of permits and fees in general, typically now what we're doing is you get mailed all the stuff you have to do and fill it out and send it back. That's all going online, and so that's going to have to change some of the way the regulations are set up. It's really hard to believe that it's still all done by mail, but isn't that so 1950s? Anyway, that's the way it is.

Then we have some snapper grouper things. If you want to go over some of the snapper grouper stuff, we can do that, but we can -- We will jump ahead and look at some of the shrimp. One of the things that the council is looking at is removing the operator cards, operator permits, from the dolphin wahoo for-hire industry, and, because the only other fishery we have that has operator permits in it is in shrimp, we thought perhaps the council might want to look at considering that in the shrimp fishery as well, getting rid of those operator permits, but I specifically wanted to have a chance to speak to this group to see if you all wanted to weigh-in on that and whether you think that that is worthwhile and should we keep it or should we not keep it, whatever recommendations you all might have on that.

MS. SOLORZANO: It's kind of okay with us to keep it, in my opinion, because, when guys are running your boat, if there's a citation in that fishery, they can cite the captain, and he's supposed to have an operator license, unless that's going to change, instead of it being the owner or the person who is the owner of the boat being fully responsible. They have to accept some responsibility if they have the operator license.

DR. CHEUVRONT: Let me follow-up with a question. One of the reasons why they want to get rid of it from dolphin wahoo is that they're simply not being used, and they think that it's just a hassle to have to deal with these things, because you have to go and get the pictures taken and all the other stuff and do this, and they're saying that nobody is ever using them. Are they being used in the shrimp fishery?

MS. SOLORZANO: Being used at -- I mean, if they're cited, and I don't know anyone who has been cited with them, but we keep them. When they send us the renewal, we update them and renew them. I mean, no one really asks you for them, but, if there is citation, it could -- That was one of the reasons why they made that, because, when it initially was back twenty years ago, or fifteen years ago, when we started that, it was to prohibit the owner from -- You can't control if the captain gets inside the box. You're the owner, and you're at home, and so for them to be able to accept the responsibility, they required an operator license, and I think it's like twenty-five

dollars and a picture, but I don't think it matters one way or the other. They don't ask for it, but it is a -- It kind of protects the owner just a little bit.

MR. MERRIFIELD: It is a hassle, because I've had -- Since they have not had it and they've had rock shrimp, and then it's a -- You have to quickly try to figure out how to get that operator license for them, but I didn't think about the fact of insulating the -- I guess we need to ask the question of, legally, does it do that? The issue is -- You understand the issue, and so where is the --

MS. SOLORZANO: That's the reason -- That's how they got us to implement the operator license, by telling us years back -- Now, they've told us a lot of things. I have been coming to these for thirty years, and I've heard it all, again and again and again and again. With that being said, they told us that it would be a requirement to have the operator license, because it would help aid in the owner not -- The captain would get the citation, because he's supposed to know. He takes responsibility that if that boat goes there that he gets the citation. It still reflects back on the boat, but he will be the one responsible to pay as well.

DR. CHEUVRONT: That's the way that I understand, as Marilyn just described, is the way they're supposed to work, and so there is a sense of protection, I guess, for the vessel owner, and it holds responsibility with the captain. The other thing is, if the captain moves from vessel to vessel, then, if they have a citation, that citation travels with them, and so the owner would know. I think Charlie is going to speak to that.

MR. PHILLIPS: Yes, and snapper grouper does not have to have an operator card, but I do know of at least one case, probably four or five years ago, or maybe a little longer, where a guy was -- I think he was in an MPA, and the captain got charged and the owner got charged. The owner wasn't on the boat, but they can charge the captain, whether he's got an operator card or not, because I've seen it happen. I don't think they ever got any money from him, but he was involved in the case, and it did have a fine attached, I think.

MR. MERRIFIELD: But the question is will an operator card keep the owner from being -- In that sense, if the captain had a card, would that prevent the owner from being --

MR. PHILLIPS: Probably not. I would suspect that -- I am thinking that -- I am not a lawyer, but you could say that the owner would have benefitted because they caught shrimp in an illegal area, and so they are possibly -- But I don't think having an operator card is going to totally take the owner off the hook. I just don't think it's going to take the owner totally off the hook. Could it help? Yes, possibly.

MR. MERRIFIELD: The other thing is that citation would follow with that captain, which is a good thing, because, if you're hiring captains, you want to know how trustworthy your captain is, and so there might be a reason to keep this one.

DR. CHEUVRONT: Okay. Then we have a consideration of looking at the establishment of coral HAPCs. At this point, they could actually be established through a framework, which is the shortened procedure for getting new regulations into place, but, considering the amount of significant public input that is needed before they can do that sort of thing, some folks maybe thought that it might be best to remove coral HAPCs from this framework and force it to go through a regular amendment process before they can be established in the future.

Basically, things get put into a framework that would be -- That the council wants to see happen quickly, because it's considered a relatively routine type of action. In this case, the coral HAPC is probably less likely to be considered a routine action, and so it was thought that maybe that could be considered for removal from here and put it through the longer process that it takes through a regular plan amendment, and so that actually makes it a little more difficult to get a coral HAPC in place, by putting it through the regular amendment, and I just wanted to see how you all felt about that.

MR. MERRIFIELD: I think that's probably a good thing, because I believe it took us at least two years, if not longer, for the Coral Amendment 8, and it was a process of working on the boundaries, and then we still are coming back and trying to correct, and so I think that's probably a good item for removal. Any other comments on that? Do you support the removal of that regulation, so that it's not so easy to put a HAPC in? Okay.

DR. CHEUVRONT: Then you all spent a fair amount of time yesterday talking about transit provisions, and so what we've done is we have captured all of the regulations for the Northeast, the Gulf of Mexico, and the South Atlantic for transit provisions, and, if you read through all of them, you can see that they really are different.

You all made a recommendation yesterday about the way you think that they ought to be, and so I think that would be combined with what we have here, because, basically, what I did is went through and pulled out all of the regulations that related to transit provisions, and it sure as heck makes a lot of sense to make them the same and make them actually doable, which I think the recommendation that you all gave yesterday and gave good reasoning for it, I think that suffices for this, and so I think we could say that the Shrimp AP has made recommendations for how transit provisions ought to be modified.

The other thing that we want to look at is some of the things that the other APs have given us is to eliminate the two-for-one requirement for the Snapper Grouper 1 permit, and, if not, at least have the council state what is their goal that they're trying to get to with that two-for-one, because, right now, it's open-ended, and so there needs to be some kind of a trigger that will stop that, because, theoretically, it could get down to where there are no more, or you could conceivably get down to one permit, if everybody kept doing the two-for-one. It's not likely to happen, but I'm just saying that's where it would go.

MR. MERRIFIELD: Do you know what the reduction has been as a result of that regulation?

DR. CHEUVRONT: I can't recall right offhand, but it's been pretty substantial. I remember when I was in North Carolina and I was doing some research with snapper grouper permit holders up there, and I think we identified, at that time, over 140 snapper grouper permit holders in the state, and I believe they are down below 100 now, and so I don't know. I think, if Michelle is listening, she probably can tell me what that number is, but I believe it's down below 100 now.

The turtle release gear requirements are considered to be overly burdensome for such a low frequency of occurrence. A lot of the vessels, and this came from the snapper grouper fishermen, because there are a number of smaller vessels out there that are fishing for these things, and to have to do things like carry tires and all this other stuff is really burdensome, especially to these

smaller vessels, and so they would like for the council to review this and to see if there are other, less-burdensome things that could be done.

The same sort of things regarding safety equipment, particularly, again, on smaller vessels. Some of the safety equipment is a bit much. Looking at circle hook removals, and part of it is based on where you are and things, but part of it is different species will bite on a circle hook, and there was some golden tilefish things that were brought up, particularly the buoy gear, and one of the things that was interesting that came up is one of the APs recommended and say why do we have to do these permits every year, and can't we just do them every two years instead, and so could we lengthen the period in which permits are valid.

That one, I think, was a really, good creative idea. It took me totally by surprise. I had no idea, and I don't know if there's any reason why we can't. I don't know if there is any kind of statute or anything that says that they must be done annually or if there is any way to get around it, but that would save a lot of the burden, not only on fishermen, but also on the Permits Office, which has an awful lot of work to do right now. If we could cut a lot of that work in half, that might make it easier for them as well as for those who have to obtain those permits, and they could probably even -- If you start getting violations or something, then maybe you have to get yours reviewed more often, but most folks are violation free, and so why couldn't we look into extending that time? I don't know, but that's one of the suggestions that people came up with.

Then there was the cut fish regulations. Folks are saying that a lot of the fish that they're catching, if it's got a shark bite in it, they have to release it, even if it's just part of the tail that's been bitten off, because it's considered a mutilated fish, and you can't keep that, because it looks like it's cut, and so they have to throw away an otherwise good fish, and so they would like to have that revisited so that they're not throwing away a fish that's perfectly viable.

Getting rid of tournament sales, particularly in Florida, because Florida doesn't seem to be enforcing the regulations on those, and then the crew size restrictions to determine for dually-permitted vessels who are both charter and commercial, and there are some crew size restrictions that force them into one category or the other based on the number of people they have onboard, and that was it for what I had, but what I wanted to bring up with you all is, is there anything else that you would like to recommend?

As you can see on these other ones, they just have the suggestions, and I am going to have to research that and go back through the Code of Federal Regulations to find the applicable CFRs for those kinds of actions, to pull them out and put them there. What I am looking for from you guys is, if you think there are things that could be modified or removed, to let me know, and I will do the research to find out where that is in the Code of Federal Regulations, but what I need mostly from you is the recommendation and the reasoning behind it, because we can't just say that I don't like it. Well, there's lots of things that are regulations that I don't like either, but we have to give them a good reason for why the council should recommend these to be reviewed or modified.

MR. MERRIFIELD: Any ideas out there of regulations that could be removed?

AP MEMBER: I am going to submit some at a later date. I am going to reserve my right to submit it at a later date to you in writing.

DR. CHEUVRONT: I will need it by the end of next week.

AP MEMBER: You know me. It's not a problem.

DR. CHEUVRONT: Okay, and I'm just saying, because I have a timeframe in which I have to have this document put together, and so, if you want to -- If anybody wants to submit something to me by next Friday, I should be able to get it in there.

AP MEMBER: What is the date it's required to be in by you?

DR. CHEUVRONT: Next Friday is --

AP MEMBER: I think you somewhere in June. When is your report due in?

DR. CHEUVRONT: When I need to get it into the report is what we're talking about and not when the report is due.

AP MEMBER: I understand that, but I'm just asking when is the report due?

DR. CHEUVRONT: I have to give it to the council -- It has to be published on I think it's May 22, but I have to write this report, and so I have to have it by May 4 to give me time to do it.

AP MEMBER: To do it by the 22nd, to publish it before June?

DR. CHEUVRONT: Right, before the June council meeting, and so, if you want to suggest anything to me, your deadline is Friday, May 4, by 5:00 p.m. Actually, if you're going to submit, I won't work on it until Monday, and so you can work on it through Sunday then, but I'm thinking in terms of --

AP MEMBER: We're talking days here, okay?

DR. CHEUVRONT: Yes, but that's what we're talking about, a week from Sunday.

AP MEMBER: Is there any reason why we weren't called in for advising or notified of this prior to?

DR. CHEUVRONT: This is the procedure for everybody. All of the APs received this information in their briefing book ahead of time, a couple of weeks ago, and so it was there for you all to look at, and the idea was that we were going to gather this information at this meeting, but, if you want a little bit longer, we can do that, and that's okay, but I've got to have everything by -- The SSC meeting is next week, and I'll be getting some information from them at that time, and then I've got to get into doing all of the research to find out which regulations, and that's no small thing to do, when you look at the size of the Code of Federal Regulations related to fisheries. I literally will have to do the research to find the areas that relate to each of these things. This is going to take me days of work to do this, and this isn't all that I do.

AP MEMBER: Got you. I will try to get as much of it done for you as I can.

DR. CHEUVRONT: I appreciate that. Thanks.

MR. MERRIFIELD: Any other comments or questions?

AP MEMBER: Is there any way to do online renewals instead of having to do that big old packet?

DR. CHEUVRONT: That's exactly what they're talking about doing. The regulations that are being -- That are outlined in here for strikeout for removal are things that have to do with mail-ins and all, and they are looking at how to do it by online renewals, which will save a huge amount of burden. The good thing would be finding a way that they can save the information that you submitted previously, because apparently the burden is of having to fill out everything every time, and so I think that's all being looked into at this point.

AP MEMBER: All right, because I just did mine, and it's the same thing every year, and it doesn't change.

AP MEMBER: Is this the overall permit process for all fisheries?

DR. CHEUVRONT: Yes, this would be for all fisheries.

AP MEMBER: Okay. Will there be a grace period or anything for those who are not computer literate, which we have a lot of fishermen that do a lot of their own stuff, and I'm talking the bigger ones have people, but the guy who is doing one boat and one permit, and a lot of them are not aware that we're changing this, and they could be waiting for something in the mail, and it doesn't come, and we've seen many people in history lose their licenses and permits over just this kind of thing, a death in the family or something else, and is there going to be a grace period for the transition, and I would say it should be about a year. That would be my suggestion.

DR. CHEUVRONT: Well, right now, the council is not involved at all in permits. That goes through the NMFS SERO Office in St. Petersburg. They have the Permits Office, and they're the ones who are working on this, and this is the kind of stuff that will have to be discussed, and I am sure they will work out at least a transition period to make this work, because, whenever they have done any kind of permit changes, they always have appeals processes, and all these sorts of things are all built into it, and so I'm sure they will do that, and I am fully aware of the fact that there probably are fishermen who don't have computer skills or computer access or whatever, and those kinds of things will be the kinds of things that have to be taken into account, and that will all be part of the discussion, and so don't look for this tomorrow. It's not going to happen right away. Trust me.

AP MEMBER: Yes, and, like when I'm saying phase it in, it's also something that they could have an option of doing it online or have it mailed to them, and they can apply the old-fashioned way, through the mail, instead of just doing away with it. You might save 75 percent of it by not having to mail it out, but still that 25 percent should have, one, a grace period, and two, the option to still send it in the old-fashioned way, the way they're used to. Some of the old-timers are tough.

DR. CHEUVRONT: The thing is that there will always be a comment period that should something not be done or the system be set up to a way that is not amenable to the way you think it needs to be done, then you can comment on that, and they will be forced to reply to that comment

specifically before any regulations can go into effect, and so there is plenty of way to get the involvement in on this, but I can't see them specifically trying to do things that will make it impossible for fishermen to renew their permits. I think they want to do it as efficiently as possible for themselves and for fishermen as well, and so, dealing with that issue, I don't know how they will deal with it. I don't have an influence on that.

AP MEMBER: So where would I find the comments on that, to put my comments in, or any of us, because we're commenting on it here, but there is a proper way of submitting our response to that?

DR. CHEUVRONT: As far as I know, there is no process appeals yet that has been established, because they have -- This is just in the very, very beginning stages of looking at this, and it will -- I think what we would have to do is, once NMFS decides that they are wanting to pursue this formally and do the change to the CFRs, what we'll try to do is make sure that they make it well known to us, so that we can send this information out to our advisory panels and other folks that we can get to -- For them to be able to comment on it. I think this is so early in the process that we've got the cart very far ahead of the horse right now, and so I think we'll be able to do that. We'll keep an eye out for that.

MR. MERRIFIELD: Thank you, Brian.

DR. CHEUVRONT: Thank you, everybody.

MR. MERRIFIELD: I think I saw a survey, and I can't remember who did the study, but the fisheries is like the seventh-most regulated industry in the United States, or sixth, and so this would be great. We're going to move on to royal red shrimp. We need to get Marilyn back in here, because she will have input on this.

DR. COLLIER: I will just give an update on what this is. What we've been trying to do, as council staff, is develop some of these papers and get background information from you guys, because you know the fishery best, and what we've been calling them are fishery performance reports, and I know that the royal red shrimp fishery isn't a federally-managed fishery, but there has been a significant change in landings in the past few years, which could raise caution, and so getting your input in the beginning will be very valuable, as opposed to hearing it after some ideas come up for management. Knowing what you guys are seeing on the water will be very beneficial, and we don't know much about royal red shrimp, and so any information that you guys can provide will be extremely useful.

We generally store these what we're calling fishery performance reports -- We put them online, and they are available, and you can see that we've done them for black sea bass, and they're working on -- I am trying to remember the ones that we've done so far, and I think red grouper, black sea bass, and they just completed ones for king mackerel, and I am drawing a blank on the other ones, but it provides background information to the scientists of what you guys are seeing, and it's extremely useful.

What I did was I just pulled some rough information that we had for royal red. Starting off with the landings, we have landings going from 1990 to 2000. You can see that, in general, the landings were under 300,000 pounds, and then, when you move over to the other column, from 2004 to

2016, you can see some high landings back in 2007 and 2011 and 2012 and 2014, 2012 and 2013 and 2014, and then it drops again back in 2016.

A visual representation is -- This is actually the number of trips here in this figure, and you can see 2012, and, as we had talked about, that was a high landings point, and it also had a high number of trips. 2014 had a high number of trips, and then 2016 had a high number of trips, and these trips came from the FWC's commercial landing page. If you look at that, it's a pretty nice little feature, where it gives you number of trips and pounds landed.

Going into the second graph, this is landings per trip. In red, I have rock shrimp, and then, in blue, that's royal red shrimp. You can see, for royal red shrimp, the peak occurred back in 2012, the landings per trip, and then it dropped to a low in 2016. Given some of these concerns, or given some of this data, this drop in the CPUE could be an indication of the fishery not doing well, the fishery not being targeted, the fishermen not going after those, and so any input you guys can have.

Also, other things that we look into are potential temperature impacts, whether or not the shrimp are moving further northward or they're moving to deeper areas, and this northward migration has been observed in the white shrimp fishery. They were observing, prior to this last cold snap, a lot of white shrimp in the Chesapeake Bay, and they were considering a fishery in the Chesapeake Bay, and so that's a species that is definitely moving northward. Other species have been observed to move deeper.

Another thing that could be of potential interest for royal red shrimp are parasites, and so blackgill disease, and white shrimp has definitely had an impact for Georgia through North Carolina, and it has been noted for northern red shrimp, and we're just curious if you guys are observing blackgill in royal red shrimp. Some of the questions that we go through for this is how has the fishery changed since it began in the 1990s, and if you guys will indulge me while I try to type down some notes, and so not everybody at once, but just a few comments on how the fishery has changed.

MS. THOMPSON: It's pretty obvious when you look at the two graphs. Your high years on red harvesting was 2012, 2013, and 2014, and those were very low years for rock shrimp, and so the boats are going to go where they can make the most money the easiest way, and it's much, much harder to fish for the reds than it is for the rock shrimp, because they're out in deeper water, and the tide is running harder, and they are fighting the tide with the rock shrimp, but nothing like what it is further offshore.

Then, in 2016, when you see that drop, we've been inundated with Argentinian imported red shrimp. All of the restaurant suppliers have them, and they are pushing them to the restaurants. They have sent us I don't know how many samples to Dixie Crossroads to try out, and they're totally tasteless, but they're cheaper than the domestic reds, and the restaurants are buying them, and so there is no market for domestic reds right now.

MR. MERRIFIELD: I think Publix has these Argentinian reds at a cheaper price than what we pay the boat. Marilyn, did you have some comment on the red shrimp fishery?

MS. SOLORZANO: Pretty much what Laurilee touched on. We have boats that are working it, and my son is trying to leave out now, and we had a lot of shrimp in the inventory, because he

couldn't move them, the red shrimp, because he was competing with the Argentinian or the imported royal reds, and so that's one of the big problems.

You also see years where there is not very many boats that are rigged or capable of working the red shrimp fishery. It's just tough and hard. It's a winter fishery, on top of the fact that there is so much cable and different things used, and it's just a hard fishery to work, but most of the reason they're not going is they don't have a market for it. This year, there would have been a lot of boats that would have worked red shrimping, because we didn't have a white shrimp season to speak of, and they would be out red shrimping if they could sell them, but the problem is selling them. With blackgill, there is not any blackgill in the royal reds, because they're just so far out and so deep, and so that doesn't seem to be a problem, on that question.

MR. MERRIFIELD: I think capable captains is probably another issue, too.

MS. SOLORZANO: Yes, and you're just not going to put anybody out royal redding. I mean, they're just not going to do it. There is a lot that can do it, but won't do it, because it's so -- It's just you had better be on your toes, and there is no room for error.

MS. THOMPSON: I wanted to comment on the white shrimp in the Chesapeake, and I am not a scientist, but I am very opinionated on this matter, and they have improved the habitat in the Chesapeake. They have spent billions of dollars reducing the nutrients going into the Chesapeake, and the seagrass beds have come back. They are flourishing in the Chesapeake Bay now, and so we've got horrible degradation of the estuaries in Florida, and I assume that it could be so in the other states too, but you've built habitat for the shrimp in the Chesapeake Bay, and you've built a really beautiful nursery area for them, and the water is warming up, and so it seems plausible that they could be moving into the Chesapeake, because they have a nursery area that is healthy.

MS. SOLORZANO: I agree with Laurilee. On the abundance of royal reds, there is plenty of royal reds out there this year, if you're wondering that there has been a lesser supply of them. We really haven't seen a drop-off in the supply of royal reds, as far as the amount you can go catch, the abundance, but it's marketing royal reds, the weather, and sometimes the tide is running really, really, really hard, and there is a lot of factors into when you can go catch royal reds. The areas that the -- They are still staying pretty much in the same areas, from St. Augustine down off of West Palm, and the general same depths of water and stuff that they've been in, and we haven't seen a lot of change in where they're at, as to any moves, because they are so far out.

MR. MERRIFIELD: Regarding CPUE, I specifically -- If I am going to buy royal reds, I say how many I will buy, and I will not buy any more than that, and so I will limit the trip based on the market, and I'm sure everybody else is the same way. They can only catch what they know they can sell.

MS. SOLORZANO: And if you've ever ate one, they're the best. The Florida royal reds are the best. You can go to the Keys and get a few here and there, over in the Gulf, but they don't taste as good. They just don't, and buyers don't want them as well. They want the ones in the Atlantic.

MR. MERRIFIELD: The Argentinian fishery has skyrocketed in production. They've got three fisheries down there, and it's a beam trawl, a regular trawl like we use, and then they have the fresh boat inshore fishery, and they are slaying the red shrimp down there, which is a different

species of red shrimp. It's not the same, but it's a closer-in fishery. They don't have to go out near as far or as deep. The water is very cold down there, closer in, and so it's conducive to the red shrimp. It's a cheaper fishery to operate, and that's why their price is -- They're catching so many of them that the prices are so low, and they've kind of substituted everything that we do here.

MS. SOLORZANO: I also noticed that on here you had said that you got your information from FWC, and that's landings in Florida, and I believe there may have been some in Georgia landed at the dock, and so I don't know if you're doing area fished or landings, because, if you're getting your information from FWC, you're getting what's turned in on Florida trip tickets, and there are a couple of boats out of Georgia that go and work, and usually they will land in Florida, but I believe there have been situations over this period of years where they landed in Georgia as well, even though they didn't fish for them in Georgia, and so I'm still confused on whether your landings are the state they landed in or whether it's area fished, and I asked that question yesterday.

DR. COLLIER: For this one, it was where they had landed, and it was not necessarily where they fished. The reason that I pulled from FWC's database is I had originally gone to the national database looking at landings in all the states, and only non-confidential data is coming from Florida, and so, if they did land in Georgia, that was confidential information.

MR. MERRIFIELD: Or North Carolina, actually, too, but that would be confidential, because it's one dock and one boat owner.

MS. SOLORZANO: So those states don't have to produce trip tickets in Georgia and South Carolina and North Carolina?

DR. COLLIER: No, they still have to produce that information. However, we can't display that information, and so, if it's confidential information with less than three anglers, we can't display it.

MR. MERRIFIELD: But you can consolidate the data into one lump number.

DR. COLLIER: Right.

MS. SOLORZANO: So I don't think these counts are probably all that accurate, considering you don't have that many royal reds that you're showing, but I know more than that are being brought in.

MR. MERRIFIELD: Do you have any other questions? Laurilee, go ahead.

MS. THOMPSON: I have a comment on the social and economic influences, and this doesn't pertain just to the royal red shrimp fishery, but it pertains to all of the shrimp fisheries. You question about changes in infrastructure, there is only two places on the east coast of Florida now that can handle the big boats, and that's at Mayport and Port Canaveral, and that's it, and Fernandina.

They pretty much shut down the infrastructure in the Keys, and so our shrimpers, if they don't go into Port Canaveral, they have to steam all the way around they Keys and go all the way up to Fort

Myers to unload or take on provisions, and so that's adding an astronomical amount of fuel and days to their trips, because the infrastructure that once supported these fisheries is gone. It doesn't exist anymore. You've got Fernandina and Mayport and Port Canaveral, and, once they leave Port Canaveral, they have to go all the way around the Keys and up to Fort Myers is the next port where the big boats can go in, the larger boats.

AP MEMBER: At Fort Myers, the outriggers have to be a certain height, or they can't get in there, and they have to go to Tampa.

MS. SOLORZANO: Right. We have to go to Tampa. We can't get into Fort Myers. It's one little slip you can get in there, but it's not where we can offload, and so we have to run to Tampa.

MS. THOMPSON: It's a long way to go from Tampa all the way to Port Canaveral.

MS. SOLORZANO: It's about four days.

MR. MERRIFIELD: On the question of how do they decide to target royal reds, it's basically market driven. If I say I need royal reds, they will go out and target those, and that's weather and tide dependent. There's a lot of times they get out there and the nets just won't go to the bottom, or they're dropping them down and immediately when they drop them down they're off to the side of your boat until they hit a mid-current, which brings them back around, and, I mean, it just gets really hairy out there, and so it depends on weather conditions and tide conditions and whether they will even go out there with an order.

The fishing season hasn't really changed over time. You can probably go out there any time and find royal reds. It's always been a fishery off opportunity, and so, if there is something else that's available, like white or rock shrimp or something else, they're going to fish for those first.

MS. SOLORZANO: In the summer months, you're not going to find any red shrimp, if you go out. It's usually fall, from like November until about May, because they can catch plenty now, or maybe even June, but, in the summer months, some of them have went out and just didn't find as many, because I think they -- That's the offseason for rock shrimp, and so, if you sent a guy out and he sampled in July, he's going to go -- But, if he goes back in January, it's like, wow, it's loading the boat in the same place, and it's just seasonal, but, yes, in-season, you can go and find -- There is no slack amount of them, but you've just got to get the right size and right buyer to move them.

DR. COLLIER: All right, and so the next question there was what has been driving the change in the catch per trip, and you guys indicated that that was the Argentinian fishery, and so now we can kind of go into the social and economic influences. You guys talked about the demand for royal red shrimp has changed with the Argentinian fishery starting, and what about local price? Has that been going down, due to the competition with the Argentinian fishery or not?

MR. MERRIFIELD: Absolutely. There's a lot of pressure on price. I mean, you just can't -- It's a very tight market there that, if you go up twenty-five cents, you've lost your market completely, and so there's been pressure to bring the price down, and I think we're back down to prices now that we were the first time that I ever saw reds, and so the price did go up, and I always try to bring

the market price up to support the fishery, because it is a hard fishery, and it's an expensive fishery, and I got the price up pretty good, but it's back down to where we started, or where I started.

DR. COLLIER: Given that there is only three ports of Fort Myers, Fernandina, and Port Canaveral, are those communities the ones that are most dependent on royal red shrimp?

MR. MERRIFIELD: In the southeast, it's going to be Canaveral and Mayport, mostly. I don't think Fernandina takes in too many.

MS. SOLORZANO: I don't know if Mayport -- I'm assuming that you all are considering that Jacksonville, too?

MR. MERRIFIELD: Yes.

MS. SOLORZANO: Okay, because we go a little further up, and our dock is technically in Jacksonville, but it's the same port.

MR. MERRIFIELD: There is some fishery in the Keys, and I would guess that's probably the Gulf fishery though. Actually, there is some on the east side, too.

MS. SOLORZANO: For royal reds?

MR. MERRIFIELD: For royal reds.

MS. SOLORZANO: There is a couple of spots in the Gulf that you can fish for them in the Gulf, but it's very rarely fished, and it's just because -- A lot of times, people don't want to really buy them. They are a little different.

MR. MERRIFIELD: Yes, and it's the same species, but a little bit different product.

MS. SOLORZANO: And going all the way over there.

MR. MERRIFIELD: Then the rest of the fishery is in the Gulf, and I think it has slowed -- I don't know who is catching them in the Gulf anymore.

MS. SOLORZANO: The big blue boats. I'm braindead for a minute, and I can't get the name. It's going to come to me in a minute.

MR. MERRIFIELD: Anyway, I don't know what's being landed in the Gulf, and I don't know if you've seen landings for the Gulf.

DR. COLLIER: When the landings were high in the South Atlantic, they had exceeded what was being caught in the Gulf, and I thought I had put a plot in there. I know I have it somewhere, but I just can't pull it up right now, but definitely in the 2000s the landings in the South Atlantic seemed to be either on par with the Gulf landings or a little bit higher.

MR. MERRIFIELD: There is actually a color difference between what's caught in the Gulf and then down in the Keys and what's caught off the east coast. I mean, it's a -- The east coast is a brighter red, whereas ours is more in terms of a darker scarlet red or something.

AP MEMBER: I know my husband's uncle used to royal red in the Gulf, but he has passed away, and so a lot of the ones that used to make the effort have just gone, and nobody in his family is carrying on that tradition. He was the only one out of Fort Myers that was going out there, but, like I said, he passed away five years ago.

MS. SOLORZANO: I think it's Bill Sessions' boats, right? Isn't it the Sessions boats that do a little bit of Gulf red? I think that's who it is, and Jeremy Zirlott. I think he does, but they don't go very often.

MR. MERRIFIELD: So no change in distribution really, and no blackgill. There has been no change in abundance, readily available, and small shrimp -- There is plenty of small shrimp. There is two markets that really are out of the red shrimp. One is the small red shrimp, which are mostly peeled, and then the large shrimp, obviously for head-on or shell-and-tails, and abundance of small shrimp is not -- I mean, there's just really not been any change in the character of the fishery.

MS. SOLORZANO: That is another reason why a lot of the boats won't go. When you have a lot of small shrimp and they can't move them, they have to go to the peelers, and, for instance, this year, you've got so many shrimp that come into Key West, and the peelers are just full. The Keys were very abundant in shrimp this year because of the storms, and so the peelers are processing those shrimp, and the royal reds have to be processed pretty quick, because their shelf life isn't that long if they aren't peeled and deveined pretty well, and so they're kind of saying, well, we don't want to handle them right now, because we've got an influx of these shrimp, and so that's another reason that you can't -- You're not going to go out and work and just catch big ones, because then you're just killing off the small crop, and so you've got have a buyer for both sizes. I don't know in Argentina what they do with their smaller ones.

MR. MERRIFIELD: They peel them.

MS. SOLORZANO: They do the same thing?

MR. MERRIFIELD: Also, the small red shrimp peeled are a substitute for rock shrimp when rock shrimp seasons are low. They will substitute a rock shrimp meat peeled product with a red shrimp peeled product, and so we had a high year of rock shrimp, and so low demand for red shrimp, lower demand for red shrimp.

MS. SOLORZANO: You know, I was going to comment on golden crabs. When we used to go out red shrimping, we used to get a few golden crabs as bycatch, and it's been several years since we've been able to get any. We don't ever catch any. It used to be they would come in and my son would bring me a little bag of golden crabs, but they're not catching them either, and so we were talking about that yesterday, that they must be moving further north, which would be even more reason why they need to open bottom for you all, because we don't see them in the red shrimp fishery as bycatch any either, and so all really need a lot more area to explore.

Those names that I mentioned that were royal red fishermen, I don't think they've done that in the Gulf in a few years, because they have been with the other fisheries that have kept them pretty -- They came over here and rock shrimped and fished for royal red as well, catching pink shrimp in the Keys, and so I don't think they have red shrimped for a little while in the Gulf, for a few years, and I don't think anybody has even attempted it.

DR. COLLIER: The final thing we really have is what else is important to know about royal red shrimp, just in case I forgot to ask any questions?

MS. THOMPSON: The east coast royal -- The royal reds that are coming out of the South Atlantic, it's probably one of the most premier shrimp in the entire world. They are really a delicacy, on the level of stone crab claws or something like that, and, I mean, they are very, very good.

MS. SOLORZANO: Yes, they really are. They are my favorite.

MR. MERRIFIELD: I don't know what else to tell you about them, but shelf life is a critical thing, because, if you leave them in the freezer, you are losing money, because they are losing weight every day, and so you may have bought 2,000 pounds, but, if you wait three weeks or four weeks or a month, and you have lost 10 percent of your weight.

MS. SOLORZANO: I know you've experienced -- I have tried some of the Argentinian reds, just to see, and you put them in the pan and you cook them, and there is all this water -- You start out with sixteen or twenty shrimp, because that's what they're going to sell you, is big, huge shrimp. You put it in the pan and cook it, and you've got a whole bunch of water and a little bitty shrimp left, because they -- I don't know what they're putting in them, but --

MR. MERRIFIELD: It's tripolyphosphate.

MS. SOLORZANO: Yes, and I wouldn't want to eat them.

MR. MERRIFIELD: Red shrimp are -- You can pump a red shrimp up big-time with tripolyphosphate. They are very absorbent, and so that's another reason why you don't want them in your -- The shelf life is so short because, when you brine tank those shrimp, they have got to freeze instantly. The longer it takes them to freeze, the more salt they are absorbing, and the same thing when you leave them in your freezer. If you leave them in your freezer very long, they are absorbing the salt off the shell from the brine tank, and so you can get to a point where it's too salty and you can't eat it. It's a delicacy shrimp, but it's also a lot of overhead to process and maintain and get it to the market.

MS. SOLORZANO: There is people that buy shrimp that pretty well know -- You guys know that certain boats that you're going to buy off of, because those guys know what they're doing and how to handle the shrimp and not ruin the shrimp by leaving it in the tank too long.

MR. MERRIFIELD: I think we've done a red shrimp brain dump here.

DR. COLLIER: Thank you very much for that. What I will do is put this all together in a report format and send it back to you guys for your review afterwards, and hopefully I will have this together in --

MS. SOLORZANO: There's one more thing that I wanted to make sure that they know. There is not fifty boats going and working in this fishery. There is just a few boats, and I think it's kind of like the golden crab guys. There is not a lot, and we're not going to damage or destroy or ruin it with the few boats that are actually capable of doing it, and so I don't think we need any over management. That is my opinion, and probably everybody in this room's opinion, most likely, is that less is more.

DR. COLLIER: If you look at the number of trips per year, and this is from the FWC commercial landings query page, you can see the blue line, and that is the royal red shrimp number of trips, and usually it's around twenty, and most years less than thirty, with one year getting up to over forty, and so obviously, if you have only forty trips, the max number of boats you can have is forty, and so it is a very small fishery operated by just a few fishermen.

AP MEMBER: What years did the Argentinian imports start to affect the royal red industry? Do we know when Argentina started pumping royal reds into the U.S. market, and did that affect some declining years?

MR. MERRIFIELD: I mean, they've been around for a while, but they have just really kind of taken off in the last -- It's been about three years where they've just really been dumping into our markets.

MS. SOLORZANO: It seems to be becoming more. Like you see them in grocery stores and stuff, and like you would only see them occasionally, and you would still see local. At the time of the year that we produce them, you would see local royal reds, South Atlantic royal reds, and there is a lot of labeling on this. They may not put "Argentinian" on it. A lot of times they will say wild-caught royal reds, and they didn't tell you that they're not a product of the U.S.A.

MR. MERRIFIELD: It looks like -- I have a graph of their production, and it looks like the beam trawls really, from 2005, they have just had an upward trend, and it looks like the bottom trawls, probably just since 2013, have really been on the increase, and, at the same time, the artisanal inshore ice boat fleet has kind of picked up their production.

AP MEMBER: It would seem essential to have some type of an import cap with that species for that fishery. It appears to me that it's essential to have that, and I'm not talking banning all imports, because that might hurt the market. It might cripple the market, but you may want to think about 30 percent import of a total allowable catch into the U.S., and it could keep that market viable for -- It doesn't appear to be a year-round market. It seems to be a winter market, and is that correct?

MS. SOLORZANO: You can produce them probably about seven months of the year or eight months of the year, depending on the weather. Depending on the weather, but, most of the time, it's about three to four months, because it's sort of a filler market. They're going to where they make the money, and so you've got white shrimp and rock shrimp, which is more in demand than the red shrimp are. Most of the time, it's just a winter product, and that would be the -- Most of the year would probably be about seven months. Argentina has probably got a season as well, and I don't know what their season is, but I don't think they're going to produce them all year long.

MR. MERRIFIELD: They do have small closures for spawning closures, I believe, but it's -- I am not sure what their season is. I know, for me, it was a year-round -- I had year-round product on this for -- Probably about three years ago, I would have year-round product available.

MS. SOLORZANO: When they catch them though and they freeze them, and we all know when you get it processed and you fill it full of chemicals and you throw it in a box and you put it on a shelf that you're going to get a lot longer life than you are with something that's fresher and handled a little differently.

MR. MERRIFIELD: This is a clear example of how imports have really affected a fishery.

AP MEMBER: The royal reds could be a great starting platform to protect U.S. fishermen with foreign imports. If you look at Australia, there are zero foreign imports, zero. All of their fisheries are strong, and it's -- The royal red fishery could be a platform for -- I am not saying zero, but a percentage, and you guys could figure that out with the metric tons that you need to keep your markets stable throughout the year.

MR. MERRIFIELD: Okay. Have you got enough information on that?

DR. COLLIER: I think so.

MR. MERRIFIELD: Did you guys have -- The golden crab, did you guys have an opportunity to kind of discuss amongst yourselves, or did you need more time to figure out if you want to make a motion about proposed areas to open?

AP MEMBER: We need Nuno, because he's the one that's going to start it.

MR. MERRIFIELD: Okay.

MS. JONES: It was brought up about blackgill in the royal reds, and is there any kind of study in Florida on the blackgill, because we're sending our information to Brunswick, because nobody is wanting any information, but we're getting blackgill in Jacksonville, and so, if they're wanting to do any kind of study, is Florida doing anything?

MR. MERRIFIELD: Not that I know of, and I know it comes further south every year. Cape Canaveral shrimp traditionally -- I mean, we have not had it as bad as you have it up there in Jacksonville, but it comes further south every year, and so I don't know that anybody is studying that.

DR. COLLIER: Nancy, can you repeat what you said? I was trying to figure out a place to write it.

MS. JONES: I was questioning if Florida was doing any kind of study for the blackgill, and, right now, we're sending our information, when he gathers it, to Brunswick, to the University of Georgia Extension Office there, and they've got an app, a phone app, now that the fishermen can just type it into the app and they get their information, but the question was is Florida doing anything about it, because Jacksonville has had it for years, and, like Mike was just saying, it's in Canaveral now. It is progressively going further south as it goes.

MS. SOLORZANO: When our guys catch shrimp down south, they haven't gotten the blackgill. You get it a little bit here. We get it up here, but, as far as getting it south of the St. Augustine area, no. That's where they go to and usually try to get out of them, but it's really bad in Georgia, and it seems like it's moved a little further south, but that could be storm related and stuff for the last few years, and who knows why that stuff is going, but I don't --

MS. JONES: I mean, it hasn't affected the price of it yet, but they don't know what it is, and so, when they find out what it is, it may affect our prices or our ability to catch them or the lifespan, and we don't know. The question is what is it and what is it doing to the shrimp?

MR. MERRIFIELD: It affects the marketability of a head-on shrimp.

DR. COLLIER: It definitely shortens it. They have done some research, and it's a protozoan, and they don't know much about it. There's been a few papers on it, and I will try to find those and send them to you.

MR. MERRIFIELD: Okay, and we have golden crab. Is everybody back in the room? The question was did you guys want to make a motion about areas that you would like to see opened up for further golden crab fishing?

DR. COLLIER: I made this map last night, and what I did was I put the probability of coral here, and it's highlighted, and it ranges from zero, and so that's emptied out, and it's not showing up, and then it ranges from a 1 to a 10, and so you can consider these essentially 10 percent increments, at least for the bottom two, and then we have 2 to 5 and then a much higher probability in red right here, and let's see what else I have added to this map. This is the habitat area of particular concern, the Stetson-Miami, and then I also included some of the bathymetry lines.

If you want to see which bathymetry lines they are, since I have this map pulled up, I can actually highlight those, and I think you guys had mentioned between 1,600 and 2,400 feet yesterday, and so I will try to adjust those. On the map up here, we start off at 1,600 feet, and this is 1,900 feet, and this is around 2,400 feet. If there is anything that you guys want me to remove or any boxes that you would like me to draw on there, please let me know. This one right here is 1,600, this is 1,900, and this is 2,400.

MR. MERRIFIELD: I think where there is red is high probability of coral, right?

AP MEMBER: Isn't there a difference between probability and proven? Doesn't this stuff move when you get a storm, if it's on a loose rock or something?

DR. COLLIER: I mean, it can become detached. Yes, it can be removed from that rock, but it's not --

AP MEMBER: No, the whole rock can move in the storms that we have.

DR. COLLIER: Right, and so -- But the coral that was attached to that rock is no longer going to be attached, and it would have to be recolonized afterwards.

AP MEMBER: So what's the probability then? You're saying probability, but how about areas that we already have proven? You are doing probability instead of proven. What are the proven areas that this coral is and suitable? When I say suitable, yes, we have all coral edges, a lot of coral base, but a lot of it is not conducive right now. There is no coral there, and so you've got probability up there, and how about proof of where it is, instead of a map saying probability, because probability wipes out all of our area. I mean, if we want to work with you, let's give and take. Until you find the coral, or we can give you information of where the coral heads are, and we would be happy to do that if we have that information, but probability is not something that we can bank on to close our fishery, and we're talking shrimp and golden crab here.

AP MEMBER: The white box on the outside, and you said the dark-blue line was 2,400?

DR. COLLIER: That's correct, yes.

AP MEMBER: What is that big white area there?

DR. COLLIER: That is the current CHAPC, the Stetson-Miami CHAPC.

AP MEMBER: What's the bottom there? Is that mud? I don't see any coral in all of that.

DR. COLLIER: This is an area that they want to do some research on. They had talked about this as an area of interest in the Okeanos Explorer, and they're going to consider doing some research, and let me pull up to see if there is any maps for that area out there.

AP MEMBER: My question is why are we closing the areas before they do the research? Why don't we close them after they do the research?

DR. COLLIER: Some of the information that's included in this, in the probability maps, are actual spots that have been observed with coral, and then they take a second option and, going through the model development, they will look to verify and ensure that what the model is doing is actually predicting areas where coral have been observed, and so they do an iterative process to make sure it's working fairly well.

I believe this model was working pretty well, and I can't remember all the details. It's been a while since I've read the paper, but the paper is online, and they are continuing to work with this model in order to better reflect the actual distribution of coral. Unfortunately, as you guys have indicated that these fisheries are very labor intensive, similar to what you guys indicate for catching the golden crab or royal red shrimp or rock shrimp. It's also intensive for scientists to get out there.

There is very few scientists that actually do this kind of research, and there is even fewer boats, and so their time to do the research is very limited. What I have provided you guys in that first draft that I sent, and I haven't been able to put those points on this map, is I did send you all the points of where coral have been observed in this region, and so I'm going to add that to this map, and so that's some of the information.

Those are validation points that have been done. When we do get points from something like a deep-sea dive, where they observe coral, it's usually just a single point on either where the

submersible went down or where the submersible came up. It's not the entire track line of where the submersible worked, and so we're limited on some of that information. Also, where we do have points, that doesn't mean that, anything that has been outside of that, that coral hasn't been observed. It likely means that nobody has done any validation work in that area.

AP MEMBER: Chip, when they plotted those known points, and you put them on the map, are they not to scale? I mean, it would seem like they would be very small if they were just a point of latitude and longitude observation.

DR. COLLIER: They are definitely not to scale. As you get closer and closer in, it's going to be -- I mean, it's just a single point.

AP MEMBER: Well, it makes it look like these areas, the known areas, are actually bigger than they perhaps may be.

DR. COLLIER: That is correct. Are these areas, like right in here where the hand is showing up, is this an area of interest?

AP MEMBER: Yes, it is.

DR. COLLIER: Right here would be another area of interest?

AP MEMBER: Correct. I would say all of that white and yellow and orange, since it's all probability and not determined from --

AP MEMBER: If you remove the yellow, that's a lesser probability, and we would give you all the reds. How about the orange, too? We're talking probability. Has anybody else got any input except for me?

DR. COLLIER: Give me just a second on that. Sorry for bouncing to a different map here, but I think it's just going to be a little bit quicker to show you where these dive sites were based on this one. We have some dive sites out here, and so this is going to be south of where we were talking about, and then there is some areas here, and so I will put those on the map.

They are just essentially east of Jacksonville, and so they are going to be likely in this high. It's going to be in that high probability area. You can see the bottom mapping here, and you can see the high rugosity, and so they've done some dives in these sites, and they found -- We can see what. This is a link to exactly what they saw in the area, and fishermen that worked -- Then this gives a description of the habitat.

MS. JONES: There has been nothing since 2006?

DR. COLLIER: This is just for this site, and so that dive -- What we do is we have a description of each of the sites, and so, every time they go down, they write up everything and they put it into a consistent format, and so I will go back, and we will look at if it was all done in 2006. Usually it is pretty limited, because dive sites can only go so much, and they generally -- We're lucky to have two weeks a year on the southeast coast, and so you can imagine how much area can be covered over that time period, and so they tend not to go back to the same site all that often.

MS. JONES: It's just old information, and that's what I was getting at. It's eleven years old.

AP MEMBER: I have a question on the dive sites, because I haven't seen or reviewed any of that. Has any of them ever been repeated more than once?

AP MEMBER: That was a good point that Nancy mentioned. It was potentially 2006 that they did this, and who is to say that it didn't move already?

AP MEMBER: With research, you must repeat the process, and you must get the same results each time, and so my question, again, was has there been a second dive on any one of these sites in the past twenty-five years or whatever you're going back, because, again, none of us have ever seen any of these reports, and we would like to have access to them, and I'm sure it's research, and you say it's online, but somebody needs to send me the links.

DR. COLLIER: The link to this map that I showed to you guys yesterday is actually in your document. The link is right there in the document, and you can click on these --

AP MEMBER: That big document where these maps are found?

DR. COLLIER: In that working paper that we sent in regard to this options paper. It's listed in there, and --

AP MEMBER: Okay. Thank you. I need that so that I can look at it. To your knowledge, was any of the dives ever repeated a second time in any of the twenty or twenty-five years that this spans, to your knowledge?

DR. COLLIER: Yes, there are some dives that have been repeated. Are they these dives right here? No.

AP MEMBER: The same ones over -- The ones that we're looking at, is there any of them that's been like examined five years later or two years later or ten years later in the same spot?

DR. COLLIER: They are beginning to go back to some of these sites and revisit them, but we are extremely limited on the data that's available.

AP MEMBER: Okay. Thank you.

DR. COLLIER: It's expensive.

AP MEMBER: It's expensive what we do, too. It's our livelihood. I have taken my kids out of school at times because of losing my permits for -- Not my permits, but losing the gear that I needed to fish, and that cut into basically profits, and so, when the kids at hot dogs and they were complaining, it's like, no, I can't help it.

MS. SOLORZANO: I have a question that's going to be totally out there, but, many years ago, they went out and put these little pods down of coral to plant them, and does anybody in here remember them doing that? Are any of these their planted efforts that they're putting on there?

DR. COLLIER: The planting efforts occurred in the Oculina Bank. They tried to go back to those sites, and, unfortunately, a lot of them were not there, and so it's a very technical dive in order to be able to go there and put these sites out, and they had some difficulty with not only putting these sites out, but also going back to the same sites and finding them.

MS. SOLORZANO: But the question is are any of these little marks planted ones, or are they naturally-grown sites?

DR. COLLIER: This site is a description of what they did at this one location, and they described the coral that was in the area, and so you can go on to this web portal that we have and click on "more info", and it will give you all the information that you want to see. If it was a site that they did some of this, did some of the plantings, it would indicate that. Here, it says fish assessment and filming and evaluation of 2,000 restoration trial reef balls, and so this actual site is a location of where they planted some of the oculina coral.

MS. SOLORZANO: Okay, and most of that, when it was gone back and checked, was not there? The ones they were able to check, their planting efforts, due to storms and hurricanes or whatever, natural environments down there moved it around, and it didn't, obviously, let a lot of it work, and so why are we giving up areas for planted things that didn't -- Possibly it may not even be there now.

AP MEMBER: How many people are actually employed in this organization here with the coral? Are they putting money into the economy like we are? I've got sixteen to eighteen people on the payroll, and we all pay our taxes, and we all want to go to work, and just give us back that area that we fish. You can have the coral in the deep or in the shoal, but leave the fishery -- Or let's try and get it so that that area where we harvest the crabs, so be it. You're not going to be able to have your coral there. It's been there since the dinosaurs anyway. I mean, let's just leave this strip alone, like we did in the Middle and the Southern Zone. Leave it alone in the Northern Zone as well.

MR. MERRIFIELD: I think, ultimately, what we've got to do is come up with a couple of motions, and I think you've got to do similar to what we did, was come up with a motion, different levels of motions, and one is if you want to ask for the whole thing. Then make a motion for that. Then you need to come down from that and say, what if we did all the area plus 10 and 20 percent probabilities, which is what he's got up there right now, and say let's pick out some white area that has low probability, or lower probability, of coral existence, like he's got up there right now, and come up with those areas and make a motion that says that. Then you've got at least a couple of levels. You're approaching it from a couple of different levels, and you can see how the council wants to respond to that.

AP MEMBER: Well, Mike, again, two years ago, that's exactly what we did. We started to draw out some boundaries, and then we said, well -- We looked at each other and said, hey, let's ask for the whole thing and thinking that they're going to come back and counter and say, well, we can't give you all of it and they would possibly come back and say we'll have what we did in the Southern and Middle Zone and kind of map it out for us, and here we are again.

MR. MERRIFIELD: That kind of highlights a --

AP MEMBER: But I am willing to do the strip, the same way. I am willing to just work with what we've got in the Middle and Southern Zone, and the same way in the Northern Zone.

MR. MERRIFIELD: That kind of highlights an issue that -- Chip, I don't know how you do this, but, if you make a motion, or if you have an option, I mean it's either the option is yes or no, and it seems like there should be some way to have an iterative process that says well, no, we're not going to accept that you want the whole thing, and so the issue is closed, and we would rather go with -- We're not going to accept that, but let's go to the table and let's try to work this out based on probabilities and things like that, rather than have a motion that's either approved or disapproved. I don't know how you get into a situation where you make a motion, but you're really just trying to open a dialogue to say what kind of terms can we come to. I mean, obviously, they want the whole thing.

MR. ALMEIDA: Could we make a motion where they could come back to us and identify the areas that --

AP MEMBER: We have been there, Nuno, and they never came back, but what Mike was saying. When we ask for the whole thing, we're not going to use the whole thing, because they're not -- The crabs don't even live in the whole area, and we don't want to be in that coral anyway. We just don't want to have to face a potential being where we're not supposed to, because in fact there isn't any coral there, and we're going to fish there, because there is no coral, but, because there is probability that there is coral, we would be -- We would be in violation.

MR. ALMEIDA: Even if you zoom in, where you have those dive sites and you see the contour on the bottom, we see, as fishermen, that same thing. We don't want to get up in there. We stay off. We get as close to it, and we identify it, and we come looking for that soft bottom, and so, if there is a way where we can map it where it's fairly easy to map out the hard and the -- There may be a little area off the hard bottom that may have a probability of one day something catching on and growing on it, and that's not what we're trying to figure out, but to stay away from those known areas that -- It's not going to move. That's just part of the earth.

Then, as we go up that strip, all the way back up to the Virginia line, that is the motion that we're trying to put together here today. It's to be able to retrieve that whole area back, and whatever is in that area that is real hard, and knowing that it's there, we just stay away from it.

MR. PHILLIPS: I understand what you want, but I don't think the council is going to take a great big huge box and say, okay, let's just give them this little piece and that little piece and that little piece, because they're not going to know if that's going to work for you all. They're not going to know if it's close enough or if there is -- If it's going to be productive bottom or not, and what you may have to do, and I'm just thinking of possible options, is what you may have to do is say, all right, we're looking at this area, and then you may have to just go in there just like you're saying and you run the bottom off, and then say we've ran the bottom off, and there are the numbers, these are the edges, and this is what we want.

If you ask the council to come back to you, they are really shooting in the dark. They don't know your fishery, and you may have to just say this is the area we want and we're going to run it off and we're going to tell you there is no coral in it, and the council may even want some of the

research boats to say, all right, we're going to go verify this and make sure that everybody is on the same page, and then we can talk about opening it up like that, and that is an option of doing it, but I don't really think you want the council to come back and just pick boxes on a map, because we don't know the fishery, and it may be useful and it may not, and it may be where you need to be and it may not, and so --

AP MEMBER: So how long do we have to come back with numbers to map out what we want?

MR. PHILLIPS: Well, I guess that would be up to you all. We're at the table because you all want more area, and we're trying to figure out how to get you more area, but we don't want to get you area that's not going to do you any good.

AP MEMBER: Well, we know that if we stay within those depths that that's where the crabs are at. That's like a no-brainer. That's why we want that area.

MR. PHILLIPS: Well, we also know there is a probability of some scattered coral in there, and so we're going to have to verify it one way or the other, and so, if you all pick where you want and then you all verify it, and then if the council feels like it needs to be documented, then that may be the way to run the rabbit, and, that way, you know exactly what you're getting, and you've looked at it, and I really don't think you all want the council just negotiating back of, well, we'll just give you this area, because it may be useful and it may not.

AP MEMBER: How did they determine the existing allowable fishery areas? Was that based on historic fishing?

AP MEMBER: It was current fishing conditions.

AP MEMBER: Current fishing conditions?

AP MEMBER: Current. Just like, where the box ends on the west side, they just stopped it.

MR MERRIFIELD: But was that just because you said that's where it was, or did they have any VMS points or any tracks or any -- What did you show them to say this is where we fish?

AP MEMBER: Well, I mean, our current numbers of fishing traps, where we were currently fishing.

AP MEMBER: It was the activity that was current that we had to prove and show, but now, that being said, it's obvious that they don't know our fishery, because, if they did, it just makes common sense to go ahead and keep it the same contour, the same way, and just follow it all the way up through there.

MR. MERRIFIELD: I would suggest that you try to get something in now and then develop further some of this other area.

AP MEMBER: Well, it's pretty straightforward here. If you look at what we have in the Middle Zone, we keep it the same width and just follow that same contour all the way up with the same depth. That is what we would like to see.

AP MEMBER: Yes, extend the northern boundary line back up to the Virginia line, through that same contour all the way back up.

AP MEMBER: Whatever the width is in the middle zone, where it keeps going, and it ends at the 29-line in the Northern Zone, and we'll keep it the same width and just follow it all the way north.

MR. MERRIFIELD: The whole width between the two lines?

AP MEMBER: Yes.

AP MEMBER: Yes, between the 16 or whatever it is to the 24.

MR. MERRIFIELD: That motion --

MS. SOLORZANO: Wouldn't a reasonable person realize that, if there is a little bit of scattered coral in there, that -- These guys aren't going to go get on it. I mean, a reasonable person --

AP MEMBER: But that's the point that we could come back to. They say that, no, we can't get it, but, again, we could box it out. It could be modified where it narrows in certain places where the coral is proven to be there, and there is places in the Middle and Southern Zone that it's open and you can throw a gear on there and we stay away from it, because we don't want it, and we know it's there, and all we're asking is for the same rules that apply for the other two areas and just to continue back up to how it originally was.

There is areas in the Middle and the Southern Zone that we know that there is coral there, and we don't fish it, even though it's allowable to fish. We stay away from that, and they probably don't even know it's there, and so it's something that, if we ask for it and we know that it's there, and it's just common sense. It's a commonsense thing. We know it's there, and we're not going to get into it. Even if we don't know it's there and somebody finds it, that's going to be the last time they are there. We stay away from it.

MS. SOLORZANO: We've been coming -- In the 1990s, they had the first rock shrimp meeting, and some of you all were probably here for that, and the room was full of people, full of fishermen, and they came in announcing that they were going to close these areas, which, inevitably, they did. We were telling them that we work it, we work it, and, for years, we've been trying to get back a little more. In the early 2000s, it was if you put VMS on, and we're going to work with you, and we won't take more. We did, and, a couple of years ago, they took more, and then their rebuttal to that is, well, we were going to take a lot more, but we shrunk it down for you, and that's the give-and-take that we get.

It's like we don't ever get anything, but it's a take, take, take, and we took a little more, but we shrunk it down, and so you should be happy. That's the attitude we get, and a lot of this -- There is what twelve of you guys that are going to go in here? You're not going to go beat down the coral.

AP MEMBER: It's probably like two boats.

MS. SOLORZANO: Sometimes the common sense just doesn't -- They want it to be statistically researched and numbers, and then they've got to find it, and then they've got protect it, and then they've got to re-protect the protected habitat or the potential protection of the blah, blah, blah. It gets -- I don't know. It makes me crazy.

AP MEMBER: I was wondering about the -- If a block is picked, if the AP comes up with a recommendation for this is the area that we want to fish, and then there is -- If there is coral in the area, does that preclude fishing in that block at all, because these things are not continuously distributed, and you can certainly work gear and stay off of the coral, and so that was my question. Does coral in a chosen block preclude any fishing activity in that block?

DR. COLLIER: They have identified some of these areas in the southern region with coral inside of there, and they have recognized that that is an access area, and so that does not necessarily preclude that fishing cannot occur in that area.

AP MEMBER: I think that the council would understand, try to understand, both sides of it. It's understanding the fishery and understanding why we want it back and understand that it's not going to get harmed in the future. Thirty years ago, it was not known what is known today, and, as we go forward, if we could get into these bottoms that no one has ever fished before and stay away from them, you know, the fishery could stay alive. It could move on, and, as the fish migrates and does his thing, because it has all changed, and we have an opportunity to do it.

AP MEMBER: Have you all worked with the coral board? Have you all met with the coral and habitat board, because we did that.

AP MEMBER: I want to say ten years ago maybe.

AP MEMBER: Yes, and they give nothing. They swear up and down that you're goat-trailing through it, but we don't want to tear the gear up, but they swear that we're doing that. They think that everybody is tearing up the coral and they don't want to protect it, and it's like, no, we don't want to tear up our gear.

AP MEMBER: Right. If that was the case, then we would be out there tearing up all these underwater lines that they keep running to Europe. I think that we would have run into something by now if things were being torn up by our gear.

MR. MERRIFIELD: Chip, are there not any better charts that show more bathymetric -- I mean, that relief that they're showing in that picture, when you drill down, that dot where they said they found coral, that relief should show up on a bathymetric chart. There was enough relief there that it should show up. Wouldn't you agree? I mean, when we looked at the Oculina stuff, we had a -- I mean, you can see -- You don't see bathymetric lines, but you can see the --

DR. COLLIER: Yes, you can see some of these areas have been mapped, and they do -- I mean, it does show rugosity, and some of these areas that have been mapped don't have all the rugosity that is definitely available. I can add these. I mean, this information is currently included in that tool that I sent to you guys, and not all mapping is the same. Some mapping has much better resolution than other mapping.

MR. ULRICH: Some of that rugosity that is noted -- When I did make some dives on the NR1 and on the Johnson Sea Link, some of those rough areas are actually sand ridges, without any coral on it, and so you can't really necessarily predict that there is coral there.

AP MEMBER: What gets me is it was cut right straight at the 29-line. Like it didn't even like narrow or -- It was just like a straight line, and I am not saying that it needs to be 1,600 to 2,400 consistent all the way north. We will go around the coral and the contour, and it could be 1,800 to 2,200, or, at times, maybe even narrower than that. We'll go 1,700 to 2,100, but just give us the strip and we'll accommodate.

DR. CHEUVRONT: I would like to try to make a suggestion, maybe to help you all move along a little bit here. I think one of the things that you need to do is -- You've been hearing from Charlie and all that the council doesn't know enough about how this fishery operates. They work based on recommendations they get from groups like these advisory panels and from the Coral AP, et cetera.

I think probably a good course of action for you all to consider now is to request that the council look at specific areas, and I get, like from what Nuno and Robert are saying, like start at the width of the northern area that is open at Latitude 29 and run that line along that contour all the way up to the North Carolina/Virginia state line.

Then let's evaluate those areas specifically to determine where there is a high probability of coral in those areas and then look at the potential for opening up some of those other areas that will avoid the high concentration probabilities of corals. Then let's start that process, because what the council wants to know is what do you want them to do, and they're not going to do anything without confirmatory information or something that is going to help them to make these decisions with some degree of confidence.

The council frequently deals with having to deal with probabilities of something bad or good is going to occur, because they don't have full knowledge, and they are never going to have full knowledge, about fisheries-related activities, but what they would love to have from you is guidance on how to proceed to help them make these determinations, and so it sounds like, from what you all are saying, you have something very specific in mind that you would like the council to consider, and let's ask them to do that and then tell them, in what your recommendation is, what you think ought to be considered when evaluating these areas.

I think that will help the council along to move towards getting where you want to go, and so however you all want to word that, but I think I've heard you all, and the starting point is start at the Latitude 29 and the width of that allowable area and follow that contour line all the way up to the North Carolina/Virginia state line. Then now you've got -- It would be helpful if you could then say something about the avoidance of the high probability of corals and concentrate your research in this area and all these other things that can help the council make decisions, but that's the kind of stuff that I think in the long run that will be much more informative to the council and being able to potentially help you guys out and get more areas to fish.

MR. MERRIFIELD: Okay, and so we're going to try to craft this motion here.

MS. SOLORZANO: Who does the Coral AP work for? Like where do they make their money?

MR. MERRIFIELD: They're an advisory panel just like we are. They are different coral scientists that work for different -- Whether it's Harbor Branch or for different agencies. They come together to protect coral.

DR. COLLIER: It also includes individuals from both of these APs. There is one individual from the Golden Crab AP and one individual from the Deepwater Shrimp AP.

MS. SOLORZANO: That's why you're over there knowing what the Coral AP is going to say to a lot of this.

MR. MERRIFIELD: Like you said, they don't know this fishery. Just like when we got together with the Coral AP, they didn't understand the shrimp fishery and how it operated and that we -- The fishery does not operate by mowing over coral. It's detrimental to our fishery, and it's dangerous, and it tears your gear up, and you want to avoid it, and I imagine the same is for these guys. Those reliefs are not good places to lay your traps. You may not get it back, and there is all kinds of issues with that, and so, because they don't understand your fishery, their job is to make sure that the coral is protected, and it's slow-growing coral, and so, when it's hit, it takes years and years and years for it to grow back, and so that's their job.

MS. SOLORZANO: I think a lot of them are stuck on a picture, where they have seen a piece of webbing laying up against a piece of coral or a crab trap, and they seem to think, well, that's what they do, and chances are that wasn't -- That could have been moved through weather or through many things, and it wasn't that anybody went and put it on the coral, but they will post those pictures or stick those pictures, and that's all they see in their minds.

MR. MERRIFIELD: Do you have a motion?

AP MEMBER: Almost.

MS. SOLORZANO: Fishermen are more concerned about taking care of the environment that we make our living on than most of those people that are sitting on the councils that are -- Not councils, but different groups, because councils just -- They are hearing the recommendations from APs, and they don't do that job. That's not their job, but the AP people -- Like for coral, for instance, they are being paid by a university or a grant or a private somebody to come in and do these -- If they don't say they're protecting something, they don't have a job. It's this battle, a balance, that goes on that seems to get -- It's not balancing favorable towards the fishermen in most cases, and I learned that from the 1990s on, and I'm still coming and fighting the same battle and trying to get back bottom that's been taken for years.

AP MEMBER: You are absolutely right, Marilyn. I have a couple of kids at home that want nothing to do with school, and I am thinking that they're going to be jumping in this and getting skin in the game as well, and that's why we do everything we can to protect the fishery, and I think Howard has his son involved in the business as well, and we want it to be good for the next generation, but, the way I see it, it's getting to be more and more challenging with all these obstacles we have. The way it's being left is we're not trying to gain more, but we're actually trying to move, so we don't overfish these areas that we keep, week in and week out, pulling crabs from. We want to move around.

MS. SOLORZANO: Yes, I have three sons, and all three sons went into the commercial fishing industry. They all run shrimp boats now. They all -- They kind of expanded from mom, and it's like here's a boat and go, but all of them stayed in the commercial fishing business. Some were not interested in school and some have college degrees, four-year degrees, and they still went into the shrimping fishery by choice.

MR. MERRIFIELD: Do we have a motion?

AP MEMBER: Not yet.

MS. SOLORZANO: My grandchildren are even -- The older boys are shrimping.

AP MEMBER: Okay. On the motion, the way you have it written, we just want, on the last part -- We want to avoid areas -- No, I'm sorry. Hang on a second. Take that out. We want to change regulations from high probability areas and regulate the known areas of high concentration of coral, opening up all areas taken without the input of commercial entities or comment.

DR. COLLIER: Can you repeat that?

AP MEMBER: (The comment is not audible on the recording.)

AP MEMBER: In this case, would you want to just say probability and not high?

AP MEMBER: Actually, it's deregulate high probability areas and regulate the known areas of high concentration. Deregulate high probability areas of, and then it's high probability. I have to read the whole thing each time, and so I have to make sure that it's worded -- Add an alternative to access areas of high -- To have the depth lines of 1,600 to 2,400 from the Northern Zone continuing up through the Virginia state line.

AP MEMBER: I'm just saying you're not mentioning anything about just regular probability.

AP MEMBER: Yes, and this is only addressing the Northern Zone. This is not addressing the Middle Zone at this point. Are you interested in any of those depths in the Middle Zone? Are you okay with where it's closed now and keeping it closed? Okay.

AP MEMBER: You are actually having them look at from the northern end of the Northern Zone, or, as Brian said, from Latitude 29.

MR. PHILLIPS: I had to step out of the room, and, when I stepped out, I thought I had heard you all wanted a motion for an alternative with taking your box that you had at the width that it was, and I guess that's the Middle Zone, and then going up with that. Now we're back to the large area again, and the only thing that you want to -- Then you want to work specifically around areas of high concentration, and they don't know where everything is, and you can go this way, because this is your meeting, but this is going to get a lot of resistance at council. I am just going to tell you that this is going to have a lot of opposition from probably the Coral Committee, and you're going to have some problems at council, because I'm not sure there can go very far, but --

AP MEMBER: Let's close all highways, because we could have accidents. We're talking probability here. I mean, you think that's ridiculous, and probabilities of coral everywhere in the world under the oceans -- There is a lot of coral, and so let's not talk about probability. We're not going to go to the extreme. We're asking for something back, and we're trying to give them enough room to give us back something decent but preserve the coral.

AP MEMBER: When you say they can't, or they don't know, I mean, they've got to know whether there was a three-foot plant that they saw down there and decided to put a square mile around it, because it's probability within a certain amount of area surrounding the coral, and so, Charlie, with all due respect, the way you're talking here is like, and we're all hearing this, this is just a big waste of damn time being here for two days. Let's have some faith here, and let's put this in and see where it goes, because, honestly, I'm really, really pissed off, and I don't even like talking anymore.

MR. PHILLIPS: That's fine. I mean, it's your meeting, but I am just telling you what you're going to run into, and that's fine.

AP MEMBER: Right, but the way it sounds, Charlie, is they took it and they have it and what's done is done. That is the impression that I have had yesterday and today. I don't feel as if anybody is willing to work with us, the fishermen, at all. The coral is the thing, I guess, and it's not what we want. It's what we need, really. If not, we're just going to keep plucking these things from the same damn area until it thins out and to where there is nothing.

MR. PHILLIPS: Well, if it was a done deal, then we wouldn't be here. We went to a lot of effort trying to come back to you all and the Deepwater Shrimp, and you all can ask for whatever you want to ask for, and that's fine.

AP MEMBER: Then again, there is always that term that they would use of be careful what you ask for, because you might just get it all, right?

AP MEMBER: You could also do an alternative. In the alternative, you could use the words "high probability", and, that way, it would be something they might discuss. If they're going to say, no, absolutely not, to this and just move on, if you have an alternative that excludes high probability, then they might come to the table and say, okay, we'll work with this, let's work with this.

MR. MERRIFIELD: I think we might have -- Maybe there is also alternatives, and so the ask is you need more area in the northern section opened up between these two bathymetric lines, between these two depths. That's the ask, and so then sub-alternatives to -- This would be a sub-alternative to that, is to just open it all up and then this would be one -- Maybe we need to come up with another sub-alternative that would be more politically correct for the council, if you want to call it that, and I don't know that -- This is a different approach, but it gets you more area back. Really, the goal here is you need more area to fish.

You're not interested in destroying coral, and so we're trying to get the areas back where you're not going to be in the coral, which you don't want to be in in the first place, and we ran into the same problem. The only reason that we got where we got was because we were able to prove, and you guys I guess could prove, where you want to fish that -- We proved where we fished, and that was how we got the boundaries moved into a smaller area.

AP MEMBER: Looking at that chart even yesterday on the screen, Mike, I don't think it's impossible. I mean, I think there is definitely potential there for them to even see it, and it may not be all right in the middle at 1,800 to 2,200, but it may end up falling at 1,700 and then there will be like a strip maybe going from 1,800 to 2,000 and then back down to 1,600 to 1,900, but I saw it. I mean, we all saw it yesterday. There is potential there to go around that contour of the coral. It's there, and there is white spots, and so there is no probability there of coral, and so it's just something that was closed just for precautionary, and we're just saying, hey, there is some areas here that does not show coral and let's work together here.

MS. THOMPSON: If you look at the -- If you go further south, down into the Golden Crab Middle Zone A, there are -- There is crab access areas with bright red spots, and so there is definitely high probability of coral in the existing allowable fishing areas for the golden crab. You have got to word it so that -- If you look north of Latitude 29, there is big areas where there is only green and yellow and orange, but the red seems to be -- The red of the really super high probability seems to be further offshore than the depth contour that you guys are looking at.

You've got to word it so that the council is willing to work with you, and I agree with Charlie. They're going to look at that wording and just throw it in the garbage. They're just going to go, no, but I think you've got to get it worded so that your -- The way it's worded includes staying out of the high probability areas, but not -- I don't know how to word it, but I agree that they're not going to like what you're proposing, and they closed -- They did the same thing to us with the Oculina.

They closed a big area because of the probability of coral, and you should -- There should be records that you were fishing further north of the 29 Latitude, and somebody should have some logbooks somewhere that shows that you were fishing successfully in those areas, and you wouldn't have been fishing there if there was coral, and so there has got to be some way to word your motion so that it's not going to offend the members of the coral panel and the members of the council, so that they're willing to try to move forward, and I think that they're going to find that language offensive.

MR. MERRIFIELD: Yes, I don't think you can say to open this up and let us worry about the coral. They're not going to -- That's not going to be acceptable, and so how do we get to where we say we want to open this area up? One sub-alternative is open it up and we'll take care of the coral, but the other one has to be something else, like open it up but -- You may get into -- Maybe you get into a VMS option, where VMS will show that we're staying off of any --

AP MEMBER: As we all agreed yesterday, we don't want to be subject to being pinned into an area in which we're not fishing, because of the drift and what have you.

MR. MERRIFIELD: I think yesterday they were saying that you could have VMS, but not have it as a regulatory -- Is that right? Not as an enforcement tool, and so you would just have VMS, which shows your concentration of effort, but it is not boundary driven, and I hope I'm not speaking out here, but it would not be used as a regulatory tool that says if you drift over into this area that you're going to get a fine or you're going to get boarded or whatever. It would just be used to strictly at this point -- Who knows, and maybe down the road, and I don't know, but, at this point, it would just be used to show concentration of effort. If you opened up that area and

you see that this is where our concentration of effort is, that means the areas where it's not is obviously high relief or high potential for coral areas, but --

AP MEMBER: I guess that could be a tool we can use for bargaining, if something happens, as an alternative.

MR. MERRIFIELD: Yes, and I don't know how you would word something, Chip, that says that we want to open this area up, but we want to avoid those areas of high relief, because there is not any specific boundaries, and I know they like specific boundaries.

DR. COLLIER: Right, and so do have the maps that are available and --

AP MEMBER: How about minor probabilities, the ones that are the yellow and the orange and the green, instead of high probability and deregulating the lesser probability areas and regulating the known areas with a high concentration of coral and opening up the areas? See where it just said, "high probability", and it's like minor probability or the --

DR. COLLIER: The way it's written right now, where you have "deregulate the high probability areas", what that will --

AP MEMBER: What we're saying is, instead of where it says, "deregulate high probability", how about we're going to go with all those minor ones and leave just the high probability areas, and that would be our first one. That map there. See how we have a lot of open areas and a lot of closed areas that we don't have as high probability? We could open up some of the surrounding areas and the patches and stuff or --

DR. COLLIER: What I'm thinking is, if I look at the wording of this, is it says deregulate high probability areas.

AP MEMBER: Okay, and so we leave high probability areas, and we're going to go to likely -- I don't know how to word this, but it would be one word, maybe lesser probability areas, being green, yellow, orange, and I don't know what other color comes between that and red, but leaving just the red probability areas.

AP MEMBER: How about continue to regulate high probability areas and open up all the --

AP MEMBER: All sub-probability areas.

MS. SOLORZANO: As much as no one is going to want to hear this, even though the coral people probably won't agree, then you're going to get the law enforcement people who are going to come in and say, if you start drawing all these boxes, and then you're going to trap here and not trap here and trap here and not trap here, law enforcement is going to say that we can't monitor that if you don't put VMS on.

That's what they ended up doing to us. If you want to get it boxed out, and you want to be able to use the areas, they are going to -- Law enforcement is going to back the coral people by saying we can't even enforce these patchy zones, and not that they're patchy zones, but I'm just using what they're going to come -- They're going to have reinforcement from their Law Enforcement AP

people, and they're going to probably suggest VMS, and you won't like it, and I don't like it. I hate it. It's an invasion of my privacy and my fishing grounds and everything is public, and I pay for it, and I don't like it. It's costly going on, and the government does reimburse you to put it on, but they don't those monthly payments. Every time you get closer to the boxes, they are going to ping, but, with the coral people -- Not only are you going to battle them, but they're going to get support from law enforcement.

MR. MERRIFIELD: I still think we need to go to the sub-alternatives, and don't you, Chip, so that we can -- The motion is to open up -- One is going to be this item here, and the other is I think you're going to need to -- I know you guys are avoiding VMS, but --

AP MEMBER: Not all probabilities, because that would take out the red too, and so high probability. We want to go to deregulate low probability areas and regulate the known areas.

DR. COLLIER: The reason I changed it to read for low probability areas is -- If we look at this map again, these areas that are no longer highlighted, those are the low probability areas, and so, if we do the low probability, moderate probability, and high probability, that would give us options for sub-alternatives to be developed.

AP MEMBER: I would save this map and give them this map, too.

MR. MERRIFIELD: You are going to need something that is going to limit or define your access to that area, because there is too much in that area other than -- I don't know how you --

DR. COLLIER: Given that these are fairly large vessels, for the most part, is AIS -- Is that on these vessels?

AP MEMBER: AIS is. What is AIS?

AP MEMBER: It goes through your radio and GPS. Your radio and GPS is connected, and it's AIS, and it broadcasts to other boats where you are and who you are.

AP MEMBER: Yes, I understand now, because I can bring up the map and see where boats are at any given time on the internet. Okay. That is like geofencing type of thing, or is that different? It's just the reporting of where the vessel is, a pinging?

MR. MERRIFIELD: Right, and do you guys have that on your boats?

AP MEMBER: We do. We have AIS.

AP MEMBER: Actually, I have the vessel monitoring system. It's inactive right now, and I have all kinds of global positioning stuff, yes.

AP MEMBER: But AIS would be an alternative that they could monitor by AIS. That could be in your options. The AIS, you just have to buy a particular radio that supports it, and then you just hook it up to your GPS, and it's real easy.

MR. MERRIFIELD: Maybe another option would be to develop the fishery in this area and through the use of VMS identify where the higher concentrations of fishing would take place and the lower concentrations would be where, obviously, there is relief that would be higher probability of structure of some sort.

AP MEMBER: Maybe you could include some kind of language that would indicate the ability of the golden crabbers to add to the knowledge base of where the coral is. Make yourselves an asset to research, and I think that, in the very first sentence, it needs to say like a golden crab fishery access area or something. I think you need to -- You don't want to open it up for everybody, and so keep it specific for your golden crab fishery, and, where it says, "to have", it needs to take out "to have" and say, "between the depth lines". Then you could get some language in there about how the fishery would actually enable additional knowledge about where the deepwater coral mounds are.

AP MEMBER: Are we doing these as sub, or is this A and B and C?

MR. MERRIFIELD: We're still developing it here. We're still trying to figure it out.

AP MEMBER: So Alternative A, Alternative B, Alternative C and not combining it into one motion?

DR. COLLIER: I am just putting it all together as one motion from you guys, because we would have to go through and wordsmith this stuff into an alternative. The way I'm seeing it right now, yes, it would be one alternative right here, where we would have a sub-alternative for A, a sub-alternative -- That sub-alternative in A would be low probability areas, and the sub-alternative in B would be low, moderate, and high. In all actuality, if we're doing a full NEPA analysis, which is the National Environmental Procedures Act, it requires us to go through all ranges, and so we would probably have three different levels, where we would have a low, we would have a low and moderate, and then we would have a low, moderate, and high.

That is likely how it would end up looking like in the full analysis, and then, for the next part, when you guys are considering AIS, that would be a separate action, because we would have to evaluate that separately.

AP MEMBER: So would that need to be a separate motion then, because it's a separate action?

DR. COLLIER: Yes, it would work out best if it was a separate motion.

AP MEMBER: So we have to modify the previous motion, or we're just -- That one with no VMS, we're going to keep that one and just go for the AIS? Can you modify this one, since we're going to vote on it, to go from the low, then low and moderate, and then -- B would become C, and we would have a new B. At this point, do we really want to just admit just the very low, because I see it as the yellow, the green, and the orange, and what's the green in that area, because we're talking -- Right now, you've got low and moderate and high, and what is the green area that is still lesser probability on your map?

When we're doing this motion, now that we have addressed that the red stands for very high, we want to write the motion now that one of the alternatives would be keeping the very high, and I

guess that would be D, and that stays, and that's the high, and now we want to go D, and we want to -- Don't we want to word one saying that we would be willing to keep the very high or not?

DR. COLLIER: If you think about these and the terms of protection, this A would actually deregulate areas of low probability, and so, coming back to the map, what that will do is it will take these green areas away, and so those are the low areas of probability and the no areas of probability, and so that's the A option. Then it gradually increases, and the amount of area that you would get back as you go up in alternatives from A to D.

AP MEMBER: Do you even need that clause at the end of each sentence about deregulating certain areas or of regulating? You're basically just going to deregulate low and moderate, or deregulate low, moderate, and high probability.

AP MEMBER: That would say very high, areas of very high concentration, and regulate known areas of very high concentration of coral, and I guess that would be where we have D.

MR. MERRIFIELD: This is all that area that's closed already anyway with the Stetson-Miami Terrace, right, and so it's all closed except for what you have now, and so you're not going to regulate anything. It's already closed. You are just asking to open up areas that are in the closed area.

AP MEMBER: Each one of those, when you put it in an alternative, it has to say when the alternative -- Because they are going to deregulate the low, moderate, and high probabilities, and what they're going to give us is -- That should say, on each one of those, very high concentrations of coral or high concentrations of coral. What we're trying to say here is where the known areas of concentration of the high concentrations of corals and not the probability. We are trying to deregulate the low, moderate, or high probability areas and only regulate the areas of high concentration or very high -- I think it's just high concentrations of coral.

MR. MERRIFIELD: So what you want to do is you want to -- This is a closed area, and you want from that strip all the way north to the Virginia line, and you want to open up to the fishery areas of low concentration, of low and moderate, and so one option is to open up low, and the next one is to open up low and moderate, and the next one is to open up low, moderate, and high.

AP MEMBER: At this point, with the map that you're giving us, I don't want just the low. I am sorry, but I want low and moderate, at minimum, and so A can be stricken out totally, because that's just the very low.

MR. MERRIFIELD: Is "regulate" the right word here? You just want to open -- So A would be open low and moderate probability areas, period.

AP MEMBER: I don't know what use the phrase "opening up all areas" -- That is kind of confusing, because you're asking to reopen low and moderate probability areas, and then, in the same sentence, you're asking them to open up all areas.

AP MEMBER: In summary, it looks like basically we're giving them three alternatives, being opening up some of the areas, which we have used this map, being low being green, moderate

being yellow, and high being orange, and very high, which we didn't really address. Can somebody give me the definition of Code 3 through 5?

MR. MERRIFIELD: It's on the map.

AP MEMBER: Yes, I see the color, but is there sub -- Does 3 and 5 mean the exact same thing, or is 3, 4, and 5 each different?

MR. MERRIFIELD: Is it a probability number of 1 out of 10? Does it relate to a percentage?

DR. COLLIER: I am trying to remember. This is a different kind of probability mapping that was used for this, and so it's not clicking in my head exactly what these values mean. I think it was based on these things called kernel densities, and so I will have to re-read it to exactly understand what these values mean in the real world.

MR. MERRIFIELD: That would be probably be important to tell the council as they're looking at these, what that means. Is there anything else that you want to add?

MS. THOMPSON: If we look at our motion, there is language in the rock shrimp motion about using input from the fishermen. Can you go back to the rock shrimp motion, please, because I know that there was language in there about using the input from the fishermen.

MR. MERRIFIELD: When we brought that alternative up at Coral Amendment 8, we brought track data to the table, but that was not what made the difference in what we were able to get, in terms of the boundary definition. What made the difference is the VMS points, and so, even though we brought these nice charts with these green lines on them that show where we fish, really what they based more of the boundaries on was the VMS dots, and that's the only reason why I think we're going back now, is because the VMS dots clearly show that there is an area that was heavily fished there that was eliminated by the boundary.

AP MEMBER: Do we need to change the language of our motion and, instead of saying based on the recommendation made by the rock shrimp fishermen, change it to based on data from the VMS tracks?

DR. COLLIER: You guys had -- In that one, you guys provided a boundary with actual coordinates and everything, and so we can go back to those coordinates that you guys have already provided to us.

MR. MERRIFIELD: So the recommendation refers to the coordinates that we submitted.

AP MEMBER: But does that specific language need to be in our motion, or is the council, going to go, what, they want us to change the boundary based on recommendation from the fishermen?

DR. COLLIER: That's why I have the date in there, because there is a specific motion that you guys gave to the council specific coordinates, and so it's a more advanced version of what we're trying to develop here with the golden crab fishermen, and so you guys already have a box that's been drawn, and we can use that, with lines based on the VMS points.

MR. MERRIFIELD: There is a specific motion already in place for that, and that's why it was determined to address this at a later date, because that specific motion had specific coordinates in it, and the VMS data does back up that request.

AP MEMBER: But since the golden crabbers don't have VMS data, but they still have logs of where they have been fishing, that information should be useful, since that's all that they have. Do you guys want to add another motion or something that uses the language based on logbooks or past records of fishing or past fishing activities?

MR. MERRIFIELD: Do you have data to submit with this amendment that says that these are areas that we have fished in the past?

AP MEMBER: I believe at the last meeting that we worked on that and the maps and historical points, and a lot of it was done, and we submitted it, especially in the northern areas around the Carolinas.

MR. PHILLIPS: I know the Georgia Bulldog had been off of there and done some work in the 1980s, I think, and they looked and tried to find whatever they had, and they didn't have much, and obviously that was before GPS and LORAN-C, just about, but I don't think -- I think we have already scrounged for all the data that we could find and put it wherever we could. I think Glen probably has as much as anybody, and so I don't think there is anything else to get.

MR. ULRICH: The Georgia Bulldog did do some sampling, I think, after we had finished up the survey that we were going to do, or that we did, but they didn't really have an extensive dataset, by any means, and, in many cases, they fished some of the same territory that we fished. They may have extended down a little further down near the Florida border, but we found that, the further we went down in Georgia, the stronger the currents got, and that was a problem with us using buoy gear, because it sucked the buoys right under, and you would lose your string.

MR. MERRIFIELD: I think the council is going to have to come up with a method, where we have these large closed areas that we're creating, for how to go about increasing allowable fishing areas, because we have trapped these guys into here, into a small area, and with no method or no way of getting out beyond the area that they're in. I mean, this whole allowable trawl area has come up multiple times in the shrimp fishery as well, and this is a prime example of why -- I mean, if you're going to propose that, then you've got to have some kind of a method for if the fishery moves or if something -- For any reason, how do you get out of that?

MR. PHILLIPS: That's why I said earlier that one of the options may be that they just literally run the bottom off, just like we used to run off shrimp bottom, and you have to run the bottom off, and you mark it, and you say this is what I need, and I'm not saying that's the best option, but that is an option, and at least when you do that -- As Marilyn knows, once you run the bottom off, you're in pretty good shape, unless you hit a hang or something in the middle, but you've got a high level of confidence.

We've got probabilities, but we don't have all of the areas tested, and it's a point test, and so we don't know if the point hit the coral or didn't hit the coral. These models are not 100 percent. We're doing the best we can, and the Coral Committee and the council is charged to protect the coral, and we're also charged to try to work with fishermen and have as much fishing as we can.

It's a balance. It's a dance, and so one option is to run your bottom off and say exactly what you want.

We can use these maps, and you can ask for a lot, if you can get it, or you can say that I'm pretty sure this narrow strip is something that we can start with and can we get that, and maybe, if we see some coral or something, box that out, and there are a lot of ways to run the rabbit, and none of it is going to be really quick. We have committed to bringing you all back together so that we can look and try to find something that helps you all, but those are the options, and that's -- The council has to look at stuff that you all as fishermen don't necessarily look at, and so we have to look at a much wider range of issues, I will call it.

DR. COLLIER: Just to your point on that, Mike, we have been developing a system management plan workgroup, and what a system management plan does is it looks at a protected area and looks at the goals and objectives of that protected area and makes sure -- It reviews the science and literature available and reviews the enforcement of the area and also whether or not the area is achieving the goals and the objectives of why it was closed, and we have done that for the deepwater marine protected areas. We also did it for the spawning special management zones, and we have intentions of doing it for the coral habitat areas of particular concern. It's on the schedule for I believe it's 2022 is when we're going to be working on the CHAPCs. I think that's the timeline for it.

MS. JONES: I think one of their frustrations though is they say they have already submitted maps, but you all can't find the maps that they submitted, and so they're going to have redo all the work of what they did before. If I am understanding correctly, you all have already submitted maps, and you all are saying that you can't find them.

AP MEMBER: Well, Nancy, two years ago, when we sat down, they put the chart in front of us, and they gave us the option to draw it out, and we all had a unanimous vote that we were going to just ask for it all and see what they would come back with, and they never --

MS. SOLORZANO: We had an advantage when we submitted our areas, because we had been trawling and using those areas. They still got taken, because they wouldn't go back prior to. You guys are just -- You want to go into these areas because you know they have moved into there, and you don't have a whole lot of history from back then. You know they're there, is what I am understanding. You want to go look and expand your fishery, which is a great thing, and I don't know why anyone would be opposed to that, but running off bottom -- You're going to spend a lot of time and a lot of effort running off something, and you're going to run and run and run, but you can never put the trap out to see if there is anything there.

You could run for a year running off bottom every day and never know if there is a crab on there, and we had the advantage of knowing that we had previously shrimped for many, many years, and we still lost bottom, but we had a little more to be able to know that this is a good area and we would like to get it back, but that's a tangled web.

MR. ULRICH: Yesterday, there was a mention made of exempted fishing permits, and I wonder what is the possibility of vessels getting that to survey areas with gear outside of the current open areas? Is that a possibility?

DR. COLLIER: That is a process that's done through NMFS. The council gets an opportunity to comment on the exempted fishing permits, but you guys can apply online in order to get these exempted fishing permits. What I would recommend is you partner with somebody within the National Marine Fisheries Service or academia to make sure that the information that you collect would be usable

AP MEMBER: Nuno, you fished further north than the box in the Northern Zone, correct? I mean, do you have those records to how far you actually went up?

MR. ALMEIDA: Most of all that was done after the fact, into South Carolina, north of the closed areas.

AP MEMBER: No, I'm talking about before they put the HAPC in. You were fishing north of that, right?

MR. ALMEIDA: As I told you also, the gentleman that I purchased the permit from also deployed a bunch of gear, and he went back with only half of it, and so it's still there, but, because you have multiple permits and I myself, if all of these permits were individually owned, there wouldn't be enough room to put them to use.

AP MEMBER: You are correct.

MR. ALMEIDA: There isn't enough area to fish.

AP MEMBER: But that would be helpful, with your positions.

MR. ALMEIDA: Sure, but, going back to what Marilyn was talking about, we obviously know they're there, because they live on that contour, in that depth, and we would like to expand and allow the fishery to come back in the areas that we've been constantly fishing. We are not looking to put more gear out there, but we're looking to move it.

MR. MERRIFIELD: What Nuno is talking about is true. We'll leave an area and let it come back, because sometimes we fish it hard and let it come back, and then it comes back, and then we're back on it again. Okay. We have this motion. Is there anything that we want to add to this motion, or are there any other motions that you want to add besides this?

DR. COLLIER: I will read the motion, real quick. **It's to add an alternative for golden crab access areas between the depth lines of approximately 1,600 to 2,400 feet from the Northern Zone, Latitude 29 North, continued up through the Stetson-Miami Terrace to the Virginia state line, and reopen low and moderate probability areas and regulate known areas of high concentration of coral. Alternative B would be reopen low, moderate, and high probability areas and regulate known areas of high concentration of coral. Alternative C would be open low, moderate, and very high probability areas and regulate known areas of high concentration.**

MR. MERRIFIELD: I think somewhere that it needs to be explained, and I don't know if it needs to go in the motion or not, that the fishery does not operate in areas of high relief or that you're looking for that soft bottom or flat bottom, so that the fishery naturally avoids those areas of -- I

don't know if that's explaining the fishery to the council so that they understand that they're not out there just laying traps on top of coral mounds.

DR. COLLIER: We can put that in the background information. Glen's work has indicated that you have a much higher probability of catching golden crabs in mud areas than coral areas, as well as some work done by John Reed.

AP MEMBER: Do any of these maps show mud? Do any of these charts show the mud?

DR. COLLIER: Some of the mapping information would be able to -- They would be able to figure out what kind of bottom type there is, but that's going to depend on what kind of instrument was used and whether or not there is backscatter and all that other stuff that's associated with it, and so some maps yes and some maps no.

AP MEMBER: Do you have the high concentrations of golden crab maps with you? I mean, can you knock this other stuff out and put up the maps so that we could see the -- In other words, that we might be able to do another alternative by looking at the map for our product and what we have on the maps for high probability of golden crab and where we want to concentrate, so that maybe we can make a -- You will just click on that and that will come up with the other map?

DR. COLLIER: As Glen pointed out, a lot of the work that they did was concentrated in this area, which is right -- This is the 700-foot boundary right here, and not a lot of work was done further offshore, and I will pull up the points that they did further offshore.

AP MEMBER: They're not in the parameters that you've got set.

DR. COLLIER: There were a couple further offshore.

MS. SOLORZANO: All of this is going to be presented in June to the council for them to take back and evaluate?

DR. COLLIER: A draft options paper will be presented to them in June, and then they will begin to look at that and develop a scoping -- We'll develop a scoping document. From the scoping, we will begin to develop alternatives. If you look out here, these are areas, I believe, that -- Yes, these are some of the areas that were sampled, I think. These are the sites where we have information on golden crab catches, and this is one of the lines. This is the outer line that corresponds to this dark-blue line, and you will see this white line, and then this other line, and I will point those out on the other map. It's these three.

AP MEMBER: Do you happen to have the depth on that there, further east?

DR. COLLIER: These points over here or those points?

AP MEMBER: Those right there.

DR. COLLIER: Glen, you said 800 meters, and so about 2,400 feet.

MR. MERRIFIELD: Would there be any willingness to do VMS if they were to open up an area, so they could track concentrations of effort?

AP MEMBER: If they opened up the whole thing.

MR. MERRIFIELD: Okay, and so that's our motion, right? Does everybody agree? We're going to take a vote, but who is going to sponsor the motion, or who is submitting the motion?

AP MEMBER: **I will submit the motion.**

MR. MERRIFIELD: I need a second. Nuno seconds. **All in favor; all opposed; any abstentions. The motion is approved.**

MS. THOMPSON: I have a question. In the minutes that you guys approved yesterday from 2013, that was like five years ago, and there was a motion made by Mr. Whipple that they ask the council on how they can address regaining some fishing grounds within the currently closed areas, and Brian was there, and it looks like Ben Hartig was there, and where did that go?

AP MEMBER: The APs can make a recommendation, and so, five years ago, would that have been Brad or Bill?

MS. THOMPSON: It was January 31, 2013, and Brad Whipple, Howard Rau, and Theresa. Nuno, you were there. Robert, you were there, and Glen Ulrich.

AP MEMBER: Where did that take place?

MS. THOMPSON: In Fort Lauderdale. It was the Harbor Beach Marriott in Fort Lauderdale, and it was January 31, 2013.

AP MEMBER: So this is -- All along, here we are thinking that it was only two years ago, and so we're going back five years then, when they had asked about this, and we keep referring back two years, and it was indeed five years, until we had come back to this today.

MR. MERRIFIELD: Brian, did you want to say something?

DR. CHEUVRONT: I will go back to answer the question that was asked by Laurilee. The APs can request things of the council, whatever they want to, but that does not dictate what the council is going to do or how they're going to respond. Lots of times, the workload of the council primarily drives what they are going to work on and what they are not going to work on.

The council always receives the reports from all of these meetings, and they see what the motions are, but then they decide what they are going to do, and, yes, this was discussed back then, and we talked about the issues, and, actually, the last meeting of the Golden Crab AP was in 2015, prior to this meeting yesterday and today, and, probably because of workload issues, they had not acted on it. It has been on there. It has been on their pending amendments list ever since we've been dealing with this stuff, and so now what has happened is that the current Chair of the council, Captain Charlie Phillips, has brought this up in saying we need to deal with this, and that's where we are today. That is why we are dealing with it now. The fact that it was brought up five years

ago, the council just was not able to deal with it up until that point, but they are dealing with it now.

MS. THOMPSON: Thank you, Charlie, for bringing it up. What do you recommend they do? I mean, they may not get another chance again for another five years, and how can they best take advantage of this?

MR. PHILLIPS: Yes, and that's what I'm afraid of. I know what you want, and I know you can justify what you want, and, like I told you earlier, we have a lot of stuff -- We have a lot of interested parties, from the coral people right on around, and so we have to come to something where we can get enough support to get something through, and that was what I've been trying to explain.

I am not saying it's perfect and I'm not saying it's fair, and I am not saying anything, but I am trying to figure out a way to get all the stakeholders into doing something that is doable, and we can -- If we can get something that is doable, and it's not that you can't keep gnawing on it. Marilyn has been working really hard to get her rock shrimp area back, and we're finally going to -- I think we've got a good shot at getting this through council. Is it slow? Is it perfect? Of course it's slow, and of course it's not perfect, but that's just the process.

That is just the nature of the beast, and so, yes, when I came on as Chair, I said this is important to me, and it's important to the fishermen, and we need to bring it back and look at it. We made a commitment that we would look at it, and that's what we're going to do, and there is a lot of fisheries that would have liked to have this space and this time that the staff has taken up to look at this.

We prioritize stuff, and so we moved the pieces of the puzzle around so that this could come back up, and I don't -- June is my last meeting as Chair, and we're going to have new people on the council. I don't know who it's going to be, and I don't know what their priorities are going to be, and so I will leave it with you, and so try to give us something, as best you can, that you can work with that you think we can work with, and that's the best advice I can give you.

AP MEMBER: I appreciate that, Charlie. I had to see you go, but, unfortunately, we're on the short end of the stick here when it comes to power, because it takes so long for us to put our wheels in motion to try and get something that in fact this fishery has been around for twenty-five or thirty years. Howard, how long has it been fishing? Something like that?

When Gregg started talking to us, Gregg Waugh, back in 2007, it happened like one, two, three and that's it. It's closed, and this is where you're going to fish, and this is what you're allowed, but, when it comes back to us trying to work with the council, it feels like it gets dragged for a long time, and I do apologize for my being aggressive and what have you, but it's frustrating, and I hope you all can appreciate that, but it's really tough on this end, you know, but I do apologize to you guys.

MR. PHILLIPS: It's fine. We understand it, and I promise you that you're not the first group that has fussed at us, and you won't be the last, not so long as Marilyn sits on a panel. Bless your heart. I really would like to be able to have something, be able to do something, and it may not be what you would like, but I would like for us to have something, and I'm just going to keep reiterating

that until I'm out the door. If you've got some options that you think you can live with, and it may not be what you want, give it to us, and then we'll say -- Everybody can sit at the table, and everybody gets their public comment, and we can bring it up there and hash it out.

Having some definite lines, some definite boxes, and law enforcement wants boxes and lines. As we all know, especially in rock shrimp and stuff, it just makes it easier to justify something and say this is what they really want and this is what they really need and work it that way.

MS. THOMPSON: Since they don't have VMS data, could they get together and take past catch -- The locations of where they fished before and kind of come up with some crude areas and identify some -- It looks like you guys need to identify some areas, and quickly. I mean, you've got until June.

Get together and define some areas, so that Charlie can actually take something with some meat on it to the council and say this is where we have fished, here is the coordinates, give us back these areas, at least for now, and then maybe you can move forward, but it could be -- Like he said, it could be five years again before you get another opportunity, and all of you need to go to the public comment portion of the council meeting, too. Don't submit something and then stay at home and expect Charlie to carry it through for you. You need to go to the council meeting and make your voices heard, but I think you need to get together and define some clear areas for them to consider.

MR. PHILLIPS: Yes, and it's got to go in the briefing book for us to talk about it in June. We've got to have it in time to get it into the briefing book, and Chip might can tell you, but the briefing book time is really quick, and it's going to take them a little bit of time to lay out the format, and so that's what I told Howard.

If we can get something that is definitive, great, but just -- I don't have a problem with asking for a lot, but, then again, if you can't get a lot, get what you can. Let's get what we can work with, and then we can expand upon it later when we get some other choices. If you say, hey, you know what, this area that we've got, this new area, even if it's not what we want, we've been catching pretty good crabs here, and we hadn't fished there in a long time, and we're catching crabs here, and we're catching shallow or deep or whatever, and now this next area, next time you get an opportunity to move things, and maybe that's the way to run the rabbit. As Brian just noted, I wore my shirt just full of rabbits to run the rabbit.

MR. MERRIFIELD: I don't know, and I would recommend, in those areas, just picking out anything that's got flat bottom and just marking it off and saying that's what we want, any flat bottom, and --

AP MEMBER: Can you make some suggestions for us, because you've been there before, like in the wording for us, and we can go from there and modifying it, maybe.

MR. MERRIFIELD: I don't know, and you might have to be as specific as putting circles around those areas within those two bathymetric depths. Chip, I don't really know how to say this spot, this spot, this spot. The advantage we had was that we actually met head-to-head with the coral group when they were proposing that expansion, and so we were able to -- We actually got the council to step back from just approving that HAPC expansion until we could get together and work it out.

AP MEMBER: So maybe we suggest, as an alternative, is a meeting with us with the coral people, or we don't have time?

DR. COLLIER: That could be another request, is to have a joint meeting. If the deepwater shrimp people want to be there as well, we could have a joint meeting with all three, and you guys can develop that as a request to the council.

MR. MERRIFIELD: I think we want our amendment to move forward. I mean, they're separate amendments, right?

DR. COLLIER: It's all in one. You could also make a request to split the amendment.

AP MEMBER: I second that motion.

MR. MERRIFIELD: We're going to want to split them. What does that entail? I mean, is that creating more work and so now we've got another amendment?

DR. COLLIER: It would be creating more work. It would be a separate amendment for each one, and I am not certain how the council would feel about that, but --

AP MEMBER: So, basically, is this going to be presented to the council and it will be a yes to everything or a no to everything, or are they going to break it down?

DR. COLLIER: Right now, where we are in the stage of the amendment process is we are prior to scoping, and so, generally, when we go out to scoping, we would be asking -- We would be going to the public and notifying them that they are considering changes for management of the golden crab, coral, and the shrimp fishery, and so we're generally pretty light on the details, as far as exactly what areas would be, but we would be describing, in general, the areas that would be changing and what the council is thinking.

Then, after that, we would go to a public hearing. In there, we would have the defined areas with GPS locations for each of the areas, and so it is a ways away, but we would like to be getting these areas defined now, because it's going to be a lot to analyze the data and determine what kind of economic impact and biological impact and social impact that could be occurring due to these different alternatives. In order to analyze that, we need GPS coordinates.

AP MEMBER: I think we should leave it the way it is.

MR. MERRIFIELD: I thought these were different amendments, Chip. It's Golden Crab Amendment 10 and Shrimp Amendment 11.

DR. COLLIER: It's a joint amendment, which includes those three different fishery management plans. It's amendments to those three different fishery management plans.

MS. SOLORZANO: Basically, if they don't get this in by June, you could be another five years before you even get an AP meeting, because they have to hear it in June. If they don't hear it in June, there is no telling when you will even get -- Because they will say, well, we gave you all a

chance, and you didn't give us anything we could live with, and they will toss it out, and you will be five more years, as Charlie explained earlier, and so we have to -- Something has to be basically designed up in the next few days.

AP MEMBER: So, when this gets submitted, will a drawing help at all, so they have an idea, or do we just submit it in writing? I mean, I am thinking maybe --

DR. COLLIER: Yes, a drawing with coordinates, and I would be happy to work with you on trying to develop maps and different things.

AP MEMBER: That will be quick. That's not a long thing.

MS. SOLORZANO: Yes, we did drawings before we did coordinates, and we kind of knew what we wanted as well, and then the fishermen, a couple of them, got together and sat down and did coordinates, because they wanted to get right down to it in the end, but, in the beginning, a drawing, I'm sure, will definitely help.

AP MEMBER: Now, Chip, is this something that maybe you can do and print out a chart showing just the red and we kind of like -- We can kind of like draw around that?

DR. COLLIER: What I can do is develop some options that would incorporate some of the ideas from law enforcement. They want square boxes, and so it's not going to exactly follow the probability lines, and I can provide you different alternatives based on that, and then you could select from those.

AP MEMBER: Right, and so maybe if we have a printout of the chart showing just the red and we drew out what would be called like a rough draft, and then you could probably put it into the actual box that they would want it in, with showing all the --

DR. COLLIER: Yes, we could do all that. I don't know if we have time to do it today though, given that we're a little bit over schedule right now, and we still need to vote on Chairs.

MR. MERRIFIELD: When you start drawing these things, are they not going to require VMS? If you're drawing squares in the sand, are you just going to say, okay, you're on the honor system and these are the areas that you can fish?

DR. COLLIER: Currently, that's the way this fishery operates.

MR. MERRIFIELD: Okay. That's fine. That's good.

DR. COLLIER: Enforcement is out there too, and so it's not just the honor system.

AP MEMBER: When you say square boxes, can it be polygons, or does it have to be square?

DR. COLLIER: It doesn't have to be a square square. It can be a polygon. They just don't want jagged edges.

MR. MERRIFIELD: Okay, and so there is going to be a refined motion added that will have specific boxes outlined that you will work with, and who -- I mean, you really need to have this nailed down of who is going to do this and who is going to work with Chip to identify those and say, yes, that's what we want, and it's got to be -- Because your time is running out here.

AP MEMBER: There is only four boats, I believe, that have permits to work in that Northern Zone, and we're talking only the Northern Zone here, and those people would probably be the ones most likely to get together on it.

AP MEMBER: When is your availability, Chip?

DR. COLLIER: I can work with you guys whenever. I have a meeting on May 9 with the Coral AP, and then I have several IPT meetings within there, but I can definitely work with you anytime that you want. I would need to have everything done, at least map-wise, probably by May 15, in order to get it incorporated and ready to go for the June council meeting.

AP MEMBER: Perfect.

MS. JONES: From my experience, we probably should pick a date. They will have to be there, because, otherwise, they will fish. That's just my experience.

DR. COLLIER: What I could do is just send out, based on all the conversations we've had, try to send out some maps, based on the information that I have heard from you guys, and then you all can send back to me what you would like to see and how you want those changed, and we can try to do this as best we can through email.

AP MEMBER: So you're saying give you a list of coordinates of areas that they want to fish?

DR. COLLIER: You can either give me areas that you want to fish or areas that you would like to see still considered CHAPCs, either way.

AP MEMBER: So, basically, we're giving coordinates for both.

DR. COLLIER: One or the other.

AP MEMBER: So did you say we were going to do this via email?

DR. COLLIER: If that would work for you, or we could do a webinar.

AP MEMBER: Either way.

DR. COLLIER: Well, we don't have time to do a webinar, because I would have to do that through the Federal Register notice, which generally takes about a month, and that would put us after the deadline for the council briefing book, and so we would have to work through email on this. What I will do is I will try to -- Next week, by next Friday, I will send out a map to you guys, and if you can have it worked on prior to the following Wednesday, and then I can send out an adjusted map the following Friday and try to just do that. That way, we can have everything done and several iterations completed by then.

AP MEMBER: That would be great, Chip. Basically, I am only requesting the chart from the 29 to the Virginia line and showing just the red, one with just the red and one with perhaps orange and red.

DR. COLLIER: I will do it based on the motion that you guys made, and so it will include all of those, and I will make three different maps in the beginning and start from there.

AP MEMBER: Perfect.

AP MEMBER: I have a question. On the charts that you can provide, can you incorporate also the depths?

DR. COLLIER: I will do the best I can to get that depth information at a finer resolution than what's currently on what I have.

AP MEMBER: What about latitude and longitude?

AP MEMBER: That's a must. Thank you for that.

DR. COLLIER: Yes, I will get latitude and longitude put on there, or do you guys use LORAN-C?

AP MEMBER: Latitude and longitude is fine.

DR. COLLIER: All right.

MR. MERRIFIELD: Anything further on motions for golden crab?

AP MEMBER: So the next alternative would be based -- I mean, it will be based on us submitting a map for approval, and is that what we need to vote or add an alternative, because -- Or is each of those alternatives going to have a map that we're going to submit to it?

DR. COLLIER: Each of the alternatives are going to have a map.

AP MEMBER: Okay, and with the long and lat and things that we're requesting. Okay.

MR. MERRIFIELD: Okay. I think, with that, we're ready to move on to our last item, which is Other Business.

DR. COLLIER: Actually, I forgot to put the vote on there of elections.

MR. MERRIFIELD: I saw it somewhere, which I guess it has to do with election of officers. We are going to need to look at our members too of the AP.

DR. COLLIER: Here is a list of all the members.

MR. MERRIFIELD: As those three-year terms keep rolling off, we keep extending people, because we don't have anybody else to put in their place. Of this, I know, in our AP, that we've got Richard Reid probably rolling off, and I know Warren Gautier is rolling off, and those people that are just --

DR. COLLIER: Right, and so what we'll do is we'll go through AP selection. Based on this last meeting, we know that some of the people have gotten out of the fishery and are not going to participate in the Deepwater Shrimp, and so that will go through the AP Selection Committee, and what we'll do is put out a call for new AP members, based on the people that have indicated that they don't want to participate anymore, but what we need to do is vote for the Chair and the Vice Chair of both of these.

MR. MERRIFIELD: Okay. Let's address the Deepwater Shrimp, which we've got four people here, and I nominate Marilyn for Chair. Do we have any -- I guess do we have to ask for nominations? Any nominations for Chair for the Deepwater Shrimp AP?

MS. JONES: We vote Mike.

MS. SOLORZANO: We nominate Mike for Chair.

MR. MERRIFIELD: All right. How do we do it? Do we have to vote on that?

DR. COLLIER: You will need a Vice Chair.

MR. MERRIFIELD: We need a Vice Chair, and I think Steve Wilson is not with us anymore, and so who do we want as a Vice Chair? Are there any nominations? Laurilee as Vice Chair? Okay. It's unanimous. Okay. Golden crab, you guys have got a good attendance here.

AP MEMBER: **I motion Robert Palma to stay as Chair.**

MR. MERRIFIELD: Any other nominees? Is everybody in favor? Raise your hand. Okay. Robert stays as Chair. Who is the Vice Chair?

AP MEMBER: He is not present. That would be Brad Whipple.

MR. MERRIFIELD: Okay. Do you have a nomination for a Vice Chair?

AP MEMBER: **I motion Brad for Vice Chair.**

MR. MERRIFIELD: Can he be nominated if he's not present?

DR. CHEUVRONT: What happens is, if for some reason Brad would object to this, he will make it known at the next meeting, or make it known before the next meeting, and, if he declines, then we would just have to have another election for the Vice Chair at some point, but, somehow, I don't think that that's going to be an issue.

MR. MERRIFIELD: Okay. Everybody is in favor of Brad as the Vice Chair?

AP MEMBER: Well, before we do vote, maybe we could put a call into him real quick and make sure he's still -- He is? Okay.

MR. MERRIFIELD: Okay. That's done.

DR. COLLIER: Then the one other issue is public comment.

MR. MERRIFIELD: Okay. Post-meeting public comment, does anybody have comment from the crowd? We have no public comment. Is there any other business? Does anybody have anything else they want to bring to the table?

MR. ALMEIDA: We have, in the Gulf, some activity there where there is an individual fishing for golden crab, which apparently there is no permit needed to fish golden crab in the Gulf, and it was brought to my attention recently that he is now bringing in females, and so I would like this to go to the proper authorities. I just don't think it's fair. We purchased our permits on this side, and we stay in compliance with everything, and we do not bring in not one female crab, and then somebody starts up shop in the Gulf and brings in an abundance of females. As I said earlier, a few of us have another generation that is potentially going to want to stay involved in this, and I do believe that them crabs swim across.

MR. MERRIFIELD: Do we know if this is one stock or separate stocks or --

DR. COLLIER: We have definitely heard that there could be a migration from the Gulf into the South Atlantic region, and maybe vice versa, and so we don't know much about golden crab, as far as genetic connectivity. We don't know anything about that, and so it would all have to be looked into.

MR. MERRIFIELD: Okay, and so we're making basically a note to talk with the Gulf Council regarding this concern. Okay. Any other business that anybody wants to bring to the table? Anything else? Anything else from you, Chip?

AP MEMBER: I would just like to word that it's a fisherman harvesting golden crab females outside the EEZ.

DR. COLLIER: Outside the Gulf EEZ?

AP MEMBER: I guess that's what you would call it, right?

MR. MERRIFIELD: I think we would just leave it. It's in the Gulf fishery, under the Gulf Council's jurisdiction. Okay. With that, we are adjourned.

(Whereupon, the meeting was adjourned on April 26, 2018.)

Certified By: _____ Date: _____

Transcribed By:
Amanda Thomas
May 30, 2018

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4/26

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