SOUTH ATLANTIC FISHERY MANAGEMENT COUNCIL

DEEPWATER SHRIMP ADVISORY PANEL

Crowne Plaza Hotel
North Charleston, South Carolina

May 6-7, 2014

SUMMARY MINUTES

Deepwater Shrimp AP:

Mike Merrifield, Chair
Steven Wilson, Vice Chair
Warren Gautier
Richard Reid
Marilyn Solorzano
Laurilee Thompson
John Williams

Council Members:

David Cupka
Doug Haymans
Charlie Phillips

Council Staff:

Robert Mahood
Gregg Waugh
Mike Collins
Roger Pugliese
Kim Iverson
Julie O'Dell
Dr. Kari MacLauchlin
Amber Von Harten

Observers/Participants:

Dax Ruiz
Jennifer Lee
Rusty Hudson

Other Attendees Attached

The Deepwater Shrimp Advisory Panel of the South Atlantic Fishery Management Council convened in the Crowne Plaza Hotel, North Charleston, South Carolina, Tuesday afternoon, May 6, 2014, and was called to order at 1:00 o'clock p.m. by Chairman Michael Merrifield.

MR. MERRIFIELD: Okay, we're going to go ahead and get started, and we can start with approval of the agenda. We're going to make some change to it while we're talking about this, because we're going to move Number 5; it is going to actually come between 2 and 3. We're going to do that right after we do the approval of the minutes.

That will be our first presentation of the day. Then following that will be the shrimp biological opinion. With those changes, do we have approval of the agenda? John; do we have a second? Who was that? Warren seconded so the agenda is approved.

MR. WILLIAMS: John Williams; Southern Shrimp Alliance.

MS. SOLORZANO: Marilyn Solorzano.

MS. THOMPSON: Laurilee Thompson.

MR. GAUTIER: Warren Gautier.

MR. REID: Richard Reid.

MR. WILSON: Steven Wilson.

MR. MERRIFIELD: Mike Merrifield.

MR. WAUGH: Gregg Waugh; council staff.

MR. PUGLIESE: Roger Pugliese; council staff.

MR. PHILLIPS: Charlie Phillips; council.

MR. MERRIFIELD: Okay, next we have approval of the minutes from our last meeting, which was in a much smaller room than this one. Does anybody want to bring anything up concerning the minutes of that meeting?

AP MEMBER: I move we accept them as presented.

MR. MERRIFIELD: And a second?

MS. THOMPSON: Second.

MR. MERRIFIELD: Okay, so the minutes are approved. Are there any objections for approving the minutes? Seeing none, the minutes are approved.

MR. WAUGH: The people that are going to give the presentations are still in the process of signing on. Let me just take a couple minutes to just orient you to the rest of the information.

We have Dax Ruiz from the Regional Office. He runs part of that program. You all have a written overview of the Cooperate Research Program, which he runs, and the other grant opportunities that are available.

He is going to give a presentation and be able to answer any questions that you all have. You all had asked for information on research options available to you to characterize fishery impacts in that northern extension of the Oculina Bank HAPC. That is a real good avenue to use, and he will be able to answer any questions you all have. I would urge you to take advantage of this opportunity and ask him all the questions about who you would talk to, who has to be involved, and how you get that going.

MR. MERRIFIELD: Just for those that weren't listening to the last council meeting; basically what happened was there was a consideration of what to do with the eastern boundary of this northern expansion in Coral Amendment 8. We had come back with several iterations; and I think as Roger had mentioned, we kept kind of coming up with these little tweaks to the eastern boundary.

A lot of the reason that occurred was because of the information that I have is track data; and I have track data from a limited number of captains, four or five captains. When we would agree on a boundary, from the tracks I had it looked like it was sufficient. When it would go out to the captains and they would look at it; they would say you are missing some areas that we fish in regularly.

I would have to come back at it and look at what they were suggesting and then try to see – what I don't have is the VMS data, and Roger has all the VMS data. The VMS data which has all captains for all that period of time, that ten-year period of whatever it is, seven-year period, is what we really should have been looking at in terms of where they fish and where they don't fish. That was the intent of VMS.

What came back from that was, no, we're not going to alter that eastern boundary at this time. There was a lot of discussion about it. Then what was presented was, well, we're going to go ahead with this boundary, but what we are offering or suggesting that you do is look into doing some cooperative research in that area that would illustrate that you can fish that area and not do damage to the oculina coral that is there.

That is kind of the interpretation that I got out of it. Roger, if you've got anything to add to that, please feel free. With that being said, staff was asked to put together what are some cooperative research possibilities that we might get involved in or that somehow would help us to come up with justification or reasoning why we should open up that area that will be closed with the Coral Amendment 8. Does that make sense? Any questions?

MS. THOMPSON: Would that put off the passage of Coral Amendment 8 until the cooperative research can be done?

MR. MERRIFIELD: No; Coral Amendment 8 is going forward as is. With the boundaries that they came up with; that is what the boundaries are going to be. That is an iteration that we went through and got published. The council did not feel comfortable going back again and changing

it based upon new data that we had about some of the areas that had been brought forward to us by some of the captains as being highly productive areas.

MR. WAUGH: The council approved that at their September 2013 meeting; and we sent it to NMFS on November 26, 2013. You all have several additional opportunities to comment. When the notice of availability of the amendment is published, you all can comment to the Secretary of Commerce or NMFS.

Also when the proposed rule is published, you have another opportunity to comment. Those are opportunities available. The council has already submitted the amendment. They didn't feel that they wanted to pull that amendment back from the review process; they wanted to let it go. You all have those additional opportunities to comment; and then as Mike characterized, work to get some cooperative research.

Then if that result comes back and indicates that the line can be changed; that is something the council would consider in the future. These regulations are not in place yet. The review period hasn't started yet. Those of you that want to comment; I would urge you to take advantage of those opportunities and comment.

MS. THOMPSON: You are saying that even if Coral Amendment 8 gets signed in the way it is now; that there is a chance that somebody is going to come back and change the boundaries later, if we can prove that you can safely trawl in those areas that we're asking to be considered?

MR. WAUGH: Sure; the council can at any time choose to consider and modify regulations that they have in place. Indeed, we've changed regulations in the past. That was the discussion that the council compromised on those areas. The document was already submitted for review and implementation.

They just felt that the new information at that time didn't in their minds justify pulling that amendment back; but if the industry could work and get cooperative research that showed there are no impacts on habitat in those areas; then the council would consider that. They can change this regulation and other regulations, and have done so in the past.

MS. THOMPSON: What do you see as cooperative research? Can we take a scientist and put him on a shrimp boat and drag a net through there; and if it doesn't hang up, then that is cooperative research?

MR. MERRIFIELD: That is what this presentation is going to be about is what are some of the options I guess that are available to us. It is going to be important that you listen to those options and say, well, what are the logistics on how we go forward with whatever option seems most logical or most achievable. We're going to need to be asking those questions as to how does that happen. I have questions about how does that happen. It is great on paper, but how does it happen and where does the money come from? There are a lot of questions. Those are going to come with this presentation. That is my expectation.

MR. WAUGH: Exactly; and maybe what we could do is look through Attachment 3 that you all have. That is an overview of the Cooperative Program and grant opportunities. We're still waiting for them to sign on. As soon as they sign on, we can jump to that; but if you all want, we

can walk through that and at least familiarize yourselves with what different programs are available until Dax gets on.

MR. WILLIAMS: Yes; I think Laurilee certainly asked one of the questions I had was what was involved in this cooperative research. A couple other real quick questions; how long would that cooperative research take; are we looking at a year or two years or something? Will that cooperative research include the VMS data?

MR. WAUGH: All of those details would need to be laid out in the project description and proposal; and, yes, I would think definitely it would have to have VMS. All the vessels have to have VMS when they are operating, anyway, and you would obviously want to demonstrate exactly where you are fishing when you are doing this work. The length of time is flexible. That is something that you or whoever in the industry participates in this would work out with the scientists or organizations that you're doing this work with.

MR. WILLIAMS: One quick comment; I guess our concern or should be our concern is if we get into a year or two-year cooperative research program and then it shows that we can move those boundaries; then you are probably looking at probably another year or two years for an amendment to this; so you could be looking at outwards of four years before we could see any relief before we can get our fishing bottom back.

MR. MERRIFIELD: I think that is probably closer to reality; but we'll kind of find out when we talk with the presenter. I think probably realistically that is the case. That is why it is important that you comment when the comment becomes available to say that this is four years of production that we'll be without. Economically it is a hit.

I think we presented data at least that showed that there is a significant impact just in that one area in a short period of time. That is not to say that is there every year, you don't know, but at least this last year and probably the year before that it was probably the case.

MS. SOLORZANO: Yes; this past year we made most of our money all in what is going to be closed and last year as well. Those two years which we brought in the 2013 data, we were giving to you in September and we were trying to present that in here and they stopped the show and didn't want to hear anymore about it.

We presented it. You brought in the economic loss, the amount of money that was just in a two-month period of time that was lost; but obviously it is still going to go on. The four years we lose, I sure hope somebody plans on paying me back for it. But anyway regardless of that; what was drug on this year wasn't on VMS, because it hadn't been utilized since prior to VMS, because we get so many areas.

It is now; it is on there from this past season, but it wasn't prior to 2003 I think when we got the VMS. My next thing was when you said they've worked with us and opened bottom up; we asked back over a year ago to get bottom to the south of the box. Where we asked for that to come in; you all didn't want to hear about it. Nobody even wanted to hear that.

That has proven to be easy, trawlable area, and coral and everyone said they had no problem giving it back; but council didn't want to hear about giving anything back. We've never gotten

one single inch of shrimp trawl bottom, rock shrimp bottom back ever. Maybe you all worked with other councils, obviously they have; but they have not changed any amendments with us. It is still as is even though we've asked for it, and we would like to get some of that back, but we don't know how to go about it. When we presented it, we were told we can't discuss that right now.

MR. WAUGH: Just a couple of things; one, there are not losses yet because those regulations haven't gone into place. Those additional areas aren't closed yet. Those are potential future losses should those regulations go in place. I don't recall the instance that you're describing where the council has said, no, we're not going to listen to that. The council has listened to the input.

They haven't been convinced to change any of those boundaries now; but if you are going to get into a cooperative research program, I would urge you to look at any areas that you all have asked for in the past or think that you want to ask for and have that be a part of the research design for this cooperative program; so that then when you all do the research and come and those results are presented to the council, it covers all the areas affected from your perspective that you would like to see the council reconsider.

MS. SOLORZANO: The area we were talking about is already in the closed box. That is what we asked for last year, a year and a half ago, going on two years; could that be possibly given back. It was almost an option of a tradeoff, so to say. They said nothing that is closed is even on the table to be discussed for reopening, period.

MR. MERRIFIELD: That was presented to council and at the time what council said was that we want to wait until after this evaluation, which we're going to talk about during this meeting because there has been some movement forward. There are some draft reports out on this. I was a part of that evaluation team; and I can tell you that from the research side certainly there is no interest in opening up that area.

I think what has to happen is that we need to put our comment into this evaluation of the OECA and make sure that our concerns are heard, too, as far as an economic standpoint, obviously, but also from the standpoint where we feel where we can have access to areas that will not impact other habitat.

This meeting is where we need to come up with some things that we want to add or at least comment on to this evaluation team's reports. Just to reiterate; the council did look at our – brief as it is, they did look at our suggestion for having an open area in the HAPC and part of the OECA; but it was just kind of put off until this evaluation was completed. This is where it is important that we get that in.

MS. SOLORZANO: That open area would be like an allowable trawl area for just trawlers or would it be something they were going to open for everyone? I don't know what other fisheries have any use for it or not, because it is a rock shrimp area; maybe scalloping, I don't' know.

MR. MERRIFIELD: I think we have a challenging enough time just getting shrimp access into that area and not to be considering snapper grouper or some of the others. I think we can only

approach it from that standpoint knowing our fishery, what we can recommend or suggest; and then give that to council to mull over.

MS. THOMPSON: Looking at Attachment 3 here, this looks like it is all grants that we would have to compete with others to try and get the money. If we as an industry stepped up and said here are the boats, we will pay for the fuel to take the people out there; I mean, we know that it takes a long time to apply for grants. We don't have the expertise to apply for grants; but we can get you out there and show you that bottom doesn't have coral on it. Can we fast track the process by stepping up as an industry and bypass this applying for grants and competing for grants' process?

MR. WAUGH: That's a good question to ask on this presentation; but it would seem to me if you are talking about as an industry coming up; you can cover the cost of getting out there, but then you still have to have a researcher that is going to work with you on this project and have their cost covered.

That is part of what can be covered through this grant program. If you are talking about covering their cost as well, then that is a different approach. You would then work with that researcher to put the request together and then get an experimental fishing permit from the Southeast Regional Office to do that work. Then that would certainly be faster.

MS. SOLORZANO: We could get the money together quicker than we can deal with the government getting the grants; trust me.

MR. MERRIFIELD: We want to make sure that it is completely unbiased. I guess you've got to worry about all those conflict of interest type things; but as long as you can get over those hurdles, I think there might be ways to do that.

MR. WAUGH: You've got Florida Institute of Technology is right there, universities right there. I don't know how involved Sea Grant is. In the past they used to be more involved. But, yes, you want to find some – any type of project like this, you have a partner who is either with a university or some academic type that would be involved with the project and handle those sides of it that you can't handle.

They know the grant-writing and how to design the research and that sort of thing; but you would identify who from a university. In some cases they've been with private companies. My advice to you would be to use someone from a university. That would put you in the best possible light as your research results were being reviewed.

MR. WILSON: Well, just out of curiosity, I guess it would be a question for the council. The Coral Committee, they are doing research. They have this underwater ROV that they are using to look at coral and the bottom. Would they be available to be working with us or we would have to pay for that?

MR. WAUGH: That is not the Coral Advisory Panel doing that work. That is individuals who are on the Coral Advisory Panel doing the work; and they are doing that work at their host institution where they are, whether it is the National Marine Fisheries Service or whatever university they are affiliated with.

Our advisory panels are designed to provide input and recommendations to the council. Just like you on this Deepwater Shrimp, you are the experts in the fisheries; and what you see out there and how you interact in that environment; that is your expertise. It is the same with the Coral Advisory Panel. We get their professional recommendations and expertise.

You are absolutely correct; a number of those individuals are involved in doing research, but we don't pay them for that. Now, we do have a coral grant that we'll be talking about later that we do receive, and we administer that grant. That is in the late stages of review for the 2014-15-16 three-year cycle.

We've got as deliverables in that grant – the National Marine Fisheries Service is doing that research – is to complete all the habitat mapping within the Oculina Experimental Area and all the habitat characterization in that area. This is something that will feed into the process at the end of that time period; so we'll have a better idea of exactly what is in that experimental closed area. You don't need to worry about doing any work like that in the existing Oculina Experimental Closed Area; because at the end of this three-year grant we will have for the first time that entire area mapped and the characterization work done. You can focus on the other areas.

MS. SOLORZANO: Basically you are saying we should just go through this grant process and all these schools. My livelihood depends on rock shrimp; and when you take it away for four years, I'm screwed – excuse my French – and so is pretty much everybody else. We don't have four years to wait.

We would rather put the money together and hire a private person to go out and do the research with us. Can we get a list of names of private people that we could hire that National Marine Fisheries would agree to that we can put money together with all the fishermen and send it out and do this research quickly? We don't have years to wait. You guys have nice little steady paychecks, we don't. We depend on this.

MR. WAUGH: I doubt you would get a list like that from the National Marine Fisheries Service ahead of time, because that would be viewed as endorsing individuals; but there is a great academic institute right there, FIT. Contact them and find out. If you are willing to work with them, explain to them that you are interested in working with them to do this research, here is the type of research they do.

They have expertise in doing at-sea work. If your objective is to potentially have something changed in the shortest time period possible; that is what I would urge you to do is contact FIT and see who there in their fisheries program or their oceanography program would be interested in working with you all.

MS. THOMPSON: I'm still trying to figure out how we got to this point, because from day one, from the very first public comment at CE-BA 3, four years ago in Cocoa Beach, we were there with charts, with track charts showing that this proposal was going to take away bottom that we've been fishing for 40 years.

Staff was instructed by the council to work with Mike and get the information from the shrimp boat captains. The Coral Committee was okay with changing the boundary so that we could

preserve our traditional fishing grounds. Mike got the information that was requested. I don't understand how we are boxed in now with this thing moving forward when we have been trying to put the brakes on it since the very, very beginning.

We've shown you economic data that shows that if you take that piece away from us, that is where the rock shrimp – the majority of the shrimp that have been caught the last two years have come from. I don't get it; we've done everything we've been told to do. I don't understand how this is moving forward. I just don't get it. Explain this to me; it makes no sense.

MR. WAUGH: What went on was between recommendations coming from the Deepwater Shrimp AP and the Coral AP in the joint meeting you all had; you all reached a compromise recommendation that went to the council. The council adopted that compromise recommendation; the amendment was finalized and submitted to the secretary.

After that you all came back to the council again requesting a further change. That is where we are now. The council looked at the request for that additional change beyond what was agreed to when the two APs met together, and the council adopted that. An additional change and they said, no, we're not going to make that change now the document is already submitted. If the industry wants to look at a change, then get some cooperative research and bring that information back to us. That is how we got where we are right now.

MS. SOLORZANO: But the cooperative change is going to take years; that is what we're fighting you on right now; not really fighting, but it might come to that.

MR. WAUGH: I would urge that you take advantage of the opportunities to comment to the National Marine Fisheries Service as that amendment is reviewed. Again as I said, at the same time get with some academic institution to get on board your vessels and to get the permits necessary. Well, right now you don't need a permit because the area isn't closed; but to get the work done, if it does get implemented, get an experimental fishing permit so you can get in there and do the work as quickly as possible.

MS. SOLORZANO: Now, there is a review period of time; are we supposed to be saying our name? This has to go before a review committee, right; so if the review committee comes back and says, no, we're not happy with it; what do we have to do to stop it in the review committee or is there even a potential for that?

MR. WAUGH: What needs to go before the review?

MR. MERRIFIELD: It is sitting in the Southeast Regional Office right now, right, it has not been released from there. Once it is released out of there, it is approved out of there; that is when there is an open public comment period.

MR. WAUGH: We submitted it to the National Marine Fisheries Service, Amendment 8, in September. They are supposed to have that available within a relatively short period of time for public comment. Due to the workload that they've been experiencing, it is taking longer. They have not published the notice of availability of the amendment.

They have not published the proposed rule that actually has the regulation. Each of those, when they do that, will have a 15- to 30-day and in some instances a 45-day comment period that you all can comment directly to the National Marine Fisheries Service. The council is out of that process. We completed the amendment, we submitted it to the National Marine Fisheries Service and they are now reviewing it. You have two additional opportunities to comment to them once they publish the notice of availability of the amendment and when they publish the proposed rule.

MR. MERRIFIELD: But once they publish the final, once they publish it; that is in the register. Odds are at that point your comments are just going to go into the register with it; and there is probably very little chance of change at that point. Our best opportunity for change is probably after it is published out of the Southeast Regional Office, right?

MR. WAUGH: Well, you're talking about the same thing, because it is under review by the Secretary of Commerce. The Secretary of Commerce delegates that responsibility to the National Marine Fisheries Service. The next step will be a notice of availability of the amendment. That gets published in the Federal Register. That notice will be available on our website, and you all can comment on the amendment.

The same thing on the proposed rule; that gets published in the Federal Register and they'll have a comment period that you can comment on the proposed rule, the actual regulation. Then they look at those comments, and they have made changes in the past; and then they will approve, partially approve, or disapprove the amendment. Realistically, we are probably still four to six months away from any regulations being implemented.

MS. SOLORZANO: Right about the time rock shrimp season starts. Can we hire legal counsel to put a stop to this privately?

MR. WAUGH: Yes, this is a democratic country; you can hire a lawyer anytime. There will be opportunities that you can challenge this; but again there is nothing in place yet. You all will have to evaluate whether it is more prudent use of your resources to hire somebody to do the research or wait until the regulations go in place and hire an attorney. We're going to try with the presentations now. We have run into some issues with the voice, but we'll go ahead. Dax, can you hear us?

MR. WAUGH: Go ahead, Dax, we've got the slide show up. You let me know when you want the slides advanced.

MR. RUIZ: All right, do I have control of the slides or no?

MR. WAUGH: No, I have control of them. You just say next slide and I will advance it.

MR. RUIZ: First off, sorry for being late; we're having some technical difficulties here. Basically the presentation we have here is going over some of the grant opportunities that we have in the Southeast Region. My name is Dax Ruiz and I'm one of the Federal Grant Program Officers here.

Basically the idea of our grant program is to build a collaborative relationship between agency fisheries experts, state agencies, universities, as well as recreational and commercial fishing industries. The benefits we get from collecting this data is to basically fulfill our mission, which is to conserve, protect, and manage marine fisheries resources.

Here are the four federal programs that we have: Marine Fisheries Initiative, MARFIN; Cooperative Research, CRP; Saltonstall-Kennedy and the Bluefin Tuna Research Program. Also if you guys have any questions while I go through these, please just go ahead and interrupt. Here is our first competition, the MARFIN.

There is about $2 million available each year for this. This is strictly a southeast region competition. The awards are one to three years ranging from $25,000 to $525,000. That higher number there of $525,000 is pretty much reserved for the three-year projects; so they are not generally that much for one year.

We anticipate awarding about seven per year. Those are some of the examples of the projects. These are also the listed priorities for this particular program. We've got bycatch, reef fish, red snapper, economic and social culture studies, and integrated ecosystem assessment. This is the Cooperative Research Program. There is $2 million available each year for this one. This is also a southeast region competition. This one is different in terms of it requires a NOAA partner; and a the end of the presentation I'll give you some information on how to obtain that.

This also has industry involvement. I know in the up and coming announcement we are going to make that more accountable. That is a good thing for industry folks. These are one-year awards ranging between $25,000 and $300.000. We usually fund about eight per year contingent upon available funds. Some of the examples here; we've got commercial and recreational finfish research, economic studies, commercial shrimp harvest and Caribbean Fisheries Research as well.

Now, the Saltonstall-Kennedy, the SK, this is a national program. The Federal Program Officer for the southeast region is Bob Sadler for this one. There is about $5 to $10 million available each year. These are one- to two-year awards ranging from $20 to $400,000. The southeast region awards approximately eight to ten awards.

Some of the examples here are aquaculture, optimum utilization of harvested resources, fisheries socio-economics, conservation engineering, ecosystem studies and territorial science. Since this is a national program, the southeast region is probably the second highest in the nation in terms of collecting proposals and making awards.

We're right behind the northeast; so it is quite a bit of federal funds that are put into the southeast region from this particular program. This is the Bluefin Research Program. Obviously, this is species-specific. We've got $600,000 available for this one. This is a national program as well. This also requires a NOAA partner, either one-year awards ranging from $25,000 to $300,000. We anticipate awarding about five a year.

Some of the examples here are sampling of fishes and otoliths, genetic tagging, modeling to simulate the effects of stock mixing and aerial survey of schools to develop and support develop abundance.

MR. MERRIFIELD: Dax; we've got a question, hang on:

MS. SOLORZANO: I may be jumping the gun, but how do you get a NOAA partner?

MR. MERRIFIELD: The question was how do you get a NOAA partner?

MR. RUIZ: At the end of the presentation, I am going to show you a website. Basically you'll contact the Program Administrators for the two programs that require NOAA partners. They basically review your proposal, so to speak, and give you a contact NOAA Fisheries person to work with having some substantial involvement in your project. It is really simple; you just kind of call one of the program administrators and they'll give you a NOAA Fisheries scientist to help you out. I'll give you that information on a later slide.

MS. SOLORZANO: Do you need to have your project and your grant submitted before you apply for the NOAA partner or do you apply for a NOAA partner first?

MR. RUIZ: The whole idea is for the recipient and the NOAA partner to kind of discuss certain aspects of your project. They will assist you in terms of what NOAA's expectations might be. Obviously, they cannot write the proposal for you, but they could certainly give you tons of guidance on what direction they would like to see versus what you're trying to pitch.

Basically what I kind of wanted to point out here is the things to know. Anytime you submit a proposal, it goes through the three-level review process. The very first one is we check the proposal or the application to ensure it meets the minimum requirements. That basically involves ensuring that you have all the required documents that are stated in the federal funding opportunity.

For instance, like the project narrative; it needs to be identified to one of the program priorities that is listed in the announcement. You need to provide a detailed budget narrative. It is helpful to have a spreadsheet that kind of itemizes out your expenditures. It is really important to have all that information the same, all your totals to be the same.

If you're asking for $100,000, provide a detailed narrative that equals $100,000. For the programs that require NOAA partner, you must submit that along with your application. Any of those documents are missing that basically will not meet the minimum requirements; then we have to disqualify that application.

The next level review is a peer review. It is required that we get at least three fisheries experts on that particular topic. They basically grade your proposal. It is all based on evaluation of criteria that is also stated in the federal funding opportunity announcement. It is a basic score of 1 to 100. Each criterion has an individual weight to it. That is why it is very important to sort of review that information prior to submitting to ensure that it meets the expectations of the reviewer.

Once those proposals are ranked, the top 20 will go to a panel of experts. Basically we'll get an individual from one of the commissions, maybe Sea Grant, a university; and then they basically review your proposal again and simply give a score of recommend or not recommend the proposal.

Those are then ranked again and given to the selecting official to be selected. Basically it all depends on the available funds that we have will determine how many proposals that we can fund. If there is a particular hot topic, the collecting official does have the opportunity to deviate from the ranking order with justification. Basically, if you make it to the panel, your chances are fairly good. But, yes, it all depends on providing a good proposal that identifies to one of the program priorities. Are there any questions so far? I'm pretty much almost done.

MR. MERRIFIELD: Wait a minute; we do have a question.

MS. SOLORZANO: On the last thing, what we're doing, is this considered a hot topic or not?

MR. RUIZ: That is pretty much decided by issues pertaining to like maybe SEDAR. There are certain factors that are described in the FFO where a lot of the priorities will come from. It is kind of hard to pinpoint what is a hot topic year by year; but generally if there is an urgency on one particular species or a study that NOAA wants to see, they do have an option to deviate from the ranking order based on one of those issues.

MS. THOMPSON: In our particular instance, we have a real urgency to keep our industry alive. We don't have time to go through a competitive grant process; we don't have time to write the grants; we don't have the expertise. We need to be able to fish. Is there a way if we as an industry would fund the scientist to go out on our boats; do we have to go through this cooperative research process or can we just do like we always do and go for it?

MR. RUIZ: No, our grant opportunities are one level of receiving federal assistance. I get phone calls all the time from individuals saying we don't have the capabilities of submitting an application or the accounting; because there is another level of financial accountability that is required from recipients.

They might not have the accounting expertise to receive thousands or hundreds of thousands of dollars from the feds. What I generally advise them is to get together with their local universities or state agencies; because nine out of ten times any of these recipients will use a subcontract to industry folks. That is really another way of getting assistance.

I have received phone calls afterwards from people saying, yes, thank you so much for that tip, because I was able to contact my local university and they hired me to do such and such work. They received some financial assistance based on that. There are other ways to get financial assistance other than applying for one of these competitive programs. Now with that being said, it is not generally difficult for anyone to get a federal grant.

It is a competition; and, yes, most people are going to compete against professors from universities. However, with the assistance of a NOAA partner, it is doable; it can happen. Either just for opportunities that we have here in the southeast region; NOAA has tons of other cooperative programs nationwide. This very first link here, www.grants.gov, I don't know if you could click on that and if it will actually work, but that is basically the first place you are going to start.

MR. WAUGH: Thanks for your presentation. I think what this industry is interested in doing is less so about competing for a grant, but providing the money for the research themselves. What

they would like to do is find out how they do that with either a NOAA partner, so that they can get the necessary permits. They are willing to foot the cost for this research; they just need someone to help with the parts of designing the research proposal, collecting the data, and then presenting the data to the council. I think that is what this group would like to pursue.

MR. RUIZ: That is a little bit outside of my expertise. However, I believe contacting a NOAA partner will definitely get you on the right path. I think these two individuals are program administrators that we have for the two programs that require a NOAA partner can certainly provide some insight or guidance on how to achieve that.

MS. SOLORZANO: Do you have a list of NOAA partners that we contact?

MR. RUIZ: I'm going to get you individuals that will be the best start. They are lab directors, so they are pretty much at the top of their ladder in their region. They can certainly provide a reference, someone who can assist if they don't have the time to do it themselves. This website here grant.gov is pretty much where you would start to receive federal assistance.

There is a search link at the very top here. If you were to type in cooperative research or fisheries research, it will give you all available programs nationwide not only for NOAA, but for all federal agencies as well. With that being said, if we could go back to the other, there is the little search query and then over to the right you'll see the federal funding opportunities. If you were to click on that, it will take you to how to apply and print out the announcement itself. This is where you would start to actually submit your application. If you'll go back to the last slide –

MR. MERRIFIELD: That last slide; was that a list of opportunities that are out there right now to apply for; is that what that was?

MR. RUIZ: Yes, it was.

MR. MERRIFIELD: Okay; that is what I thought.

MR. RUIZ: Okay, so the next link is our local website. Here you will find all the information you need about the competitions that we currently have in the southeast region. You will find the FFO. Off to the right there, that was just last year's federal funding opportunity announcement.

When 2015 comes up, we'll post those; it will probably be around July. If you scroll down a little bit, you will see all the different programs that we run here. If you were to click on CRP, Cooperative Research Program, at the bottom of this page you will see a little paragraph that informs you how to receive a NOAA partner. To address the previous question about finding someone who can help with whatever projects that you have in mind; these two individuals will certainly put you on the right path, Guy Davenport for CRP; and Clay Porch, he is under the Bluefin Tuna Program. They have got their cell numbers there as well.

You can also find on this page examples of past funded projects as well as annual reports that have all our past projects; there is a synopsis for each of those. That will give you sort of an idea of what types of projects we've funded in the past. That is pretty much the end of the presentation. Are there any additional questions?

MR. MERRIFIELD: Is that also where you would get current programs and I guess status?

MR. RUIZ: Well, we don't generally post until these become finalized, but, yes, this is where you will find the most current funded projects. The same case applies with all our programs. You will see a list that has past funded programs.

MR. MERRIFIELD: What do we want out of this; what information do you want out of this presentation? Do you want names of who to contact in order to get partners?

MS. THOMPSON: I guess we need to know who from NOAA we can contact. To me it is so simple; we put somebody on a shrimp boat and we go out there and drag where we've been dragging for 40 years. If we don't hang up on coral, it is not there. I don't know how complicated that is; but we need to be able to take that concept and make it fit whatever it needs to fit, so that it follows whatever protocol; but that is basically what we're talking about.

MR. RUIZ: If you need to contact anyone from NOAA and try to achieve what you are trying –

MR. WAUGH: Dax, who should they contact within NOAA to work with them if they are willing to foot the expenses for this research? Who is one person they should call within NOAA?

MR. RUIZ: If you would want the person that is in charge of all of the science centers, it would be Bonnie Ponwith.

MS. SOLORZANO: Bonnie with a B or Connie?

MR. WAUGH: B, Bonnie.

MR. RUIZ: Bonnie Ponwith. She is basically the top person for all the fisheries science centers. Guy Davenport and Clay Porch; they are also very good to contact to get things started. They are the first ones in line to do work and give us the data.

MR. WAUGH: Guy Davenport would be someone they could call and talk to and find out who they could work with to do this research?

MR. RUIZ: He would be a good start and Bonnie Ponwith, for sure.

MR. RUIZ: If you really want to start with someone really high on the scale, on the top of the ladder; you want to go to Bonnie.

MR. MERRIFIELD: Roger, you've been awful quiet here. I just don't think that it is as simple as saying you go there and you drag and you don't catch on coral, obviously. This is going to be more along the lines of habitat characterization.

MS. SOLORZANO: Well, you know Lee's boat; he's got that high tech transducer that basically gives you 3D.

MR. MERRIFIELD: Density.

MS. SOLORZANO: Yes; it is a pretty cool piece of machinery, so it shows a lot. If you have like his boat with that on there and took someone out; they can tell so much from that. That would be the boat with the equipment to take them on to really get a good view of what is going on. He would I am sure gladly do it. It is a matter of just getting somebody there.

MR. MERRIFIELD: I think the hurdle here is putting it in terms – not in our terms, putting it in their terms.

MS. SOLORZANO: That's an act of congress; we're going to have to get some congressmen in here.

MR. WAUGH: Let me make another suggestion. Mike now sits on the Coral Advisory Panel. When those guys come in, you could ask – and I don't know if any others are planning on hanging around for that; but you have the opportunity tonight to talk with Mike a little more and ask Mike to talk one on one with some of the researchers who are on our Coral AP who will be here. That is another avenue.

We will get you the phone number for Guy Davenport so you can give him a call. I think you want to have some linkage into NOAA, because that will help with getting any necessary permits that you need; but let Mike talk one on one with some of the researchers. If they're too booked up, they may be able to point you in the right direction.

MR. WILSON: You told us a while ago – and I didn't catch the timeframe for within the HAPC, the habitat mapping; when is that going to be finished?

MR. WAUGH: Our Coral Grant is for fiscal years '14, '15, '16, a three-year grant. At the end of that grant we will have that entire area mapped. It is the experimental closed area. That portion will be mapped and characterized. We have the number for Guy, and I will give it to Laurilee.

AP MEMBER: When will this start; this is already '14? What month do you propose to start your investigation out there with this grant?

MR. WAUGH: We're not immune from bureaucratic reviews, also, and our coral grant is being reviewed now. We've responded to the questions they have and we're waiting for that approval; and then the monies will be transferred to the Southeast Fisheries Science Center for them to begin that work; but some of it will take place this year.

AP MEMBER: It might run a little longer. If it starts late; will it run a little longer?

MR. WAUGH: No. It will be done by the end of – and fiscal year '16 would run from October '16 through '17.

MR. MERRIFIELD: But again that area is for the experimental closed area. That has nothing to do with this area that we've been fishing and will be closed if Coral Amendment 8 goes into effect.

MR. PHILLIPS: Gregg, is that Stacey Harter; is that the boat that is going to be doing it; because she was asking me for some numbers up close to the Georgia MPA, and I think she said they were going in June, I believe, somewhere. They are going pretty soon. They will be starting, because I know she's going up there. Is that the same boat that is going to start that research?

MR. WAUGH: Yes; and Roger can correct me if I'm wrong; but, yes, that is the same group; Stacey and who is the other one, Dave, I forget

MR. PUGLIESE: Andy David.

MR. WAUGH: Andy David is the other individual.

MR. MERRIFIELD: Are there anymore questions or anything else we would like to get out of this presentation regarding cooperative research opportunities?

MR. WAUGH: What we'll do now is good – and we can certainly come back and discuss this some more, but I think it would be good before Mike's cell phone dies to go ahead and get the presentation from Jenny Lee. Then we can certainly come back to this and discuss this some more. Jenny, I've got your presentation up and it is the same way. I will operate the slides and you can just speak from there.

MS. LEE: I'm here to give you an overview of the 2014 Biological Opinion on SERO conservation regulations in federal shrimp fisheries. Hopefully, all of you are familiar with what a biological opinion is in terms of an analytical document looking at the potential threats or proposed action on threatened and endangered species.

I am not going to get into a lot of background on the Section 7 process; so if you have questions, let me know. I will mention the basic components of a biological opinion. The purpose for it is to set the stage really for our analysis of how the proposed action is likely to impact threatened and endangered species.

The effects analyses lay out how we think the proposed action is likely to affect threatened and endangered species. Our general analysis then looks at those effects as well as cumulative effects and determines the proposed action is likely to jeopardize the continued existence of a threatened species. This gives you the basic outline, and I'm going to touch upon information from these different sectors. Our role is consultation history and background. This is not our first rodeo; we've done many, many consultations on fisheries and our sea turtle conservation regulations. I've listed some of the consultations we've done; the most recent one prior to this one being our May 2012 opinion. We reinitiated on that 2012 opinion – the triggering consultation in our proposed action changed.

On November 21, 2012, we made a decision to adopt some changes to sea turtle conservation regulations that would have required nets and skimmer trawls, pusher-head trawls and wing nets. We did that because the 2012 skimmer trawl survey data indicated that some skimmer trawls interact with very small, juvenile Kemps-Ridley sea turtles that passed between the required maximum bar spacing. For that and a variety of reasons, we did not move forward with that proposal.

Because the biological opinion had that as one of the basis that we reviewed the effects on, we had to reinitiate. There are several aspects to the proposed action that we looked at. It was subject to continued implementation of the sea turtle conservation circulations under the Endangered Species Act in state and federal waters of the Gulf and South Atlantic and then the continued authorization of southeast U.S. shrimp fisheries in federal waters under the Magnuson-Stevens Act.

Just to be clear, this was not specific to the South Atlantic Council but looked at both South Atlantic and Gulf of Mexico; and also looked at what we were doing under the Magnuson-Stevens Act as well as our Endangered Species Act regulations. I just wanted to point out one part of the proposed action section deals with the biological opinion you might want to look at in particular. Section 2.1.1 goes through how we manage the effectiveness of TEDs; monitoring TED compliance in sea turtle captures in otter trawls.

Again, hopefully, you are somewhat familiar with the 2012 opinion. The 2014 opinion really builds off of that. Our new opinion maintains the system we set up establishing monitoring and ensuring compliance of TED regulations at a level that would keep overall average sea turtle capture rates in the shrimp otter trawl fleet at or below 12 percent.

When I talk about average sea turtle capture rate, it is really just the inverse of when people talk about TED efficiency. If you hear TEDs are 97 percent effective when TEDs are installed and operating correctly, essentially 3 out of 100 turtles would get caught. That is how we're looking at this entire turtle catch rate.

It also outlines NOAA Fisheries process of reviewing TED compliance and sea turtle capture rates. The last biological opinion terms and conditions specify we were going to review TED compliance every six months, and what we were going to do depending on the outcome, because we implemented through the proposed actions basically how we are moving forward – (inaudible)

This is just a quick overview of the species in the southeast. You can see the opinion through the effects on marine mammals, corals and (inaudible); so the effects of the action and the using of (inaudible) focuses on our turtle species, also Atlantic and Gulf sturgeon and smalltooth sawfish. I realize, of course, this is the Deepwater Shrimp AP. You are probably less concerned with smalltooth sawfish or sturgeon, for that matter.

Certainly, you don't care about Gulf sturgeon since you're in the South Atlantic, but just so you are aware of all these species (inaudible). Then critical habitat; there is associated critical habitats that are designated within the southeast that can we determine that there were not likely to be adverse effects by the proposed actions, so this presentation focuses on the (inaudible) standard and we don't have any further information as far as critical habitat goes.

Section 5 are the effects of the action and where we really get into laying out or breaking down the action and (inaudible) what the effects are. There are several components. We look at NOAA Fisheries Services exemption of the (inaudible) sea turtle through sea turtle conservation regulations and what effect that has on listed species.

We look at the existing sea turtle conservation regulations themselves, (inaudible) they have and then a general authorized shrimp fisheries. The point here is that we're not trying to look at the effects of all state fisheries in terms of their continued authorization. We're looking at state fisheries through our sea turtle conservation regulations for the fact that we require TEDs in them because under the ESA and our (inaudible) rules we are making that requirement whether it is state or federal waters. Our scope of our (inaudible) is still limited.

This is just in real general terms. For each listed species we'll give a (inaudible) that occur when exposed to trawl gear, consider the fact expecting the likelihood of exposure and then evaluate and quantify the facts using the best available information. That is just the general framework. Then we have it broken down into three categories, interactions, captures and mortalities.

An interaction occurs anytime a turtle enters a shrimp trawl regardless of whether it escapes through a properly installed TED or it fails to escape and is captured. Otter trawls and quantifying sea turtle captures can be adjusted for sea turtle capture rate estimates based on anticipated long-term compliance rates in existing regulations as I mentioned.

For our sea turtle effects assessment in the new opinion, I'm just going to run through how it differed somewhat from the 2012 opinion. As I mentioned, the 2014 opinion, our new opinion (inaudible) the 2012 opinion and tries to assess and looked at the information and all the effects that were viewed in that 2012 opinion. We then summarized relevant new information on completion and then consider how that new information might (inaudible) proposed actions from otter trawls have on loggerhead, Kemps-Ridley, greens and other types of sea turtles.

Some new information since completion of 2012 opinion, which was relevant to the otter trawl sea turtle bycatch analysis, really was limited to effort and compliance data. The (inaudible) conditions are given as far as continuing to monitor TED compliance and look at our efforts. All of that information fed into this new opinion.

The new otter trawl analysis focused on a surrogate for sea turtle interactions and captures, which were effort; days fished and number of trips in the South Atlantic and TED effectiveness or sea turtle capture rates, as I mentioned, and then the relative impact of any documented changes to those parameters on the magnitude of the effects of the proposed actions.

If you're not familiar with the 2012 opinion, I should bring out that the results of that opinion was we went through all kinds of analyses and came up with capture and mortality estimates; but there was so much uncertainty in those estimates that we really did not feel comfortable and didn't think it was the best course of action trying to set up our incidental take such that we were having to use those as we usually do for our take estimates.

Instead we came up with these surrogates which still get at the effects of the fisheries as a different way of looking at these interactions and captures strongly impacted by effort and TED compliance. In terms of that new information based on the 2010 through 2012 effort data, otter trawl effort southeast over the past three years generally remained below 2009 effort levels.

There was some fluctuation. In the biological opinion there are tables in which we look at effort in different strata in the South Atlantic and Gulf. Apparently there is some up and down, but overall the (inaudible) remain below 2009 effort levels. I have some information I could share

about specific inspections as far as how things weighed out Gulf Coast and the South Atlantic; but in the interest of time if you have detailed questions, I can probably come back to that analysis in time.

So, monitoring of otter trawl TED compliance and periodically conducting sea turtle capture rate analyses for terms and conditions indicate average sea turtle capture rates in the entire southeast were – and then I give the details on a six month basis because the last biological opinion did have us looking at things on a six-month basis. Of course, we were most concerned with the entire data set and what that indicated.

Overall, really, when you looked at the entire data set, (inaudible) our sea turtle capture rate goal or standard by 1 percent. Anticipating future efforts remain at or below 2009 effort levels in the long term; and also the 12 percent sea turtle capture rate represents a (inaudible) estimate of the rate we can contain. If any of the information I just shared use the same (inaudible) capture and mortality methodology and calculations of the (inaudible) 2012 opinion.

All of the assumptions and sources errors that were discussed in that 2012 opinion are somewhat repeated here. Some of these had to do, if you recall, with how we tried to update our CPUEs reflecting increases in Kemps-Ridley. That was a big reason why our catch rates went up. Anyway, all that information, all the factors were factored here.

As I mentioned also previously, ultimately we found the information was too uncertain to actively predict a specific number of deep sea turtle species. That is really the same case here. Moving on to analysis of skimmer trawls; skimmer trawls, as you recall, was the main reason why we reinitiated. We did have new information mainly related to our 2012 observer data.

We had new Gulf of Mexico sea turtles catch-per-unit effort, mortality, and tow time data as well as (inaudible) trawl effort data. We updated our skimmer trawl sea turtle capture and mortality estimates to reflect that sea turtle CPUE data for the Gulf of Mexico from the 2012 observer coverage.

We, of course, had to incorporate the fact that skimmer trawls, fisher head trawls and wing nets would be continuing to fish without TEDs and under tow time restrictions. Then we looked at the extent of compliance with tow times in the Gulf based on 2012 observed levels. All the new information really stems from the Gulf of Mexico observer data. There were changes in both sections. The North Carolina assessment, especially in the 2012 biological opinion; it had a status quo analysis.

Then it looked at the effects of the proposed requirement of TEDs. Essentially without the rules, that moved us back to that status quo situation; and then in the Gulf we had this new information that we incorporated. I guess that is all I have in respect to the effects' analysis on sea turtles. Again, feel free to ask questions later, but that is just a lot of information here. I didn't want to bog you down with too many details.

Sawfish, we maintained the 2012 opinions' reliance on bycatch assessments based on extrapolation of observed data from our Center reports. We updated otter trawl capture estimates to reflect 2009 effort baselines. This is one thing that we did that is different in the 2014 versus 2012 opinion.

The last one we had average effort; and this time, recognizing that the 2008 effort levels were different in that our whole premise of effort maintained consistent with 2009, it made more sense to go ahead and extrapolate using only that 2009 effort. That did result in a slight increase in our take estimates with respect to sawfish.

The estimated mortality rates were also updated. Basically I think in 2013 we had three more sawfish captures; and we didn't have the effort data at that point to extrapolate those out. That is why we're still relying on the old report, but we still looked at their fate and that is why our estimated mortality rate changed slightly. Then we maintained that TED requirements would certainly not increase the likelihood of capture of the 19 impacts resulting from capture. That has to do with like a federal – we looked at our action with respect to the federal fishery and then just what impact the TED would have on the sawfish encountering a trawl (inaudible) fishing.

Atlantic sturgeon; we made very little changes to our Atlantic sturgeon analysis. To estimate otter trawl and try net captures in federal waters are based on observed CPUE extrapolated to the fleet based on federal effort. Estimated otter trawl interactions data demonstrating TEDs resulted in 87 percent reduction of Atlantic sturgeon bycatch by number of individuals.

All this here is really duplicative of what was in those opinions. Mortality estimates were estimated by observed mortality rate; and then TED compliance not believed to be an important consideration except for when it is a very severe reaction of gear violations. Certainly, the biological opinion had some new population estimate information related to Atlantic sturgeon, but not a lot of significant change.

The same thing with Gulf sturgeon; Gulf sturgeon we still only have one observed take; so we don't extrapolate that out. We feel it is inappropriate from what we know about Gulf sturgeon where they stay relatively nearshore when they are in Gulf eating (inaudible). I think I'll just get back to the next slide. That gets us through all of our effects' analyses.

We arrive at Section 6 and we look at cumulative effects. Then our jeopardy analysis, evaluate the effects of proposed action on the likelihood of the survival and recovery by looking first at whether there is reduction in reproduction numbers, distribution of any species. This is our standard framework for how we conduct jeopardy analyses. We conclude that there would be a reduction in numbers – that is a typo there – effort from lethal captures and associated reproduction losses for all adversely affected listed species. I'm really just giving you the framework and outcome here.

MR. MERRIFIELD: Jenny, hang on a second; could you go over that type again please?

MS. LEE: It said "effort" instead of "numbers".

MR. MERRIFIELD: Say that again, please.

MS. LEE: On that slide, it concluded there would be a reduction in numbers from lethal captures, and the slide has the possessive numbers – sorry about that. Once we establish that there are changes in numbers, reproduction, or distribution, we then look at the question as far as whether they would cause an appreciable reduction survival.

I have the definition for survival here and recovery. All of this feeds into whether or not an action is likely to jeopardize. And ultimately on the next slide you have a conclusion, which I'm sure you all know already, which is it sets a proposed action. We conclude it was not likely or expected to cause appreciable reduction and likelihood of survival and recovery, and is not likely to jeopardize the continued existence of any listed species.

That will get us to the incidental take statement, which is always, of course, of the most interest which gets at sort of the requirements and how much take is authorized through that opinion. I touched on this before, but for sea turtles we use a take proxy. Take of sea turtles will be considered exceeded and effects on the sea turtles will be considered greater than analyzed in the opinion at 2009 and or 2010 effort levels. That just relates to which data depending on our trawler skimmer in Gulf of South Atlantic.

If those levels there are exceeded or compliance levels are expected to result in TEDs being less effective than the predicted 88 percent effectiveness; and that is just another way of saying maintain a sea turtle catch rate of 12 percent or lower. For other species we do have a more standard take issues as far as we characterize it in terms of interactions with captures and mortalities.

As I mentioned when I went over those analyses, there are some minor changes to the numbers, but overall it is not very different from the 2012 opinion. I'm not a big fan of reading slides, but with biological opinions it is always a bit hard, because I want to make sure you understand the specific language that we include in the biological opinion.

I guess it is easier reading a few than having to read the whole opinion. Reasonable and prudent measures for sea turtles; the first one here or number one focuses on effort in state and federal fisheries. We must monitor that and continue to work to better determine their effects on sea turtles.

The second one is monitor TED mandatory compliance, ensure the compliance is at an anticipated level; so both of those are really getting at that take proxy that I just went over. That is our way of trying to make sure that our effects are as we predicted. Number 3, continue outreach program to train fishermen and net shop personnel the proper installation use of TEDs;

I'm sure all of you are very familiar with Pascagoula's Gear Monitoring Team and all the work they do. We want to continue to work with industry on TED development and to conduct research and better understand the nature of sea turtle interactions, particularly small juvenile sea turtle interactions with shrimp trawls in inshore and nearshore waters. Essentially we want to continue what we started with skimmer trawls; and our work there is to better understand the nature of the interactions and how the turtles are interacting with their different life stage.

For reasonable and prudent measures for sawfish; conduct research to better understand the nature of smalltooth sawfish interactions with shrimp trawls. Conduct outreach, I'm sure you can see a theme here in southwest and south Florida fishermen to ensure that they know and use the safe handling guidelines. Atlantic sturgeon; conduct research again to better understand the nature of Atlantic sturgeon interactions with the shrimp fishery.

You can see where we still have a long ways to go in terms of our data that we have on interactions. I didn't reference this it, but reasonable and prudent measures; as you can see they are somewhat general statements to define what we can do to minimize the amount or extent of incidental take. We then have terms and conditions, which are more specific and really get at how it is that the agency is going to make sure it is carrying out these reasonable and prudent measures.

On the next slide I focus in on the terms and conditions that pertain to fishing effort and TED compliance, because basically I think this is where your interest lies most. Just so that you're clear, I would encourage you to take a look at the entire incidental take statement to better understand what our requirements are with respect to what the agency is doing.

There are 31 terms and conditions. Twenty-one are primarily relating to sea turtle issues, the next five are linked to sawfish, and then the last three I guess relate to sturgeon. I'm only presenting a very small subgroup of the terms and conditions and just trying to focus in on what I think you will be most interested in.

If you have that document or you are familiar with the ITS and want to ask other questions about specific terms and conditions, please do so. As I said, pertaining to fishing effort and TED compliance, you must coordinate with states to monitor shrimp fishing effort and major gear types.

You must use this information to determine trends and ensure fisheries and possible effects of these trends on the sea turtles. Number 2 relates to trying to improve our shrimp effort data in the South Atlantic. When we were working on this biological opinion, it became clear to us that some of the information that we had for Gulf of Mexico fishing effort was not available in the South Atlantic.

For example, in the Gulf of Mexico with the electronic logbook data and whatnot, they were able to look at days fished without having to make as many assumptions from the trip data. The South Atlantic, as you know, is relying on the trip ticket data. There is more that goes into looking at the days fished.

All of this terms and condition here is really just getting at how can we work with ourselves and our state partners to try and improve the data? I think you probably are all aware there is actually a SEDAR this year on South Atlantic data for shrimp. Term and condition Number 5; NOAA Fisheries must increase the amount of empirical and other data it has on trawl sea turtle capture probabilities associated with TED violations that are documented by observers, gear monitoring and the Office of Law Enforcement capture probability. If you look at the biological opinion in Section 5 and thumb through it, you will find what is basically a matrix of violations and then sea turtle capture rate probabilities.

Some of that is based on empirical data and some of that is best expert opinion. We want to do as much as we can to try to improve the data upon which we're making these estimates. That is really the gist of that one there. NOAA Fisheries must continue to monitor compliance of TED regulations using one or more of the following elements; Southeast Fisheries Science Center Gear Monitoring Team, also law enforcement, observer data, and other partner agencies.

If you are familiar right now, we've been using Office of Law Enforcement data and our Gear Monitoring Team boardings where we're looking at violations in estimating the sea turtle capture rates. Here we're basically establishing how we want to continue with those data sources but also to try and expand the information. The Southeast Fisheries Center Gear Monitoring Team must continually monitor shrimp vessels dockside and at sea throughout the Gulf and South Atlantic areas. Obviously, this is all what is being done now.

The Office of Law Enforcement continues to enforce TED regulations. You see a focus on standardized boarding forms. A big focus we have is to make sure that we are doing just that; we are standardizing the information and we have confidence in the reliability of the inspections and boardings.

Then NOAA Fisheries must work with state enforcement agencies to improve and standardize enforcement TED regulations; also promoting the use of standardized boarding forms. We gave a little thought or a lot of thought to the terms and conditions we had in the last biological opinion and the system we set up.

In this opinion we're requiring that NOAA Fisheries must use data on TED compliance to target outreach, enforcement, effort and emergency rules, if warranted, ranging from possible TED modifications to closures of areas to shrimp fishing. How we're going to do any of this really is we're going to spell out in a policy, which Term and Condition 14 establishes where NOAA Fisheries must develop a policy specifying data requirements on minimum data standards for taking various actions such as time area closures to just noncompliance.

Our goal is to use observed data for compliance analyses, because the program is based on representative samples and to avoid potential bias using enforcement data. There have been concerns, and we recognize that our law enforcement are out there trying to catch the bad guys essentially, colloquial, and what effect that may have on the data sources we use.

We really like the idea of using observer data, since it is a representative sample, but again we're focused on being consistent. We're training observers now or our gear monitoring team is training them now. Our hope is that we can start using that information to look at this question of TED compliance.

However, until that is done we must rely on our old (inaudible) data and increased enforcement. As part of this policy, NOAA Fisheries must develop a general policy or guidance outlining methods and standards for determining stock and the lack of compliances throughout the entire Gulf area or Atlantic area or concentrate in certain portions of an area.

Really, this is just recognizing a lot of what we've heard from industry and questions really from all constituents as far as the details of how we will respond and handle situations for assessing our TED compliance and how we respond to that action and condition. Basically, we really want to think this through and develop a policy that is transparent and clear on how we'll make those decisions and how we are moving forward.

Those are the only terms and conditions I am bringing up here. Again, I am open to share other information with you if you have IPS handy or have questions offhand; but aside from the terms

and conditions, the last section in the biological opinion, as I mentioned, conservation recommendations.

Those are just specific actions that we can take to minimize the effects of the proposed action on our listed species that are adversely affected. They focus primarily on developing additional information. Again, they are discretionary. We have several different conservation recommendations on each species.

I believe you are probably looking for additional information I want to bring up. The first website is our main Protected Resources Website, which has a link to the biological opinion if you haven't looked at it already. The second site is one that will take you to a page-specific to TED resources. I will note right now there is no point in clicking on that link. There is really nothing there, but we're making a lot of progress.

While we're working on the biological opinion, our outreach and development of our one-stop-shopping idea where shrimp fishers could, you know, rather than try to look at our Centers webpage and then our Office of PRs Website and then go over to Sustainable Fisheries; we want to make things really simple where you can get all the great TED compliance guys and guides and regulations and even like Center videos, et cetera.

We want to try to make all the information consolidated. We also want to have it so you can go on there; and when we do our compliance analyses, you can go on there and see a link which will share with you what our latest compliance information is. That is really where our effort is focused right now.

Certainly, I would say within the month that will be up and running and a great tool for you to track your fishery as far as how we're doing with the turtles and, like I said, also just help you navigate a variety of NOAA Fisheries related topics to shrimping. Then my e-mail and number is there. I am always available to answer any questions. Michael Barnett in our office is another person that is a great resource for you. That concludes my presentation. I am open to questions.

MR. WILSON: I was just curious. You said in developing your statistics you are using Oculina Law Enforcement numbers. I was just curious has there been much encroachment in Oculina Habitat Area of Particular Concern?

MS. LEE: I believe I did not say anything with Oculina; so I apologize, I must have stuttered or it didn't come across. Most of the law enforcement information we were looking at related to boardings where they board shrimp vessels and look at the TEDs and evaluate their compliance with the regulations.

MR. MERRIFIELD: That was a misunderstanding. It was Office of Law Enforcement and not Oculina Law Enforcement.

MS. LEE: Right now with respect to corals; with our list of corals, we determined they were not likely to be adversely affected. This particular biological opinion really doesn't go further after that.

MS. SOLORZANO: I have a question to ask. I am being very pessimistic here. I don't think you've had anyone shrimping that you boarded that did not have a TED in the net and probably the violations that you've seen are a slight bit of an angle off or a bar a little bit out of place, which can happen on very rare events. Turtles aren't getting out through that. There is no entrapment of turtles that has went on in I can't even tell you when shrimping. This is like an old topic we're beating to death with TED violations.

MR. MERRIFIELD: I thought when you mentioned there that you were looking at violations and trying to determine potential effects of those violations; I think that is a great thing because there are a lot of those minor violations where the bar distance or a lot of those small things that happen over time that just need periodically to be corrected; that will have low probability of impact to turtle.

If you are looking at those things, that is really good, because I think we've got a lot – I don't know what your distribution of what degree of violation you had, how many of them were just minor and how many were major violations. I would guess a lot of them were minor. Any of them that I have seen at the dock have been a bar got bent out of shape or something to that effect.

MS. LEE: Yes; we definitely have seen a trend from what I would characterize as lesser violations. We are working extensively with the gear monitoring teams on trying to get outreach on the impacts that various violations can have and the fact that some things are monitored and really don't have a big impact on the same.

On the other side, there are things that fishermen might not realize do have a pretty substantial effect that don't seem to be a big deal to them. The opinion does have, like I said – I apologize for not having the specific table reference, but there is a table in the opinion that is essentially our violation matrix and it shows the different violations and sort of how we form things and the probabilities for now that things are predicted to have.

That might be something to check out, but, yes, we definitely are encouraged to see that in terms of the egregious violations we're not really seeing that or it is very, very rare. That is great news. Then for those maybe who aren't familiar with the system, the 2012 biological opinion; it is kind of hard to talk about one without the other, because really the 2012 opinion set up this whole new system.

In the past when we analyzed the effects of the fishery, the biological opinion just assumed TEDs were 97 percent effective and it didn't sort of account for the fact of compliance and violations and the effects that they have on sea turtle capture rates. Starting with that 2012 opinion, we really have gone off in a different direction where we're trying to better assess and look at what is impacting the animal.

MR. MERRIFIELD: You talked about some things in there about you were measuring against effort. It really is a percentage of effort; and even though it is not a – I saw some comparisons to 2009. The fleet size has certainly diminished over what it was. Does that have an impact? I mean, obviously, it has an impact on the number of takes. Are we looking at percentage of effort, really?

MS. LEE: Yes, when we first did that 2012 opinion, we were looking at, well, effort has really declined since 2001; and, yes, when we're looking at trying to come up with our capture rates, it is largely an equation where you are applying a rate to effort. Certainly, effort is a big part of that and why we're using it as one of our proxies.

When we did the 2012 opinion and talked with our center, we established that 2009 level as what we predict being to maintain at or below and I guess that it has been a little up and down, but for the most part fishing effort is staying about that level. Then the second half of the equation, when we first did that 2012 opinion, people expected the take estimates to be way down because effort was way down.

But what ends up happening is our catch-per-unit effort or our catch rates actually end up going way up, because we tried to consider various changes related to abundance of sea turtles and then also look at this issue where we just didn't assume that all TEDs were 100 percent compliant, and we tried to factor in the effect of TED violations.

The 2012 biological opinion to some people was rather shocking in terms of why our numbers went up from our original 2002 biological opinion. It was really an apples/orange thing where one looked at something different than the other; and so this 2014 biological opinion again is building on that. We're still really using the assumptions and system that we stopped in 2012 biological opinion.

The main reason why we're doing it is just because of our changes in skimmer trawls and not moving forward with requiring TEDs in them. But, of course, as with anything, a couple years go by and you then had another year and a half of compliance data to try to reason and look at and effort and all that new information there got considered as well.

MR. PHILLIPS: Jennifer, how do you figure in the nesting numbers of loggerheads up and down the east coast, because it has gone up more than substantially in the last few years? I would expect you would have more interactions if compliance stayed the same. How much weight are you figuring in that?

Because one of the things that might happen is some time area closures; and if the fishermen are all basically on the same compliance rates, shrimp prices have gone up, so I would expect more effort out of the same size fleet, too. With more turtles and maybe more effort out of the same size fleet, I could see it changing your numbers. Fishermen are basically trying to do – you know, working on the same level or maybe even a better level than they were before. How do you figure that in?

MS. LEE: Well, the nesting numbers definitely figure in in a few different ways. You are right as far as one point in that I took everything you said. As far as the increases, they had the most impact on our Kemps numbers and our greens numbers. Kemps-Ridley and sea turtles, as you know the populations have been increasing substantially. Their nesting numbers have been increasing substantially, which we do think translates at least to the adult turtle populations.

That did go into our catch rates and, of course, that also went into our jeopardy analysis. A big part of our jeopardy analyses is always the nesting trends and what we think in terms of the population's health with respect to whether it is declining or we don't know or it is increasing.

With loggerheads, a difference between the 2012 and 2014 opinion for loggerheads, we did not in our catch rates account for changes in abundance.

The 2014 opinion, for example, recognizes that we no longer believe loggerhead nesting numbers are declining. I think the 2012 opinion; at that point we thought the trend was becoming unknown. The more time that goes on, the more it has been supportive of the nesting numbers in loggerheads increasing and the trends changing from declining to more stable. All of that factors in.

MR. MERRIFIELD: Are there any other questions or comments about the biological opinion? Okay, Jennifer, thank you very much. That was a good presentation.

MS. LEE: Thank you very much. Anyone who has questions after, just feel free to get in touch with me.

MR. MERRIFIELD: Let's take a break here, a 15-minute break. Okay, I think we're going to try to get going here. What we'll probably try to do with our remaining time; the next item on the agenda is Status of Coral Amendment 8, which we've kind of talked about; but I can do a recap of that if we want to go through that real quick. Then from there we'll get into the evaluation reports. Then we'll probably stop there, and then we'll come back tomorrow and comment and put together whatever comments we might want to put together regarding those evaluation reports.

On Coral Amendment 8, as we talked about, right now it is in the South Atlantic Regional Office. The way it got to where it is today is because we had the joint meeting with the Coral Advisory Panel; and we came to that looking at 60-100 meter lines as the closed area and 70-90 as another area.

We came to a good understanding, had a good meeting with the Coral AP and came to a compromise of 100 meter line and the 70 meter line with some modifications possibly to that. We were supposed to come away with that meeting; and I think John and I and Roger were supposed to get together and make some modifications to that.

From that, there were some other alternatives that came out. I think from those alternatives we recommended some changes based upon input that we got from the fishermen based upon what we published out there. Some of those were incorporated into a new option, which were modifications basically to the southeastern and southwestern borders were the main focus of those changes.

Those were accepted by the council and made the preferred. Then what happened after that is we got some feedback from the fishermen that said that there was this area to the north or basically about the central eastern edge of the expansion that was of primary interest in maintaining. We went back with that change and the council basically said that they had already submitted that document and that they didn't want to reopen it.

Then they said what we can do is recommend research options to industry to find ways to open that up or legitimize having it made available to us as putting it back into the fishery. That is why we got the presentation today on the research options, cooperative research options. But

where we are at now is we have two more comment periods; one when it comes out and what is published from the regional office. That is where it is going to be important that we get our comment out there and say why it is we got to where we're at and the economic importance of that area and why it is we want to have it remain open. That is kind of the status of where we are. Are there any questions about that?

MR. WAUGH: I think what would be helpful when you all make your comments is to make sure you point out what the economic impacts are going to be, which you've already done a good job of that, but also something that I think would help your case is to explain what has changed in your minds over the past couple of years to cause such a significant portion of your harvest to come from this area.

That, as I understand it, is a change over I guess the time since VMS was required, which was like 2002, '03. Were I in your shoes, I would make sure I go into great detail explaining what has changed since 2003 such that in the last two years the bulk of your harvest is coming from this area that is proposed to be changed.

MS. SOLORZANO: I don't think we can tell you what causes that change. There is no scientific reason for it. That whole area is rock shrimp bottom. Some years they are here. If we had the answer to that; we would know exactly where they were every year right on time, right on schedule. There is no magic crystal ball.

That whole area is rock shrimp bottom. They haven't been on the north end. There have been some, but they were more plentiful to the south. Back years ago we always dragged off the Cape and north. We didn't drag to the south or very seldom. As years have progressed lately, I guess the water temperatures were warmer down there.

I'm not really sure the exact reason, but whatever was just right put them down there more so. If I had the answer to that; I don't think anybody here can tell you the reason why they were there in 2000 and 2001 and not in 2002 and 2003 because we always drug there. Then it was better to the south. If we had that answer, I wouldn't be sitting in here with you all.

MR. MERRIFIELD: Also, if you look at VMS data; VMS data indicates this is the last two years are not just the only time they've been in that area. There were VMS dots in that area prior. There was a concentration of VMS dots there before the last two years as well. It has come and gone. That is just how it is.

I think you have asked me before can you identify an area that is where an allowable trawl area is or shrimp area. It is not really a functional thing because it changes so radically, especially now when you've got so many upwellings and so many species are moving north. They are catching wreckfish and grouper up in New Jersey now.

MR. WILLIAMS: I guess I'm a little confused. If we had the VMS data back from 2003, was that not included in when we were looking at all these alternatives? If it was there, why didn't we reach for that instead of coming back again and again?

MR. WAUGH: It was included and that was analyzed. It shows that from 2003 forward, based on the VMS data, little effort was in that area. I forget the exact number; we could pull it out of

the amendment; but it indicated a minor number of trips, which we equated to the percent of the trips to the percent of the harvest came from that area are very, very minor. But obviously something changed from 2003 to the time that is in the amendment to the last two years. The last two years are significantly different than 2003 up to that point.

MR. WILLIAMS: You're right, I recall that now, when you were doing the evaluation the amount of effort in that area now.

MS. SOLORZANO: I don't think that we used the whole 10 years' worth of VMS data when you did your survey. You only did – I don't remember correctly the amount of years, but it wasn't from the very beginning of VMS on. It was over like a four-year period of time.

MR. PUGLIESE: No, we used the entire timeframe. We went down this road when we first started talking about this. You all probably should remember that we actually went back, requested information, came up with the information that provided the historic, and looked at the differences between the present and historic.

We looked at all the information we had in hand up to that point and had it integrated into the review and oversight of what this area looked at. In terms of the small percentage, the small percentage for the entire area in the northern bound was less than 4 percent of all VMS points for the entire timeframe.

Actually in 2013 it was significantly less. Even though you're saying that there is a lot of fishing effort in that period of time, at least the data – it wasn't complete; that I will say, the '13, because we were in the middle of it at that time, wasn't complete. It was fairly minimal at that point, significantly less than 4 percent, maybe 1.

MS. SOLORZANO: It was in the latter part of 2013 that the data came in, obviously, September/October. There wasn't a lot of boats that worked it, but all the rock shrimp that were brought in came from that area. Pretty much about 80 percent of them all came from that area last year. There wasn't a lot of boats that worked it; but the few of us that did, that is where the money was made. It is the economic impact you will see.

There was 15, 20 years; all of the nineties, late eighties, et cetera, that we rock shrimped that are not in your VMS data, which we brought in stuff to try to present that and tell you that you're only using nine years worth of data over a 30-year industry. I explained this and brought it up numerous times; and will again, I'm sure.

What you have in VMS is not everywhere we've worked. It moves, it changes. You all have heard me say this a thousand times; Mike, Richard, Laurilee, all of us have told you this. Each time we would come back and say, well, you are taking an area that we're working. In 2012 it was the south piece of the bottom.

We come back; we presented that. It just so happened the next year it was the north end of the bottom; the other part you were taking. You would have took about 60 percent of our trawling area that we caught our shrimp in last year. We'll be closed next year. If the shrimp are in the same place, we will not be catching rock shrimp that we could afford to be out there and do for nothing; we're not protecting anything by doing that.

MR. MERRIFIELD: Then we get into that whole argument again of value of the VMS point, because it does not show productivity; it just shows presence. VMS data is excellent for showing where you fished and when you fished there and from an unfortunate standpoint whether you were in and out of an area, but it does not show productivity.

We used it to calculate productivity and we used it to do economic impact, which is wrong. It is not valid; but at this point we're past that. But the true data – as I've been told before, the true data to look at here is not the track data. The true data is the VMS data; and so that is what we should have been using all along to determine where to put those lines. If there were VMS points in those locations, then we should have tried to keep those active in the fishery. That is what needs to be in our comment; and that is where we're at.

AP MEMBER: The magic word here is we're all fishing. You never catch the same thing in the same spot on any given day, I don't care what you fish for; shrimp or fish or crabs, it moves. I don't know why they can't understand it moves around. The boats have to follow the species wherever it goes; and it is going to change from year to year, month to month. It shouldn't be that hard for these educated people to understand.

MS. SOLORZANO: That's the thing that gets me is that they are not realizing we hear all these other people with their professional input. Our professional input doesn't seem to – we can tell you what we professionally have done for many, many years, but it is not as important as some scientist.

MR. WILSON: I think the key is what bottom do we really need to protect and what bottom is not really necessary to protect. Sometimes it seems like council is just taking area as I don't know that is not necessarily for the coral. The intent is to protect the coral, but maybe overreaching as there is certain bottom there where there is no coral.

Particularly for shrimp; I mean the shrimp industry and the protection of the coral; the habitats, they work side-by-side, but they can't overlap, because you can't shrimp on coral. You just can't. It's not in the shrimping industry's interest to go into the coral. If it was coral there, then you've got to protect the coral; but if it is not there, why are we needing to close it?

If it is good shrimping ground, why can't we keep good shrimping ground? That is the real key in my mind and that is where we need to be looking. We shouldn't have to be fighting for, well, we want this for the coral, but we want this for the shrimp, because where we want to shrimp there is no coral, anyway.

MR. WAUGH: Going forward, I think Mike has made a good case. Let's look going forward. What we have since 2003 as the way to verify where you all are operating in the industry is VMS. We've got that data from 2003 on. You have done a good job pointing out that the shortcoming of that is it shows where you're fishing; it doesn't show productivity.

What data do we request you provide and we can add this into a future amendment to collect this information from you? What would you suggest providing in addition to your VMS data; so that rather than just showing that, well, this ping occurred here, that we can then look at a vessel track and say, okay, this is a track that vessel fished, here is the ping showing that the vessel was there and here is the what? What can you provide to show what was produced on that track?

MS. SOLORZANO: You could possibly show a trip ticket that will show you, but that really wouldn't work either.

MR. WAUGH: All the trip ticket is going to show you is on this trip here is what you land. Now what you have said is that now the last two years the bulk of your landings have come from a particular area; so how do we verify that? Not that we don't trust you, but we have to have a verifiable way for you to document where your production is coming from.

You are saying it is coming from a particular area; well, how do you know that? I know you do, so then how do you provide that information to the council in a way that it can be linked with the VMS data to show, okay, this vessel trawled this track; and when you brought that net up, here is what you estimate was harvested on that track.

MS. JONES: We're professionals; we know where we caught them. It is our professional opinion that there is where it come from.

MR. MERRIFIELD: Do logbooks do that; the electronic logbooks do that?

MR. WAUGH: What about having an on-board electronic logbook such that at the end of each trawl, then you input, okay, this trawl track went here and here is what we estimate what was caught in that track. The way we would verify that is that on a certain number of trips we would try to get some observers on board and then the observer would verify that, yes, this vessel is fishing this way. That would translate – rather than just getting pings where your vessel is, it would show pings where your vessel is and here is the productivity. It seems that would get at you being able to document what productivity is coming out of certain areas.

MS. SOLOLZANO: Last year we had an observer on our boat while we were dragging in the area that you are planning to close this year on the Michaela Dawn with Brad, the captain. It was a girl, I don't remember her name, but she was there. If she was keeping records, she also can verify that was where the boat was dragging along with VMS.

MR. MERRIFIELD: Does that electronic logbook in the Gulf; is that how that operates?

MR. WAUGH: I don't know.

MR. MERRIFIELD: I don't either; I was just curious.

MS. SOLORZANO: You're saying that if we put an electronic log – now I know that a lot of boats in the Gulf are being required now to put that on; that is almost mandatory now. They have to go through Verizon or something. Most people got letters; for some reason those of us over here didn't get them. Even though we fish in the Gulf, I never got a letter telling me to put one on even though most people did.

I don't know why, but anyway regardless of that point; how are those – and you are probably not the logbook guy to know or ask this question to, but how is it going to pick up if you are too far away? It was through Verizon, and Verizon is a cell phone service, so how is it picking up when boats are outside of the cell phone service area?

MR. CUPKA: Are you talking about the electronic logbooks in the Gulf that the shrimpers use? It is very inexpensive compared to the others. What happens is if it is out of range, once it gets back in range, it automatically downloads to data; but if it is real far offshore, you have to wait until they come back in.

MS. SOLORZANO: Now how often does the captain put this information in; is it daily, is it per drag, is it weekly? How often is the captain expected to put this information in? Is there a certain time within which once a day he is supposed to log in? I don't know anything about them.

MR. CUPKA: I don't know what the requirement is; but I was at a Gulf Council meeting when they discussed the fact that those things report automatically once they get back within range of the phone or whatever.

MS. SOLORZANO: I figured it was something like that.

MR. WILLIAMS: You don't put anything into the Gulf electronic logbook. It automatically does it and dumps it when it gets in range, but the captain doesn't do anything. It records it all by itself. All it does is monitor effort; that's all.

MS. SOLORZANO: It just monitors where you are at?

MR. WILLIAMS: Where you've been; not where you are at but where you've been.

MS. SOLORZANO: This is kind of a substitute for VMS?

MR. WILLIAMS: Well, somewhat, but it is just to monitor effort is all, where you've been, not where you're at; because it is not real time, it is where you've been.

MS. SOLORZANO: Well, that is not going to show anything different then, because I could have been there, but that doesn't mean that is where I caught the bulk of my shrimp at in a 25-day trip.

MR. WILLIAMS: No, it doesn't, but there are other logbook types that you input the data in yourself for the shrimp.

MR. MERRIFIELD: Now, are not most of the captains writing down the number of baskets on a drag?

MS. SOLORZANO: Yes.

MR. WAUGH: Obviously, we can't hash out the details here, but what I'm hearing is you would be interested in exploring options for – and obviously looking to be as least disruptive and cost the least amount; but you all are interested in linking up with the VMS data an indication of your productivity on a trawl track, so that then you can document, one, where your vessel is fishing; and then, two, what your productivity is. Obviously, your VMS data is highly confidential. That information would be highly confidential as well, obviously, because that equates to how much money you are earning.

The utility from your perspective would then be able to document in a very defensible way where you are fishing and what your productivity is. If we can look at something like that, you might be able to get it in fairly quickly to where you all could start using it on a voluntary basis. We would be glad to explore how that can be done and work with you on figuring that out so that it is least disruptive to you.

MR. MERRIFIELD: I think that is a conversation for another – is that something that would be helpful?

MS. SOLORZANO: If it is going to help us prove where we've been working, which we know but obviously no one seems to – you know, we've got VMS.

MR. MERRIFIELD: We better think this one through.

MS. SOLORZANO: We'll do anything to prove to you that is where we're working and don't take our bottom. Whatever we need to do to convince you all that this is where we're trawling, this is what we have historically trawled; we've brought information in from 20 years back, which obviously nothing matters but VMS.

Even that doesn't seem to matter. We'll do whatever it takes to prove that this is where we work if you won't take and close our bottom. We went through this once before; and I was told in 2003 if we put the VMS on, nothing else would be closed. That was up in smoke. That didn't happen. I don't know how else to prove otherwise.

MR. WAUGH: I'm sorry, but I have to respond to that; that is not correct. You were not told that if you put on VMS, nothing else would be closed. I'm sorry; there is no way we or the council would make that statement and/or commitment. A council cannot bind the future council. We've got two council members here and they are welcome to jump in.

We just can't make that type of declaration. Now, what was stated was having VMS on board your vessel would give you a documented, verifiable way to show where you were fishing and would be very useful to you to demonstrate that you are not fishing where coral is. That is true. We have used that information; and if you look at the information here, it shows that a very small percentage of the trips from 2003 on, when VMS was required, were in those areas.

The VMS is useful, it is being used. The problem that we have right now is that something has changed to cause the fishing distribution in the last two years to be very different from the time period that we have used VMS. You all have pointed out, too, that the VMS shows where you fished but does not show productivity; and so we're talking about ways to incorporate productivity.

MR. WILLIAMS: I guess for the folks here and myself – and I will put David and Charlie on the spot here in just a minute – anything that we're talking about now as far as electronic logbooks or trying to get some quantifiable evidence that our production is in this area, this is all going to apply to a future amendment. Because of where Amendment 8 is at now, there is no way the council can revisit that; is that right?

MR. CUPKA: That is my understanding. It has already been submitted to the regional office. If we're going to do something, it would have to be in another amendment, a future amendment.

MR. WILLIAMS: That's what I thought. I think for the folks here we should try to decide what we need to do. If that is the only choice in a future amendment; what can we do to make that change and make it as fast as possible?

MR. CUPKA: But also, if I may, to that point; that is not to say that you can't or shouldn't comment on Amendment 8, because NMFS has changed its mind in the past on things. There is no guarantee they will, but I wouldn't just write it off and say it is a done deed because it is not until they make that final determination.

MR. WILLIAMS: Yes, I agree with you 100 percent. We file comments on a lot of stuff; and unfortunately a lot of folks think when it gets to a certain level, it is a done deal. It is certainly not. We will be filing and I encourage everyone to file comments on this when it is the appropriate time.

MR. CUPKA: Well, when I said a done deal, I meant from the standpoint of the council being able to do anything further on it; but it is not a done deal until it is approved by the secretary.

MR. WAUGH: If we were to come up with an approach or some modification to how you do your reporting now, we wouldn't have to wait to an amendment. All an amendment would do would make that mandatory; but there is nothing to stop you all from starting to use it voluntarily much sooner than we would be able to get an amendment in place.

MR. MERRIFIELD: I think a lot of captains are doing that today. They are keeping track of where their productive areas are and where they are not. We don't see that at the fish house. That is not part of the trip ticket system and to add anything on beyond what we're doing today is not realistic; but somewhere down the road that could possibly be incorporated. I think that productivity data exists today; it is just private, personal data.

MR. PUGLIESE: One other addition I would like to add in on something that would maybe provide more information down the road. If you do go down the road and have the opportunity to get some cooperative research to pick up on things that have been done, say, in the Gulf of Mexico where not only were they trying to engage and look at the use of VMS and trying to connect it to production; but also looked at the environmental variables in there.

It had vessels carrying CTD, basically things that are capturing salinity temperatures and a number of different things, and they were connected to individual trawls and were able to get surface-to-bottom information on a pool on some of the ones – so what you ended up doing is combining what you knew of the habitat, the environmental conditions of the ocean, catch rates, and really captured some things.

It wasn't for deep-water shrimp; it was for brown I think and maybe white. It opened the door to see some of the variability of the oceanographic conditions that were driving and changing what people thought were the most productive bottoms were actually a variation in a combination of the oceanographic driving and the benthic habitat.

It gave a different perspective; and without getting to that level, we will never get what is driving and moving, because it probably captures some of the upwelling events, some of the different things that are shifting this distribution over time or variability. I think that would be a good component as you look down the road for something that would more defined; because the reality of that; that actually provided information that would increase the fishability, catchability efficiency of the industry, which I think is huge.

MR. MERRIFIELD: Absolutely; and we would certainly be interested in pursuing the collection of that data as well.

AP MEMBER: Is there any information recorded or kept up with the currents, the temperature of the water coming up the coast on a year-by-year basis?

MR. PUGLIESE: Yes; there is a lot of work being done right now. I actually am involved directly in one of the organizations that has been collecting and drawing a lot of information from NOAA and from universities and trying to capture what the variability and change for wave heights, for things such as hurricanes, for variable current systems.

We literally are in the process of trying to connect some of that information with fisheries information to begin to understand that now. There hasn't been a lot done to date to make that connection between these. There is an opportunity to do that as these types of models and capabilities, observing platforms; because by no means do we have enough of an array to capture really truly the entire system from surface to bottom, but there is enough that is being done right now that you are starting to be able to do it.

That is one of the big pushes that I was making is to be able to look at models that if nothing else are going to be capturing upwelling events; understanding what upwelling might be increased, because apparently there is an increased occurrence on the east coast of Florida over time. Instead of everybody talking about climate change, we talk about climate variability now, because what you're seeing is instead of just like an overall trend, which is one thing, well, it is more significant if you're having episodic events that are happening more frequently instead of once every six months, you know, four times in a week type of thing.

That may change the whole nature of what some of these fisheries may add. Yes, there is work being done on that; and I think there is a real opportunity over these next years to align some of that information with fishery operations and be able to understand how that is really changing distribution patterns or at least driving settlement rates for various species. There is a pretty complex system driving all of the fisheries right now.

MR. WILSON: To partially answer something that Gregg brought up earlier; one of the changes that kind of hit us about why we made some backtracking; we've had two years of virtually no rock shrimp. We don't know why, but the rock shrimp that they caught, that was basically all of it that year.

That bottom suddenly is very precious, because it is not just that, oh, there is so much rock shrimp caught there, but that was all of the rock shrimp for that year. We still don't even know where rock shrimp come from. We don't know where they spawn. It is kind of hard to come up with the answers. Like right now, we would like to know just where they are right now.

AP MEMBER: The premise to my previous question; many years ago two of my brothers took a trip to Roatan, because they had tons and tons of rock shrimp. When they got there, they had tons and tons of rock shrimp, but the biggest was a 50/60 head on, all the way to 100-count. My company worked with the owners of the shrimp.

They brought them up and we tried to peel them for them. It just made mush. I've always been under the opinion – I've talked with the National Marine Fisheries boys in Pascagoula and Benny Roy and a whole bunch of people. Benny is the one that put me on the idea a long time ago that these shrimp might be spawning somewhere in the Honduran area and are carried up on these fast currents that move in; because you catch them at Kantor, some around in Texas, up around Apalachicola in the spring of the year.

Somehow or another these things migrate and move around; but today the National Marine Fisheries and no one else has ever been able to tell us the life cycle of a rock shrimp, the Sicyonia brevirostris. It has got to be coming from somewhere. In the year that we blew the bottom out of them catching them around here, and then it has been tapering and just going downhill. I think it has to do something with the currents and that is the reason I ask. If there is a way of following and looking at the weather patterns in certain years, maybe we can tie that together; but it is a good industry gone to hell right now.

MS. SOLORZANO: We've caught shrimp as early as June and as late as November. If we had all that knowledge that is going to come with the water temperature and the salinity level and the right climate, and how many storms, and how many of that; every year is going to be different. There is no way to make it all be the same.

Whatever happened this past year that put the basic few that were caught in one specific area, I can't explain that; but that is where they were and that is where the productivity came from. If they are there this year and I mean if they are where they were the year before, there will not be any if this amendment goes into place.

MR. MERRIFIELD: Are there anymore comments on Coral Amendment 8? We all know we are going to get our comments ready and that is our next step is to comment on when it is released from the Regional Office. We'll get together and devise that. If there is no more on that, then let's move on to the closed area evaluation reports.

MR. WAUGH: This is a presentation Anna Martin put together and gave to the evaluation team when they had a webinar. Sorry, for some it will be repetitious. I just want to walk you through this. As I said, most of you this is old hat, but it will get everybody on the same page. For the Oculina Habitat Area of Particular Concern, this hatched area down here that is shown as the Oculina Experimental Area; that was the original Oculina Bank.

That was approved in 1984. Then you had this expansion as to what is in place right now. That was from June 2000 forward. Coral Amendment 8, which you will see in a few minutes, has some proposed modifications to that. That is what is in place now, the entire area, the Oculina Bank with these two satellites; and within that you have the Oculina Experimental Closed Area. The time line, just to review briefly the coral amendment in 1984; 92 square miles of the Oculina Bank was designated as a habitat area of particular concern.

Snapper Grouper Amendment 6 that was finalized by the council in December of '93 and implemented in '94 prohibited anchoring by vessels fishing for snapper grouper species and prohibited fishing for retention of snapper grouper species within the HAPC; and that area became the Oculina Experimental Closed Area.

Coral Amendment 3 in '95 prohibited all vessels from anchoring in the HAPC. Trawling for rock shrimp was prohibited east of the 83 west longitude between 27 degrees, 30 minutes north and 28 degrees, 30 minutes north latitude in depths less than 100 fathoms. That was done in Shrimp Amendment 1 in '96.

Then in terms of other amendments, the Oculina HAPC was expanded to include the rock shrimp closed area through Coral Amendment 4, which was in our Comprehensive EFH Amendment in 1998. Shrimp Amendment 5, which we've been talking about implemented in 2003, required the use of VMS aboard the rock shrimp fleet.

Then Coral Amendment 8, which was approved by the council again in September and sent to NMFS on November 26, 2013; that is under review. It extends the northern and western Oculina Bank HAPC by 343 square miles. Snapper Grouper Amendment 13A, the purpose of that action was to provide continued protection of snapper grouper populations in associated oculina coral.

This was a ten-year review done from the original Oculina Experimental Closed Area that had a sunset provision. The need was to provide a hedge against high degree of scientific uncertainty associated with snapper grouper species, reduce the possibility that these stocks may fall below sustainable levels, and help rebuild stocks already below sustainable levels; also, to provide a high level of protection to oculina.

The alternatives that were looked at range from what was adopted and is shown here as Alternative 1 was to extend regulations within the Oculina Experimental Closed Area that prohibit fishing for and retention of snapper grouper species for an indefinite period with a ten-year reevaluation by the council.

The council will review the configuration of the size of the Oculina Experimental Closed Areas within three years of the publication date of the final rule. The council also at that time looked at extending regulations for an additional ten-year period. for 20, for 50 years, indefinitely, or to let the regulations sunset as of June 27, 2004.

That is a range of alternatives that they looked at, but they chose Alternative 1. The preferred alternative species appear to begin recovery within the affected area. If opened, any gains during the previous decade would be lost. That alternative provided the most biological, social, and economic benefits while allowing for adaptive management.

The evaluation plan that was put in place may result in increased public support and more protection for snapper grouper species and oculina coral and result in a decrease in illegal fishing. That had three components, outreach, enforcement, and research and monitoring. That amendment called for the evaluation plan that was produced in 2005; and then the first interim report was done in 2007. The 2005 had an outreach plan and Kim Iverson will give you an update on that tomorrow morning.

The South Atlantic Council Information and Education Committee, they met, and a proposal was drafted in 2003 by research partners. They had informal meetings around Fort Pierce and Port Canaveral in 2004; and they identified four primary objectives; to support development of the outreach plan, focused outreach campaign targeting fishermen, broad media campaign, and then some way to evaluate what was done. There was also an enforcement plan.

The council approved a motion in March 2003 stating that the Oculina Experimental Closed Area closure is a high priority and requested NOAA GC to revise the penalty schedule, and that was done. A special agent was assigned to the area. The Law Enforcement Committee and AP established five enforcement principles, and the Oculina Bank enforcement meeting was held in December of 2004.

Those principles are VMS, cooperative enforcement, increased presence, enforcement reports, and outreach and education. Then the Research and Monitoring Plan – and we'll go into each of these plans in more detail; but the 2004 Deepwater Coral Research and Monitoring Workshop was held in Cape Canaveral.

They had seven objectives; habitat recovery, effect on fish distribution and status, population structure of corals, stressors affecting the Oculina Experimental Closed Area, key trophodynamic groups, physical chemical parameters, and research on coral-feeding ecology. That was laid out in detail and evaluated in the 2007 report; and now we're doing the ten-year evaluation.

That is a quick overview of how we got to where we are; and I would be glad to answer any questions. Like I said, we'll leave the outreach to tomorrow morning when Kim is in here. We have another meeting next door. I would suggest we go through the law enforcement next, perhaps; is that all right with you?

MR. MERRIFIELD: Yes; that sounds fine. That should be pretty easy to get through.

MR. WAUGH: Okay, you have a draft of the law enforcement report. Their recommendations are spread over three different places; the written report, there is a spreadsheet in here that I'll go through in a minute and Roger will chime in where needed; and then in this presentation, too. What we as staff will do is make sure the information in this presentation and in the spreadsheet get transferred over into the written report.

We're going to go through this information. I'll tell you what they have done and their recommendations. Then the idea, as I've discussed it with Mike, is to answer any of your questions both on this enforcement part; and if we have time to get through the research and monitoring, answer any question so you all understand what has been and what hasn't' been done.

Then you all can think about it and talk about it overnight and then we can get your recommendations tomorrow morning. As we're walking through this, if you have any questions, please stop as we're going through. This was put together by Richard Chesler. The enforcement update and overview reviews the Oculina Evaluation Plan. It presents updated enforcement data for 2007 through 2013.

The idea was to provide recommendations to the Oculina Closed Area Evaluation Team. Again, the strategy and efforts enforcement; Principle 1 was vessel monitoring system, which is implemented. Principl2 2 is cooperative enforcement. Three is increasing the law enforcement presence; four is enforcement reports, and five is outreach and education.

Principle 1, VMS; that has been in place since 2003, they monitor the data. They can look at incursions and interdictions. They can look at where you have increased fishing activity, where the fishing activity is changing, and look at planning their patrol activities. They can use this to follow-up inspections and interviews. You can see this is a VMS track from August 21, 2006, and you can see where those vessels were pinging; and again showing there is no incursion into the Oculina HAPC.

Principle 2, cooperative enforcement; they have patrols with U.S. Coast Guard and Fish and Wildlife Commission. NOAA Office of Law Enforcement does the investigations. They use VMS and contacts, and they are also conducting training. In terms of Principle 3; increase enforcement presence; they've conducted surge operations with the U.S. Coast Guard, Fish and Wildlife Commission, and the Office of Law Enforcement.

They've got cooperative enforcement utilizing each agency's assets and personnel. There is a cooperative law enforcement agreement with Florida. Patrol activity; they've used U.S. Coast Guard and Florida Wildlife Commissions vessels, boats, and aircraft. Looking at the patrol statistics – and this is fiscal year 2007 through fiscal year 2013 – you've got primary U.S. Coast Guard here; secondary, U.S. Coast Guard.

In 2007 there were 216.4 hours; primary U.S. Coast Guard, 24 hours; secondary, 227 hours; primary Florida Wildlife Commission; and 64 hours secondary Florida Wildlife Commission. The secondary means that the U.S. Coast Guard asset is in the area on another mission and the Florida Wildlife Commission asset in transit to the Oculina HAPC or experimental closed area. You can see that you had a higher number of primary U.S. Coast Guard in 2009, lower in '10 and '11, and then up again in '12; and '13 was quite a bit lower across the board.

MR. CUPKA: I was going to ask Gregg if he knew if that was the entire FY '13 or just a portion of it, because that is a big drop.

MR. WAUGH: I don't; and it is indicated there is not footnote here saying it is only a partial year for 2013; but we can certainly verify that.

MR. WILSON: Do we know why? Is there some event or something that caused such a spike, because 2011 didn't have much either?

MR. WAUGH: Well, if you remember from a previous slide they said they were using surge operations. I think when they can get the resources together; what they are doing is doing some extra patrols and targeting it and getting those numbers up. We will look into whether fiscal year 2013 is a complete year or not.

In terms of detections and boarding statistics; in fiscal year 2007 you had 49 detections and boardings on commercial fishing vessel that is detected; 20 boardings on the commercial fishing vessels. Recreational you had 91 fishing vessels detected with 12 boardings. Again, you can see

how that has declined through 2009, low in 2010, and again you can see that there were – which is a good thing – there were zero commercial detections in fiscal year 2010, four in '11, two in '12, one in '13.

MS. SOLORZANO: I'm sorry; that is how many boardings there were?

MR. WAUGH: The boardings are the second column; so in fiscal year 2012 there were two commercial fishing vessels detected and both were boarded.

MS. SOLORZANO: Then they must have been my boat.

MR. MERRIFIELD: That is on the O-HAPC, though.

MS. SOLORZANO: Oh, that is inside the closed bottom.

MR. WAUGH: This is in the Oculina Habitat Area of Particular Concern; not just the Experimental Closed Area, the whole area.

MS. SOLORZANO: Well, that is closed bottom or open bottom?

MR. WAUGH: Closed bottom.

MS. SOLORZANO: Oh, no, then it ain't my boat. Mine didn't seem wrong.

MR. WAUGH: You can see 2012 there was a number, 48 recreational vessels in there with 46 boarded. Then again we'll check on 2013 to verify whether that is a complete year or not. Overall to me the takeaway from this is that the commercial issue has been resolved. We've still got some recreational effort in there. Any other questions on that before we move on?

Okay, Principle 4 is enforcement reports. We get a quarterly enforcement report and these are the Office of Law Enforcement Agent collects patrol sightings, boardings, and violations data and prepares a quarterly report. This report highlights the case dispositions, media stories, outreach activities, training, and patrol activities.

The quarterly report is presented to the South Atlantic Council at each meeting; and we post those to our website. Principle 5 in terms of outreach and education; enforcement partners support outreach and education efforts, distribute South Atlantic Council and oculina regulation at outreach events like fishing shows, tournament meetings.

When they're on patrol, they give them to recreational anglers in or near the Oculina Experimental Closed Area and give them to commercial fishermen. They participate in outreach and education activities, issue news releases for oculina enforcement cases and patrol activities; and these are published on the NOAA Website. Looking now at areas for improvement; VMS they feel is effective. I think we discussed some ways that could be improved here and be more useful to you and us.

Cooperative enforcement; they want to improve patrol coordination between the Florida Wildlife Commission and the U.S. Coast Guard; increase interagency ride-along; and establish semi-

annual oculina-specific enforcement meeting and training. In terms of improvements to increasing the enforcement presence; utilize covert patrols in conjunction with overt patrols; obtain living marine resource mission hours or patrol under secondary mission – so when the U.S. Coast Guard is out there on something else, try and get them to go in the area, check the area – patrol smarter; use weather ramp marina checks.

Reporting; better record keeping by source agency and timely submission of reports. In terms of outreach; engagement of tournaments in Sebastian and Fort Pierce – this is getting at those recreational incursions, get more information out – include oculina rack card in captains' bags so they know the regulations.

Then in terms of recommendations; adapt the current law enforcement plan to project management format. This would establish resources, output, outcomes, constraints, risks, reporting, and accountability. Determine enforcement burden with transit provision and look at mitigation strategies. Establish an enforcement expectation in a compliance metric; and there are some more details on this in their written report.

MR. MERRIFIELD: That transit provision is going to be interesting.

MR. WAUGH: Yes; and we can look at that and see what they have in the spreadsheet when we look at it and then in their written report. Mike mentioned that this issue with the transit provision; I think what they're saying here is anytime you allow transit, that creates an enforcement burden. Of course, you all need that; that is why it is in there. That is an area you really want to look at tonight and be ready to offer some comments tomorrow.

This is getting into that project management format where you define an objective, which would be to increase compliance with oculina regulations, target outcomes, increase compliance with oculina regulations. The performance metric is linked to target outcomes; output is linked to outcomes and deliverables.

Reporting requirements, the frequency format and who that gets sent to; resources, assets and personnel, risk and risk management; identify the risk and mitigation strategies. For instance, rock shrimp trawling and recreational snapper grouper poaching; and then quality control in terms of reviews and frequency.

MR. MERRIFIELD: What is he referring to by risk and risk management referring to those fisheries? Does that have to do with penalties? What is that risk management?

MR. WAUGH: I think what they're getting at there is look at which sectors or vessels could have an impact on management. They are looking at here – so the risk would be from any illegal rock shrimp trawling or from any illegal snapper grouper poaching; what are the risks associated with that?

AP MEMBER: Are all commercial vessels in this area VMS? Do they all have to be; is anybody excluded that is commercial?

MR. MERRIFIELD: Only rock shrimp.

MR. WAUGH: Rock shrimp and any snapper grouper vessel that has an HMS permit would be covered. HMS vessels that are fishing in the area would have VMS. Any of our snapper grouper vessels that also have a Gulf reef fish permit would have VMS. Those are the only fisheries. The council looked at requiring VMS in the snapper grouper fishery, but the resounding public recommendation from the fishing industry was that the vessels that we have in our snapper grouper fisheries in many instances are too small, don't have the electronics, don't have the ability to protect the electronics associated with VMS; and the cost of maintaining those would just be too high given the current economic condition in the snapper grouper fishery. The council determined not to require VMS in the snapper grouper fishery.

MS. SOLORZANO: I have a comment. Back when they led us to believe that they wouldn't take any more bottom from us in 2003 is when we were putting VMS on voluntarily with that understanding.

MR. WAUGH: I'm not going to beat a dead horse, but, anyway, enough said. Are there any other questions? The next thing in terms of law enforcement is we can look at the spreadsheet. This is Attachment 4E in your briefing material. What I'm just going to go through is the law enforcement observations in terms of new developments and status report. You can follow along with this.

We can show what the objective is – and the text may be a little small, but I can tell you what is in there. In terms of enforcement of the Oculina Closure, its utmost priority; violations are high so we wanted the penalty schedule revised. That was revised in June 2003. In terms of new developments, the penalty schedule was revised again in 2011.

The schedule was updated in an effort to develop a national schedule; currently out for comment until April 28, 2014; so that comment period has just recently closed. It will modify the classification and range of penalties according to the matrix that is designed in there. That penalty schedule has been revised and currently being updated.

In terms of develop an updated law enforcement plan within one year after the implementation of Snapper Grouper Amendment 13; that was done. The updated law enforcement plan was complete; current enforcement plan to be redeveloped using project management formats, so their recommendation is to revise it using a project management format.

In terms of Principle 2, cooperative enforcement; from 2007; that was being done. Sorry, I skipped over VMS; real-time access; current developments, monitoring intelligence operations, planning patrol operations, investigation follow-up. Inspection interviews are ongoing. Florida Wildlife Commission; enforcement agents now have mirrored access to VMS.

U.S. Coast Guard has access to VMS data through their command centers only. You have to call in for this information because no direct access on a cutter. Principle 2, cooperative enforcement; so you have patrols, investigations, intelligence, training operations is functioning. What we've got in here in this Column G is an indication of whether that objective has been done or not.

Principle 3; increase law enforcement presence; U.S. Coast Guard, Florida Wildlife Commission, Office of Law Enforcement, surge operations, cooperative enforcement utilizing each agencies

asset; patrol activities undertaken by U.S. Coast Guard and Florida Wildlife Commission. In terms of quarterly reports, they are presented, as we said, at the council meetings.

Their recommendations are better recordkeeping by agency, timely submission of reports, combine with outreach research team if enforcement report data is useful. These reports are not used within the agency but are prepared solely for the South Atlantic Council. If not useful, reconsider the principle.

We would certainly say that these law enforcement quarterly reports are very helpful to the council. It shows what is being done. I think it is good outreach; it is good for all our fishing sectors to know what is going on there. In terms of support of the outreach and education plan, Objective 2, support distribution of regulations; that is ongoing in outreach events, on patrol vessels.

Their recommendation is to engage in tournaments – we talked about that – support news releases, distribution brochures; that is all ongoing. Level of completion is eight; total number of enforcement deliverables is nine, so that is pretty well addressed. That covers what information is there.

To be honest, if we were to go through their written report, I think the bulk of the information we've just presented here; that report needs to be reworked and incorporate some of this material; so I don't think it is useful. We would be glad to walk you through it. The first part has a little bit of a historical background; but the rest of it needs the meat from these two documents put in there. Roger, do you have anything that you think we need to add to that?

MR. PUGLIESE: I think the key is that what Gregg has gone through really captures those updates, which are not reflected to a great degree in the written component. That is the most significant thing. I think they did a good job in this specifically highlighting how much actually has been done for enforcement.

There was one point; I guess it was kind of more tied to some of the discussion before in the graph that showed some of the boardings, et cetera. I think one of the most important things that has happened over time is the Regional Office really being able to – there was some shift at the national level to regional ability to use the information.

I think we saw that with that ability to even use it at a finer level in terms of transit. There has been some significant advancement in the ability of the region to actually embrace and utilize VMS through more of its full potential than I think originally what they were working with. I think that was a very positive advancement that gets kind of somewhat mixed in here and gets lost a little bit.

But it was very significant in terms of, one, being able to really rely on that for acknowledgement. I think that is some of the drop-off of boardings within the area, but also the fact that they are able to use it for even more refined capabilities such as the ability to have it tweaked so that they can look at transit within areas.

MR. MERRIFIELD: I think transit is going to be an interesting transition with law enforcement to see how that's handled, because I don't think we've got all the – I just think we need to get all

the kinks worked out of that and how many boardings we're going to have for transits. The VMS certainly is capable of monitoring speed and direction. As long as everybody is going five knots, I don't think there should be any problems; but I think initially we're going to see probably a little more activity around that. Are there any questions about the law enforcement or any comments?

MR. WILSON: It seems like when we were meeting with the Coral AP we had the gentleman on the line from enforcement. Didn't he comment he didn't see any real problem there?

MR. MERRIFIELD: Yes; that was when Otha was here. I don't see where there is going to be a problem. It is just a program basically that is going to red flag anybody that is in there that is not going five knots. I just think they are not used to seeing shrimp boats cruising through, especially in their current HAPC. I think it is going to be interesting to see how that is received. I'm sure there will be some boardings from it, but there shouldn't be any problems.

MS. SOLORZANO: I'll let you all know.

MR. PUGLIESE: The bottom line is given some of the speeds that have been selected; I think as long as that really does tie to that and they are going to have some variability that shows it in different colors and all types of twings in there; as long as they use that and it has the ability to work and has the – I think the key you were looking at was making sure that there are enough ping rates and whatever to be able to capture those.

That is the important side that if it can capture it and it can do it, I think that is going to be the reality of making sure that this happens. I think the technology exists to make it happen; and their support to make it happen I think is there, which I think is important.

MR. MERRIFIELD: That is true. That is the handshake between law enforcement and their programmability and the manufacturers and their ability to set up geofencing is going to be – that that handoff I'm not clear how that is going to work, who provides who the data and the coordinates and the ping rates; and how does that get from law enforcement to the manufacturers to the fishing vessels. That to me is still a question. Everybody said they can do it. Who is going to initiate that effort?

MR. PUGLIESE: That essentially has all got to come out of law enforcement in making this – you know, once they figure out exactly what they need to do. From what I was understanding, they have the capability internally. The biggest thing is they have more control at the regional level now, so I think that they can make this happen a lot more efficiently than maybe in the past.

MR. MERRIFIELD: Are there any questions or comments?

MR. WAUGH: Okay, we can go through the research report now if you want; it is up to you. If you want to break and start talking about your input on law enforcement, that will work; or we can go through and answer any questions on the research now. Then when you come back in the morning, we can handle your input on research and law enforcement and then get Kim after that to do the update on outreach; however, you all want to do it.

MR. MERRIFIELD: Okay, I would suggest that we go ahead and go through that report. Let's save comment, because I think there is going to be a lot of comment about it. Let's save comment until tomorrow; but let's just get through the report. Are we just going to go through the report or are we going to go through deliverables as well?

MR. WAUGH: What I'll do is go through the Oculina Research Update – this is Attachment 4C – and then maybe come back to the spreadsheet if need be. Again, Roger has participated in these meetings so Roger can add wherever is necessary. This was put together with input from others but primarily by Stacey Harter, Andrew David and John Reed.

This shows where the dives were done in June, 2011. You can see that two of them were done down in the Oculina Experimental Closed Area. Roger, holler if there is anything more that needs to be said on these slides. This is showing the ROV dive track, how it is coming in and going up over the topography here and tracking over the bottom.

This shows the Daytona Pinnacles, what that area looks like. In terms of oculina density, these are the dive sites. Jeff's Reef and Chapman's Reef, those are in the Oculina HAPC. Are they in the closed area; do you know? Yes; they are in the closed area also. Titusville, that is outside, right? Yes; the other three are north of the closed area.

This is looking at the live oculina density in terms of numbers of colonies per square meter; standing dead oculina density, and then an estimate of the total number of live oculina colonies, so you can see the area that is closed, they are abundant. The density is much higher, approximately four to seven colonies per meter square in Chapman's Reef, about four per meter square in Jeff's Reef; standing dead about one to two, one to 1.5. But then looking outside those other areas, the density is lower and there is an estimated number of live oculina colonies on those dives.

MR. CUPKA: The standing dead oculina density is a lot higher in those three areas and the live are just the opposite of that bottom two.

MR. WAUGH: Yes; that is correct; so there is more dead than live in those areas, but there is more live than dead in the area that is protected. These are some of the images from the sites north of the Oculina HAPC; coral. This is images from within the Oculina Experimental Closed Area. You can see outside and you see that there is not much coral; and then within you've got a lot more oculina coral.

MR. WILSON: Just wondering, looking at these pictures; the white, is that dead coral or is that live coral?

MR. MERRIFIELD: The white is live.

MR. WILSON: So the brown is dead?

MR. WAUGH: That is correct; the white is live and the brown is dead.

MR. MERRIFIELD: The purpose of this document is to show the comparison, I mean, really?

MR. PUGLIESE: In reality what it was showing is some of the research that has been done throughout the entire area, because really I would have focused primarily on the experimental closed area is what we were talking about today. That is really what – if you go into the spreadsheet, I think it focuses on what has been done and what hasn't been done; because that is really what these questions and what we were trying to extract and what will be in the final review is how much has actually been done in research and monitoring within the experimental closed area itself?

MR. MERRIFIELD: You can't really extrapolate as it is presented that closed area versus unclosed area. You have these percentages of live versus dead coral, really, because you could have gone into another area and found just the opposite.

MR. PUGLIESE: I think the key here is that those two key areas within the experimental closed area are the most significant habitats that exist still within the HAPC; those two bottoms, Jeff's and Chapman's, and everybody knows that. That is really when it comes to us looking at this; I think that is the key that you're seeing is that those habitats are the most intact habitats that still exist within the HAPC and within the experimental closed area specifically here.

MR. MERRIFIELD: Right; and those are the most studied areas in the whole HAPC.

MR. WILSON: Then it kind of depends on the density of coral, right? I look at the images from the north; you just see the one thing of coral there. If you are saying that there are more dead than live from one area, because it depends on the density of coral in that area basically, right?

MR. WAUGH: That is correct. What they are reporting – as Roger said, we'll get into the spreadsheet that shows some more of the conclusions, but what they are reporting here in this presentation is the information from these five dives; two within the experimental closed area and then three to the north. Obviously, you have to look at why these sites were chosen, how representative these sites are; but I think it is just to show an overall on those dives here is what was seen within the closed area, here is what was seen in these three sites outside of the closed area.

MR. PUGLIESE: I think one of the other key things on this, too, is as you get into the species utilization, just because some of the area is dead, especially the standing systems; they are still serving as habitat within some of these systems. I think that becomes obvious when you start looking at species utilization of these areas.

MR. WAUGH: Continuing here; a summary of fish from sites north of the HAPC, and I'm not going to go into this in any detail, but this is showing that black sea bass were the most commonly occurring, sea basses and black sea bass; and then the fish within the oculina sites, the anthiids and sea basses.

In terms of density here, you can see that the densities with some of the species are higher outside; snowy grouper, 1.8; snowy grouper, 0.5, so again this is showing that for some species there is not a lot of difference. This is really getting into things that aren't relevant to the Oculina Experimental Closed Area Evaluation, so I will just slide over those. Here we go, oculina survey 2015 through 2017. Again, this is referring to the South Atlantic Council's Coral Grant that we are about to get. That is to be awarded to NOAA to do this work.

They will complete the multibeam mapping of the Oculina Experimental Closed Area. They will conduct ROV dives inside the Oculina Experimental Closed Area to complete a species and habitat characterization. At the end of this period, we will have the Oculina Experimental Closed Area fully mapped and characterized. Roger, the multicolored areas are showing what has been mapped thus far?

MR. PUGLIESE: What you're seeing is how much of the area has been mapped to date within the Oculina HAPC; and there are some areas probably to the north. But with regard to the experimental closed area specific, that is the core area.

MR. MERRIFIELD: What is the color characterization there? You have green going to yellow and blue.

MR. PUGLIESE: It is purely depth.

MR. MERRIFIELD: Depth; because one thing I have mentioned about this particular graphic here before is that the 100 meter line is way off. That is very misleading.

MR. PUGLIESE: Yes; that is one of the problems with using some of these; and this has come up in the past. We've looked at it. There is even some known bathy contour individual line areas that have been used in the past that we went in, looked and actually had regenerated lines, because those were in error. It is not error, it is based on what people have compiled to do it. This is probably directly from a National Ocean Service downloadable bathy.

Sometimes it is just used for general – this came up a long time ago when we had to deal with it when we first looked at the expansion of some of the deep-water areas, et cetera. We acknowledge that. When I see that, too, I hate getting representations; the 100 meter, 200 meter doesn't necessarily align with some of those areas. The representation sometimes are good; in this case they aren't.

MR. MERRIFIELD: Right; and that is particularly important with the shrimp fishery, because some of the areas that we're talking about are deeper than 100 meters. That 100 meter line actually goes right up next to that green. About one-third of the box is actually 100 meters and deeper; so that 100 meter line is huge. The oculina coral in particular is I think they've said that the habitat is in up to about 90 to 100 meters in depth; and it doesn't grow deeper than that and maybe to 110 on occasion on scoured bottom. Every time I see that, it kind of bothers me.

MR. WAUGH: To me, the important point here is that Oculina Experimental Closed Area will be fully mapped and fully characterized finally at the end of this next three-year period. I think that is the end of that presentation.

MS. SOLORZANO: Can I ask a quick question; who pays for that?

MR. WAUGH: That is federal funds that the council is receiving that grant and giving that money. We can contract with anybody to do that work. We have been contracting a number of different groups in the past, but the previous cycle was with NOAA; and this cycle is with NOAA. The money will be given – it is federal funds – that money will be given to NOAA.

MS. SOLORZANO: There is not any of that money that could be used to help fund our cooperative program?

MR. WAUGH: No, unfortunately. That source of money is targeted to the work that we have been doing and completing to document these areas. That wouldn't be a source; and besides for this year the grant has already been submitted.

MS. SOLORZANO: My tax money is paying for that, but it can't help me, got it.

MR. WAUGH: No, actually that is not correct, Marilyn. Your taxpayer funds are paying for this; and were you all to choose to go through the grant process, then your tax dollars would pay for that as well.

MR. MERRIFIELD: Is that Coral Conservation Act money?

MR. PUGLIESE: Yes; that is money – there is a small, small portion that is provided to each of the councils with jurisdiction; very minor compared to the overall coral conservation monies. Just a footnote, one of the most significant things that has to happen and I've been reiterating not only in what we've actually been able to do; but in any other program, even transit opportunity is to finish complete mapping of all the existing protected areas; both marine protected areas, coral HAPCs, Deepwater Coral HAPCs, because that is kind of the biggest priority. That is what our efforts are doing here. As I said, any of the other ones is really to try to get the rest of that mapping effort completed for any of these types of areas.

MS. SOLORZANO: But that is a NOAA job; I mean, there is no like outside grant or whatever helping do that job; it is just NOAA? It's like a school?

MR. PUGLIESE: No, this is money that the council has that we've been collaborating with other partners. It is going to NOAA, but they are partnering with Harbor Branch Oceanographic to do the characterization work with John Reed, to do characterization actually with Stacey Harter under NOAA to do the fish characterization and accessing.

It is kind of a complicated connection of different assets, access to the Pisces vessel, which can only go at certain times. We're just getting at least this much. To date, you saw the swath that has been done, and that is kind of vessels of opportunity; other work that has been done through Harbor Branch or through working with some of the other researchers going on. This has been an ongoing attempt I think to try to get as much information and work done as possible in our region. To date it has not come to where we wanted it to get to.

MR. WILSON: I have a question on this second slide where it showed the Pisces dives. Was that done by the Coral Committee independently using their own resources or was that sponsored by the South Atlantic Fisheries Council, where these blue dots are?

MR. WAUGH: Yes; that is part of our previous three-year grant to NOAA. We set the general requirements and they chose the specifics. That was a decision on the researcher's part in coordination with us and the plan to sample those sites.

MS. SOLORZANO: South Atlantic Fisheries Management Council wouldn't work with us and help us set up a plan to get the grants like they did with the coral people?

MR. WAUGH: If you are asking would the next cycle of this grant be able to accommodate the type of research that you all want, we could look into that. Roger may know the answer. We may have to look into it. I'm not sure that this source of funds that we're receiving can be used to do the type of work that you all want to be doing; but we would be glad to look into that.

MR. WILSON: Getting back to this particular slide; why did the council want to go into those three spots outside of the HAPC?

MR. PUGLIESE: This isn't the council designating that. There was ongoing research at that time looking at habitat within – and then this is coupled with other work that had been done, habitat to the north, in the central section of the HAPC, and in the experimental closed area. I think that was what – there was an opportunity to build on other research that was already in it. This is really being driven by the mandates under the council's coral plan to identify habitat and identify and characterize this information to meet those mandates under Magnuson.

MR. WILSON: There was more information. I was just asking because they made this huge decision to expand the area; and I'm looking at three spots and I'm thinking that is not very much to take so much.

MR. PUGLIESE: These are just ROV dives from this one associated effort, but then you also had the multibeam mapping that had been accomplished and the characterization work that had been done outside through Harbor Branch and other partners.

MS. SOLORZANO: Isn't a lot of money being – I mean, the coral got three years, I guess the next three years up to '15, right, so they got '13, '14, and '15 approved of the future grant money, and these dives were done in '12, so they must have gotten other grant money prior to that. A lot of money seems to be going to the coral grant people and none is coming to help fight our issue.

I know we have to take that up ourselves; but if the council has helped coral, why didn't the council lead us in this direction earlier to show that we could have used this to our benefit instead of to shut us down? I guess I am beating a dead horse, but I'm just wondering. It seems like a lot of money went to that and none has come here. If council helped NOAA or helped coral get it directed their way; couldn't we get a little boot to direct some our way?

MR. WAUGH: What we've been doing is trying to get the research that has been identified in the Oculina Plan, research and monitoring plan done. That is why this money has been focused on that. Again, we can look into whether in the future this money can be broadened to other uses. I just don't know the answer to that; but thus far we've used this source of money to try and get the research and monitoring done that is laid out in that research plan that was done as a result of our Snapper Grouper Amendment 13A.

MS. SOLORZANO: We're finding these areas where the coral exists, but what about all the places that surely they had to look in other places besides that and find that there wasn't coral. If there wasn't coral in some of the places where there used to be, that is another thing.

MR. WAUGH: What we've done with this grant that is under review now is we've been much more specific in terms of what gets done to ensure that at the end of this three-year cycle we will have the complete area mapped and characterized.

MR. MERRIFIELD: Okay; if there are no more comments on this until tomorrow, we can pick this up tomorrow.

MR. WAUGH: Do you want to walk through the spreadsheet and see if there are any other points there?

MR. MERRIFIELD: We can; there is not much there.

MR. PUGLIESE: My point is we can quickly go through it, because the bottom line is there just hasn't been as much research done in the experimental closed areas as we had wanted to see or has been available. I think it does highlight it. It is a little bit different than that presentation, because it does get to some of the specifics. We can go through that very quickly, I would think.

MR. MERRIFIELD: Which goes with Steve's question is if we wanted more research done there; why didn't we do more research there?

MR. WAUGH: That is why we have made this year's grant very much more specific to meeting the needs identified in the Oculina Experimental Research Closed Area.

MR. MERRIFIELD: You know where we're going is a lot of that area can be given back to the fishery; that is what we're looking for. That is what we're interested in. That is why when we look at this and we see three dots up here and two dots down here and you're wondering, well, where is the emphasis in trying to justify keeping this area closed? It is up there.

MR. WAUGH: We have shared some of that concern and frustration as well. That is why this year's grant is much more specific; and at the end of this three-year period we'll have your answers. That is why earlier I said that in looking at what you all would be interested in funding and working on; my recommendation would be not to worry about the Oculina Experimental Closed Area, because through this grant we will have that entire area mapped.

At the end of that, we can all look at the data and indeed if it supports; you all can use that – if it supports showing that there is no habitat within a portion of that; then you can use that to justify coming to the council and saying you want those boundaries changed. It would be more effective for you to focus on some other areas outside of the Oculina Experimental Closed Area.

MS. SOLORZANO: Maybe we should just try to get National Marine Fisheries to hold off until 2015 on doing anything when all the information has been presented to do a proper closure or opening of where really the coral is instead of just drawing a box.

MR. WAUGH: I think you have a genesis of a good comment to make there. I wouldn't focus on the issue of where the coral is. What I would focus, I would use your point and argue on the impacts, wait until we can better quantify the impacts in the rock shrimp distribution; wait until that information is available, not hang it on the coral, because I think we've done a good job showing that you do have coral in those areas. What the condition is right now is debatable, but

I think we've done a satisfactory job we think we've done, and it is in the amendment and the secretary is going to determine.

You all are free to comment your views; but I would focus on not so much the coral; although if you think there is no live coral in that area or there is minimal amount in that area, make that point; but I would focus more on the impacts to you all and the lack of information about those impacts and defer that area until we have that information. I think that would be a valid comment for you to make during the comment period.

Okay, so we'll go through 4E, which is the evaluation plan deliverables. Again, it is structured the same way. You've got the objective and project description. I know that is small up there; I will read what is in here. You have this as Attachment 4E as well. In terms of Objective 1, identifying coral fish recruitment pathways; in 2008 research was conducted to attempt to dive and assess transplant modules.

Divers sent down over a five- to six-day period. The structures that were placed there has moved. The 2011 Pisces field work during an ROV survey; scientists observed one module within the Oculina Experimental Closed Area around Chapman's Reef. Transplanted corals had not survived, but new recruits to corals were there. That is looking at the reef balls that were deployed in 2000/2001.

In terms of Objective 2, modeling the biophysical, chemical and physiological characteristics; Florida Atlantic University has hired two physical oceanographers with this research focus. They've got two people on staff that is going to look into grants and funding opportunities. Nothing has been done so far.

The second goal; determine and monitor the effects of Oculina Experimental Closed Area on fish distribution and status; this was to be completed by the year '10, which is where we are now. Objective 1 to assess spawning aggregations; incomplete in 2007, no updates. The recommendation is that it should remain a high priority. You need to assess year round and during known spawning events. Track fish movements, nothing done.

Objective 3, identify Oculina Experimental Closed Area fish population demographics, nothing done. That should be done, right, Roger, as part of this three-year grant? Objective 4, to determine pre-closure distribution; we're kind of late on that. There was a report published in 2011, assessment of the impacts of the Oculina Banks MPA and in-depth ethnographic profile of the fishing communities; but again not much done there.

They pointed out back in 2007 that this objective may not be worthwhile; well-established fisheries were once there, could do it through interviews. Also you may want to recommend that some of these objectives be removed, Objective 5, age distribution nursery grounds; nothing done there.

Third major goal, what is the population structure of corals? Objective 1, research population genetics of oculina varicosa; incomplete. Sandra Brookes published the report in 2008. Identify cross-shelf relationships, nothing done there; biogeography, nothing done there. Fourth objective, what are the stressors affecting oculina; to be completed by the year 10; nothing done there, they consider it a high priority.

Objective 1, identify natural living stressors; nothing done there; 2, 3, nothing done; 5, look at a key trophodynamic functional groups to be completed by year 5, nothing done. Again a lot of this is due to funding limitations. Objective 1, identify food web structures and dynamics, nothing done recently. Roger, is that something that might come out of this three-year grant where we're characterizing what is there?

MR. PUGLIESE: I think we have to be really careful about how far we talk about the characterization that is going to occur within three years in a dive. Basically a cruise in each one of those years will provide a foundation for understanding, distribution of habitats, species use of those individual areas; but it is not going to be extensive enough to have a full array of timeframes, mainly the limitations of the access to the vessels.

The vessels are going to be kind of out of sync with the spawning period times. I think while we'll capture some of the species complex use of the various different types of habitats and really – and it really is supposed to look at everything, because this area is for snapper and grouper populations; and they're using all the habitats from coral to soft bottom to sand.

That idea of getting as much of that I think is intended with the effort for over the next three years; so we'll get as much as we can within this. I think some of the timeframe limitations – hopefully some of that in that in the longer term is going to get addressed. One of the things that – you talked about the characterization of the current systems, et cetera – one of the things that we've done in the past is looked at a ten year build-out plan for the ocean observing.

In that if you ever get it funded – now again it is another funding issue – it had everything from arrays of gliders, which would be tracking across the shelf from North Carolina through Florida in different areas that would give you acoustic signatures and other capabilities that not only refine the information on characterization, but also have the potential to begin to pull in information on species information.

The opportunity to look at expanding the observing information along, very specifically the managed areas, and it would include both the oculina and the experimental closed area. The opportunity to use things such as landers where you would put in fixed systems that are capturing all types of oceanographic capabilities and information that could again add to our broader understanding and timeframe.

I think if some of those types of technology; those may be really the only way we can get to the broadest sense of some of this. Getting all the way back to Gregg's original question, yes, I think it is going to give us some, but I will qualify it by saying the amount we can get within those three years and with three periods; that is just expensive.

The real shame with some of this, and I think we see by him identifying not done, not done, not done; this has been a high priority. It is just that where researchers have put in proposals for fish, for habitat, for whatever; they have not gotten funded. When you are talking about us trying to be able to do it, I think the council has tried to push to get as much done in this region as possible.

This has been a direct effort in the last period to at least try to get more than we have in the past. I think it just can take both the technology opportunities that we may have, collaborative and

cooperative research to work with vessels, to use vessels as vessels of opportunity, and platforms for other information gathering. I think it is going to take more than maybe what we have slated to get to where we would like to get to on here. But, yes, I think the bottom line is we will probably have the most information we have in terms of trophic connections and species use of habitats that we have had in the past.

MR. MERRIFIELD: I just wanted to make a comment on that, too. I think across all the fisheries; I think that every group that I've been involved with has been begging for cooperative research. I think you've got willing partners in that if you could just figure out how to utilize them. I think that would be a great step, and it would be certainly a cost-saving step.

The thing about that limited characterization that you are talking about is that probably the characterization that is going to be more important is going to be the characterization of the bottom that has structure on it. We're really interested in the characterization of the soft substrate bottom. I would guess that it is not going to get as much attention.

MR. PUGLIESE: I think the intent is to try to get as much as possible, because you do have individuals that have the expertise in not only structural but soft bottom characterization. John Reed has done the whole gamut of all those types of habitats within these deep-water systems. I think some of the players that are involved should at least get as much as we can based on the amount of cruise time that actually is available and the timeframes that you're able to capture.

I understand your concern, but I think we're going to get – at least we have some key players that have the understanding for the entire complexity of habitats, because that really is what we're trying to get. That whole area; because at least what we're talking about today was very specifically supposed to be the first MPA for snapper grouper; and we were supposed to have some of this type of information ten years ago.

MR. WILSON: Don't' take this wrong; I'm just trying to understand. It had all these costs assessed; how was that money supposed to come about, where you have all these figures in costs? That was just from grants, but the grants weren't approved?

MR. WAUGH: Right. This is an area that we're learning I guess the new normal we're under. The Magnuson Act lays out that the National Marine Fisheries Service, NOAA, is to provide the data and research that the council needs. Now, NMFS gets funding through NOAA and we put in our research needs.

The expectation when we created this was that there was a lot of interest in using MPAs as a tool; this was relatively close to shore; there had been some historical research in that area. It was our expectation that NMFS would be the lead agency in doing work in this area. Indeed, they have been, but certainly our list of needs have not been as met as we would have hoped.

This is part of our efforts to pursue the coral grant monies and try to steer more monies. Roger represents the council on a number of groups to try and direct additional research funding in our area. We can't do it all. I think it is time to take a real accounting look at this list of needs; and this is where if you see some that we should remove, to let us know that. What we're hearing increasingly from NMFS and NOAA is that they cannot meet what are being termed unfunded mandates.

You will see in some of these different reports the statement that, well, while these projects are listed in here, it doesn't obligate any agency to do any of it. It puts the council in a very awkward position in that we've identified these research needs and enforcement needs. You shall see the outreach is one that has been done very well; but it leaves us in the position of a lot of our research and data needs aren't being met. What the agency is saying is that they can't meet them due to their funding limitations. If this is going to be the new normal, then we're going to have to look for other sources of funding to try to get some of this work done.

MR. PUGLIESE: Can I just pick up from there; just because of the connections beyond what we're talking about here; I think the real concern I have in working with what we have and how far we've gone in this and trying to collaborate and focus other efforts to do more within our region is all of the other potential activities that may be impacting these types of things.

When we're looking at these areas, these areas are not just being established for coral or whatever. Those habitats are being the foundation and I still think are the nursery areas for rock shrimp or nursery areas for a number of other different types of species that are managed. The potential threats from other activities in the ocean are real.

Right now we're about ready to get into a land grab offshore. We need this information, the refinement of the characterization and the species, because it is supporting all of our fisheries in the region now. It really does have the opportunity of being impacted by anything from spills to who knows what that may happen in the offshore areas.

MR. WILSON: I was kind of curious because I jumped ahead a little bit; but I'm seeing in ten years out of 33 projects, you have a completion level of six. That is kind of rough – information-wise that is kind of hard on you guys, I imagine.

MR. PUGLIESE: I think that is what this really did emphasize is the intent that this was supposed to do is to try to encourage and move as much forward; and there still hasn't been as much as we really need to do. That six does pin it down. I think it is obvious from the check-offs of we haven't been able to do, we haven't been able to do.

It does complicate it because we are trying to make sure that these habitats are protected, that the fisheries that depend on these habitats and the fishermen's livelihood that depend on those fisheries is maintained. It is tough not getting the focus to do as much of the work, the long-term characterization and analysis of these types of areas that we have.

I really think we are extremely lucky that we have had done what we have to date in terms of the research efforts; plus the fact that you have a VMS system in here, because we couldn't have been doing this fine-line discussion without that. We could have started this process with a 60 to 100 meter contour and said that is the information we have; we don't have other information beyond that.

I think the combination of information, both characterization and habitat and the fisheries, at least we've gotten as far as we have; but on the biological side and the habitat side it has fallen way short from what we really need to get to ultimately. As Gregg has indicated, I think the timeliness of this to work cooperatively, collaboratively I think is going to be across all different fisheries, not only commercial but recreational fisheries.

I look at the amount of fleets of vessels and individuals on the water; there has got to be a way to tap in on that. From an oceanographic information system, I'm looking at, hey, you can't rely on all these just individual buoy systems.

I'm already looking to opportunities with the fishery- independent surveys, to maybe use those as vessels of opportunity for while they are collecting the environmental information and having that funneled into the system; why isn't that something we can also collaborate with the commercial fishery, they become vessels of opportunity for the oceanographic information. You are on the water. You can't put that many vessels on the water for research. There is a lot of other opportunity beyond just, say, sampling of the resources, oceanographic information that would be a passive kind of collection system.

MR. MERRIFIELD: A quick comment is that the Navy is using the fleet. They've strapped instrumentation to the bottom of those shrimping vessels. They are using them; NMFS should be too. Go ahead, Laurilee.

MS. THOMPSON: In the avian world, the NGOs and the scientific institutions have been extremely successful in using individuals as citizen scientists. We would not know near as much about bird migration and bird populations as we do now if it wasn't for all the backyard birders and the people that do the Audubon Christmas bird counts. I don't see why we can't do that with the fisheries.

But, it has been interesting listening to this discussion and frustrating, too, because if indeed this area was set aside, this experimental area was set aside for snapper and grouper; had this research been done in the timely manner that it was supposed to have been, it might have helped avoid this red snapper closure that we're suffering through right now.

It is very frustrating sitting here listening to we don't have money for this and we didn't have money and we didn't have money, and $3 million was taken from federal funds by Bill Nelson specifically to do a benchmark assessment for red snapper and that money went somewhere else. Why?

(Remarks made off the record)

MS. THOMPSON: But they want to make more MPAs and they haven't even done the research on this very large MPA, the very first MPA. It is still sitting there and nobody knows – I mean we have assumptions about it, but we don't have any scientific evidence that the MPAs even work. It is mind-boggling.

I can't even wrap my mind around it that we have this huge first MPA sitting there and the research hasn't been done, and other MPAs have been created and now they want to create a lot more. If that is such a high priority, why isn't it a high priority to get the red snapper opened back up again; because the economic devastation that has caused should be an impetus to get that fishery opened back up again. I'll just stop for now.

MR. MERRIFIELD: Are we almost finished with this, Gregg?

MR. WAUGH: Yes; I think if you look here, Item 6, develop an index of physical and chemical parameters that characterize a healthy oculina coral ecosystem; nothing has been done on that since the previous assessment. Seven, conducting research on coral feeding ecology; nothing done there.

Assessment planning projects, Objective 1, characterize major fishing species within the Oculina Area. Stacey Harter pointed out that NMFS hasn't received funding. They did five dives in 2011. Objective 2, referring to our future grant, so nothing done so far; major habitat types, nothing done there. That's it.

MR. MERRIFIELD: Okay; any other further comments for this evening or are we ready to break and pick it up tomorrow?

MS. SOLORZANO: I just wanted to say one thing. John Reed; they are not interested in opening to commercial fishing. They are more interested in closing everything down; so they are not going to be doing anything in our favor. They are more interested in getting out there. When you were saying they didn't want to use our people and whatever because it may be I guess prejudiced. Definitely, John Reed –

MR. WAUGH: Who said that?

MS. SOLORZANO: Not the word prejudiced but biased – that was it, "biased".

MR. WAUGH: I don't recall anybody saying that they don't want to use you all.

MS. SOLORZANO: That if we went out and hired outside people to come in and help, that it could be biased; but John Reed and them are definitely biased against commercial fishing.

MR. WAUGH: Well, everybody is entitled to their own opinion. John Reed is a researcher. Each individual has their personal views, but John is a researcher and he does research. He publishes through a peer review process. Our SSC reviews material, and that is a part of. It is hard to point this out without people misinterpreting; but any information done; the scientists aren't immune from being biased. They are human as well. That is why they have a peer review process. They publish it and other scientists critique it. That is what happens here. Any research done has to go through some sort of peer review process.

MS. SOLORZANO: If we done information as commercial fishermen and hired outside people to help us and went through a peer review of commercial fishermen; that research wouldn't be considered appropriate, because that is what we've been presenting to you all for quite some time now. It is not as important as what John Reed's information is.

MR. WAUGH: I beg to differ with you. I think a good example of this is our SSC met here last week. They reviewed a wreckfish stock assessment that was done by the industry hiring a scientist; and they worked with the SSC, developed a review process for that. That assessment was reviewed.

It was deemed useful for management; and they are working up the new recommendations for an allowable biological catch. That is exactly the process that we've described to you here. Work

with someone from a university rather than hire a consultant. Consultants, they are not all bad; they are not all good. The risk you run in just hiring a consultant is you are open to the criticism that, well, you can hire a consultant to get you whatever answer you want. If you go with an established university, you buy some additional credentials and legitimacy; but that still needs to be reviewed and would be reviewed,.

Just as they hired Dr. Butterworth to do the wreckfish stock assessment; he is a well-known international stock assessment scientist, but that work still had to be reviewed by our Scientific and Statistical Committee. If you do the work, work with an established university, that information will be reviewed and used. The council; that is why they have advisory panels is to use your input and get your input. That doesn't mean they are always going to do exactly what you tell them to do.

MS. SOLORZANO: We could hire a doctor from a university and just hire one; and he would go out on the boat with us and do the research that would be acceptable for the council?

MR. WAUGH: He would do research that would then be presented to our SSC; and if it was deemed valid, that is something the council would use – could use, yes.

MR. MERRIFIELD: Are we ready to adjourn this meeting for today? We are adjourned until 8:30 tomorrow morning.

(Whereupon, the meeting was recessed on May 6, 2014.)

The Deepwater Shrimp Advisory Panel of the South Atlantic Fishery Management Council reconvened in the Crowne Plaza Hotel, North Charleston, South Carolina, Wednesday morning, May 7, 2014, and was called to order at 8:30 o'clock by Chairman Michael Merrifield.

MR. MERRIFIELD: Let's go ahead and try to get started here. I think we're going to go through the OECA Evaluation Report from the law enforcement agency first.

MR. WAUGH: We've got the written report from the law enforcement; but as we discussed yesterday, there is a lot of information that needs to be pulled from the spreadsheet and from that PowerPoint presentation. We'll put that in here and restructure this some. We'll send it out to you to take a look again.

This would be the opportunity for you to give any input. We can go through the written report and you provide that input; or just in terms of making motions tell us what changes you want to see. Problems; you raised a concern about the transit provision that is in – well, I guess law enforcement raised a concern about that as being an increased enforcement burden on them and you wanted to comment on that point.

We don't need to do formal motions if you don't want to. We can just get your consensus points, points that you all want addressed in law enforcement. Then we'll do research and then Kim will be here in a little while and she'll give her outreach presentation, and then we'll get your input on outreach.

MR. MERRIFIELD: Okay, so we're just going to move down the Law Enforcement Report.

MR. WAUGH: Action 2 in Coral Amendment 8 implements a transit provision. Law enforcement has indicated that is an increased burden on them. What comments do you want to offer on that transit provision?

MR. WILLIAMS: Did they say what would be the increase in their enforcement capabilities or what the problem was?

MR. WAUGH: I don't think they were that specific. I think they were just saying that anytime you allow transit, it is easier to have a box that is closed, that you don't have vessels in there with trawl gear and shrimp on board. They are just saying, okay, now you are putting in a provision for transit.

The way that is worded it says allow for transit through the Oculina Bank HAPC with possession of rock shrimp on board. When transiting through the HAPC, vessel must maintain a minimum speed of not less than five knots determined by a ping rate acceptable by law enforcement – that is five minutes – with gear appropriately stowed. Stowed is defined as doors and nets out of water.

I think they are just making the point that, okay, now you are going to allow – assuming this gets approved; you are going to allow transit with shrimp on board. The nets have to be out of the water, obviously, and you've got to maintain that five knots. They are just indicating that means that it is going to be more difficult to enforce.

MR. WILSON: We mentioned yesterday that this is actually the alternative that we worked with the Coral Committee with the enforcement guy – Otha was his name – on the phone with the meeting. At that time everybody was on board with it, even Otha. He didn't feel like it would be that much of a burden on enforcement. Personally I like the preferred alternative and I think we should stick with it.

MR. MERRIFIELD: I don't think there is a question about whether – I think the alternative is in Coral Amendment 8, so it is going through as it is. I guess the only concerns I guess that we have is that they have raised it as an issue that it is going to be increased effort on their part. That is mainly because, like Gregg said, you are going to have people passing through an area that has been closed or a new area that is closed.

Now they've got to determine are they maintaining speed; what do they have on board? It seems absurd to us, but nobody is dragging across oculina coral. That what they are charged to do is enforce that closure. I don't know that there is really a problem here. I just think it is going to be an increase on them because there is more area going to be closed and there is a new provision here to allow transiting.

It is a little bit trickier than what it has been in the past; but I think with the VMS capabilities of being able to monitor speed and direction, they are going to be able to say – I come from a computer background, so to me it is just a computer program that says they are maintaining five knots. There is no problem. If they are under five knots it is going to raise a red flag, it is going to come up on the screen. They are going to dispatch; it is as simple as that. That is simplifying it from my point of view, but I don't know how it is actually done.

MR. WILLIAMS: If this is in Amendment 8 and is waiting for a decision from the secretary, what are they asking for us? If this preferred alternative is already there; what are they expecting us to comment on?

MR. WAUGH: They are not expecting you to comment on anything. It is just that they made a point that this is going to increase their burden; and you had indicated yesterday that this is still very important. I've tried to capture some of that and maybe see if that captures what your position is. It says this provision is important to the industry, referring to the transit provision, and this is what the AP worked up with the Law Enforcement AP. The Deepwater Shrimp AP still supports this provision. I think if that is your view, I think that would probably take care of it.

MR. REID: Transit has been taking place for a long time out there in the red shrimp fishery. It was a pain in the beginning, they made a big deal about it, but it has slowly totally gone away. It is a non-issue. The size of the rock shrimp fleet is pretty close to what the red shrimp fleet is at some times.

It is not going to be an issue at all. They've been going through there. It is not like a boat is going to go in there and make a one-hour drag and catch a bunch of shrimp. Somebody is going to have to be in there all night for it to make any difference, anyway. It is not going to happen. The whole issue will go away.

MR. MERRIFIELD: I don't think there is an issue in terms of – I mean, law enforcement is just identifying that is going to be an increased burden; so that is that. Where I think we might want to make some clarification at least from my view point is that I would like to see what an implementation plan is in terms of what is the order of events that has to occur for this to actually be implemented?

If Coral Amendment 8 is put into place, what are the steps at that point prior to that area actually being closed that we get this implemented so that we don't have a problem coming across there now in a closed area that is from Fort Pierce to St. Augustine? What are those steps, so that we're assured that when that actually gets enacted or when that closure actually takes place; we are able to get across there. It is a safety issue in my mind. I would like to see what that list of tasks is that would make that active.

MR. PUGLIESE: I think the bottom line is that they are obligated, as this moves forward, and their being mandated to do the implementation phase to actually provide the methodology and provide the understanding of exactly how it is going to operate. I think that is given in the way this is going to proceed. I think they've made that clear. The good thing is that you've got the technology. Like you said, you've got the technology in place. It is just a matter of really making it so specifically for that process.

MR. MERRIFIELD: Then is that the additional burden that they're talking about; is it the implementation phase of it?

MR. WAUGH: Yes, I believe it is; just the fact that as you indicated, Mike, earlier that somebody is going to have to modify the code for watching the ping rates and giving an alert if a vessel is moving through that area and then an alert if the vessel goes below five knots. Does

that capture what you are looking for? You want the order of events for this to happen if Coral Amendment 8 is approved. The steps and timing should be provided to industry prior to the closure being implemented.

MS. SOLORZANO: Well, if Amendment 8 is too much trouble for them to mess with fixing it, then we should just do away with it, I think. That would solve everyone's problem. We won't have a problem, they won't have a problem. Ditch it.

MR. MERRIFIELD: Does that capture it? To me the concern is to make sure that when that closure goes into place, everything is in place, and all you need to do for your boat is download a patch or whatever it is that goes into your VMS unit, and you can now transit.

MS. SOLORZANO: If that closure goes in place.

MR. MERRIFIELD: Right; and as Roger pointed out, if it doesn't go into place, that would mean no transit on the existing HAPC would still be in place.

MS. SOLORZANO: I'll take that tradeoff.

MR. PHILLIPS: Do all of the VMS units have the ability to change their ping rate?

MR. MERRIFIELD: No; some of industry will have to change, because I believe there are only three manufacturers, two or three manufacturers that have the capability to meet the requirements of this transit provision.

MS. SOLORZANO: Do we have the names of the VMS people or the companies that can do this proper ping; do you know which ones they are?

MR. MERRIFIELD: I believe Pat O'Shaughnessy gave a presentation that identifies which ones those are, yes. I think we've got that presentation. Yes, we do. I think I have that presentation or we can get it from council staff that identifies those. Is there anything else regarding the transit?

MR. PHILLIPS: It is probably not a question; it is just I guess an open question. Once this is signed and some of these folks actually have to change VMS; are they going to give them some kind of grace period to do this? What is the answer going to be to that question; how quickly do they have to have it changed?

MR. WAUGH: That is a good question. I don't know the answer to it; but generally when there is a change in regulations like that, there is a time period that is allowed for that before it becomes effective. I guess to flip that around in terms of your recommendation; if the closure were to go in place, you would like to have a period of time before – so that those vessels that need to upgrade their equipment can do that before it becomes required. That would be the recommendation you would want to make.

MR. WILLIAMS: I just want to ask maybe Gregg or Roger if this new VMS or a patch to it or whatever would only apply to if you want to transit those closed areas, but the other ones will still be good if you are not going to transit them.

MR. WAUGH: That would be my understanding, yes. If you want to transit that area, then you would need to have a VMS unit that can meet that ping rate.

MR. MERRIFIELD: Because there are a lot of boats that don't go to the offshore side that will need to come back across so they won't have to do anything. What is the typical timeframe from the time that an amendment is approved? I'm asking does it vary from the time an amendment is approved until the time it goes into effect, if the actual closure would go into effect?

MR. WAUGH: That is highly variable depending on NMFS/NOAA's workload; but generally about six months; but again we submitted this in November and not a lot has happened and we're already up on almost six months. To me a reasonable time period to think of would be six months from now.

MS. SOLORZANO: What is the process of that going through? It goes to National Marine Fisheries and what do they do with it?

MR. WAUGH: Well, we sent Coral Amendment 8 to them in November; and the first step is for them to publish a notice of availability of that amendment in the Federal Register. That gives you an opportunity to comment on what is in the amendment. That is supposed to happen five days after we send it to them.

But, they review the document first; they want to make sure everything is in there; and then they publish that notice of availability. The second step is they prepare a proposed rule, and that is the actual regulations that would have the detail we're talking about now. That is published and you have generally a 30- sometimes a 45-day comment period on both of those.

That would be the opportunity when you see the specifics on how it is going to be regulated to comment on that proposed rule. Then when they publish the final rule, there is generally a 30-day delayed period; but for certain reporting requirements and things like this, they can build in a further delay to give people a chance to get ready for those requirements. Then they would have to in the final rule respond to all the written comments that they received on the proposed rule and explain why they made a change or why they didn't make a change.

MS. SOLORZANO: Who is they?

MR. WAUGH: That is done in the Southeast Regional Office. Roy Crabtree is the Regional Administrator; and he and his staff are reviewing it and NOAA General Counsel also reviews it. On our side, Monica Smit-Brunello is our attorney generally. Mike McLemore is the head of NOAA GC in the Southeast Region.

MS. SOLORZANO: Who makes the final call; the three of them?

MR. WAUGH: No; it is Dr. Roy Crabtree on behalf of the Secretary of Commerce. The Secretary of Commerce has delegated review and implementation authority to the Regional Administrator. Roy Crabtree would be the one that ultimately makes the decision.

MS. SOLORZANO: He gets to make the decision; I wouldn't want his job.

MR. CUPKA: He can either approve or disapprove or partially approve an amendment. It doesn't have to be all or nothing; but they spend a lot of time reviewing the amendment and making sure it meets all the national standards and that sort of thing before they make a decision.

MS. SOLORZANO: I have another quick question going back on these peer groups. With the peer groups, are there any commercial fishermen on those peer committees that evaluate the information given in whenever you have a study?

MR. WAUGH: You are talking about the peer review that our study is undergoing? Our SSC does not really have any fishermen on it. It has scientists. It has one representative basically from each state; and within that state representative you do have individuals that have some on-water expertise. Now where we get our fishermen review is through advisory panels like this. You would have the opportunity to comment.

MS. SOLORZANO: But it doesn't weigh as heavy obviously as the scientists.

MR. WAUGH: I wouldn't say that; it is a different weighting. For instance, reviewing a stock assessment; it just reflects different capabilities. Our SSC has mathematicians on there that don't have on-water experience but understand how the models are done, how they run. Vice versa you have fishermen on the advisory panels that don't understand the intricacies of a model, but have tons of on-water experience and understand that part. The council weighs both of those. I don't think it is accurate to say one is more important. You are getting different recommendations on different aspects of each study.

MS. SOLORZANO: Wouldn't it be wise for the council on these peer reviews to have a commercial fisherman on them? Wouldn't it kind of be a little fairer if there were one there? I know life isn't fair. I'm getting a big dose of that; but wouldn't it be fair if there were a commercial fisherman on a peer review? As it is, the word peer is there.

MR. WAUGH: Going back to the SEDAR process; we have steps where fishermen are involved. They do participate. Thus far in doing peer reviews of stock assessments and reports on our SSC; we have not chosen to have a fisherman on there. That is something you could recommend and the council could consider.

MR. PHILLIPS: I've been on the MARFIN Panel; and this year earlier I was on the CRP Review Panel. It wasn't the reviewers; we were looking at what the reviewers did. A lot of time you're looking at the scientific protocol; can you do what the research says you can do? Are there any holes in the research? Is it logistically possible? Does the budget match?

That is a lot of stuff that really a fisherman; it is not going to be his expertise; but then I do look at some of the stuff they look at. A lot of their stuff is highly technical so it is even over my head, which doesn't have to get very deep; but I do look at that kind of stuff if I'm appointed to that particular panel like for MARFIN or CRP or something. A lot of the people I think are biologists and still state managers and stuff; but there are some people like me I think that have some experience on the water that do look at this in the end when it starts getting looked at to be funded.

MR. WILSON: I am not the sharpest kid on the block either; but I don't recall our AP ever being involved in reviewing for grants or anything like that. It sounded like that from what Gregg was saying.

MR. WAUGH: You all have reviewed all of our coral amendments. You've reviewed our coral amendments; you've reviewed our shrimp amendments, the amendments affecting the deepwater shrimp fishery. You all are our experts and you all have reviewed and provided your recommendations on those.

I think the council has listened to a lot of them and acted on a lot of them. We haven't had any shrimp assessments that would apply here; but looking similarly to our Snapper Grouper AP, they have the opportunity to comment on what went into an assessment, the results of the assessment.

It is primarily the Scientific and Statistical Committee that review the details of the assessment and say, yes, it meets the requirements and should be used for management. But our APs weigh in; and they weigh in on the development of that assessment as well at the data workshop and assessment workshop.

MR. MERRIFIELD: Okay; I guess what I was trying to get at was if this thing got fast-tracked and got implemented, Coral 8 was approved and published into the register; from that point does it state this will take effect on this date? Is there a prescribed time that says once it goes into the Federal Register, 30 days later it is in or 60 days or whatever it is? Because, that is the timeframe we're trying to look at as that buffer zone that says this is how much time we have in order to get that function operable and everybody's equipment compatible.

MR. WAUGH: Yes, when a final rule publishes, on Page 1, right near the top of it, it has an effective date. It gives you the date those regulations are effective. Many times what you will see is an effective date of X except for the following provisions, which are effective as of another date. What we've captured here is your recommendation that if the amendment is approved, you request a delay in the VMS unit requirements to give sufficient time to purchase and install the necessary hardware and software.

I would encourage you all when that proposed rule is published to make that comment. I am sure that would be accommodated such that then were it approved, the regulations generally would take effect 30 days after that. Then they would say except for this requirement to have the ping rate; and then give you another, I don't know, 30 days or give you 45 days. That has been done before with other reporting requirements; and that is something that can be done.

MR. MERRIFIELD: Is there anything else on this topic? I think it is going to be important in our comment – I don't know how Coral Amendment 8 could go into effect, but have a delayed requirement for the ping rate to change because a closed area is a closed area. You can't say, well, it is a closed area but we are going to allow you to transit through there without a change in ping rate or anything. It seems to me that would have to –

MR. CUPKA: They could implement the closed area and just say we're not going to enforce it for X number of days or whatever.

MR. WAUGH: They could also implement it and say that the area is closed and the provision to allow transit will take effect an additional 30 days to allow industry the opportunity to get the equipment on board; and so you would not be able to transit that area until you had that delayed date. I suspect that would be the approach they would take to make it more enforceable; but again these are excellent points to make in your comments on that proposed rule.

MR. CUPKA: Gregg made a good point, too, NMFS has to respond to all of the comments they receive and they publish the responses. They either tell you why they agree with it or disagree with it. They are going to have to respond to every comment you make, so make sure that you do comment on those and see what the response is.

MR. MERRIFIELD: Okay, I think we got the concern documented and the request for some kind of an implementation plan so that we have some comfort that we're going to be allowed enough time to come into compliance with that requirement. Are there any other questions? Are there any other concerns about the law enforcement? Okay, the next report was the research and monitoring report. I thought the enforcement was going to be pretty quick. Did everybody get a copy of this report Monday?

MR. WAUGH: There are hard copies over here, too, if anybody needs one.

MR. MERRIFIELD: Do you just want to go line by line down this report?

MR. WAUGH: We can certainly go line by line; there is not a lot that has been done. I can pull up the report and we can walk through it. On Page 1, what is outlined there is an overview of Oculina research, sort of a review of what was done looking into 2008, visual surveys in 2011; and then a description of what was done, some of the work that was done putting those reef balls out there in 2000 and 2001. Then we talked about how when they went back out to look for them, a lot of them had moved.

And sort of where they get into starting to talk about what has been done is current status of specific questions and objectives delineated in the Oculina Evaluation Plan at the bottom of Page 2, coming over to the top of Page 3. The first question was will oculina thicket recover throughout the Oculina Experimental Closed Area?

Objective 1 was to identify coral fish recruitment pathways. They've done some work on that in 2008, but that has not been completed. Objective 2 was the model, the biophysical, chemical and physiological characters. That has not been done.

MR. WILSON: I had two questions. When it says there was some trawl damage evident in Chapman's Reef; I was curious from damage like that. How long does it take for coral to recover from that?

MR. PUGLIESE: I think the point is these are slow-growing corals. That type of damage where it has knocked down thickets, either thickets associated with the base of systems or up on top of the reef; they are probably are not going to recover within our lifetime. They are basically very – you know, a centimeter growth a year type of species.

That is one of the real issues with regard to the concern over species. If it gets damaged, potentially you're going to have that structure is lost, the base structure of the entire component from which it usually grows on. Given the current systems in there, it takes a very significant amount of time for it to recover.

MR. WILSON: My second question was does the council consider did the artificial reef block program work; was it a positive thing?

MR. PUGLIESE: The ones that were fine – I think what has been identified is really they haven't had a chance to find the rest of the reefs. They did find some reef balls. There was speculation that they had gotten moved by trawling. Those were placed a while ago. There was a potential that there may have been a trawling event or something that moved some of them, because there is not a whole lot in that area that would move reef ball structures.

When they dove on the location, they only found ones – I think what the report identified is that what they were trying to do is they were looking at the ability to do recovery by seeding the corals. When they did that on that, it did not work on the balls themselves; but the fact that you had super structure above the ground provided this foundation for new corals to grow.

It is kind of a flipside; yes the recovery type of thing didn't work, but they actually provided substrate for coral growth. They have proven that the coral will grow not only on those structures, but have found – the placement ones that they used were actually found on a wreck north of the existing Oculina Bank that they removed and then placed them to try to do a recovery.

They provide habitat, but they did not affect at least on that one – they don't know where the rest are. On that one that they've located, it did not have the survival of the original coral. The deeper system that was trying to test what they had done and been successful in the shallow systems with some of the other shallow corals; it didn't seem to be as effective to be able to do that.

MS. SOLORZANO: How do they know shrimp trawls damaged them?

MR. PUGLIESE: It is just something large had moved some of them. That was speculation. I'm just relaying the point that when they placed them; they were all in a fairly tight location. There was just speculation on what else. There is trawling that had occurred through that area. That is kind of just their statement that something large enough to be able to drag them off of site had occurred.

Now, they did not sample that entire area, so it is still limited on how much time they've actually been able to go out and really go down and find those systems. About the only thing I have said is that having additional structure on those provides actually a foundation for growth. That is what gets lost when they get leveled or dropped down to the bottom and become rubble zones.
MS. SOLORZANO: Currents, hurricanes, nothing else could have moved them?

MR. PUGLIESE: It was a pretty low profile. I don't know if you are familiar with the reef ball systems. A big vessel will probably get moved more likely than something like that. That is fairly low and that is in fairly deep water in most cases; but I am just relaying what was the

comment; and that's it. They still need to find the rest to find out if there actually was any survival of the other corals.

MS. SOLORZANO: That would be Reed and the scientists that did the study and said those were gone, right, and moved by trawlers. Who did the paper saying they were moved by trawlers?

AP MEMBER: Nobody did.

MS. SOLORZANO: Nobody did?

AP MEMBER: No, it was speculation.

MS. SOLORZANO: Oh, it was speculation by whom?

MR. MERRIFIELD: I think in general there is going to be a sensitivity level here that we are all going to touch a huge nerve here when you starting saying trawl. I think everybody on this table here; I think they're –

AP MEMBER: I have a question for Roger. To date, has it been successful at all trying to transplant coral; has it been successful trying to move coral and transplant it in that area?

MR. PUGLIESE: There haven't been that many attempts to do that. That was one of the biggest attempts; and they were only able to locate and then be able to document what they found. They don't even know what the rest of that area is.

MR. MERRIFIELD: We have to figure out a way to get past this. I think it bothers me every time I see it, I know. I know these guys, it bothers them, too. I wish we could get past this.

MR. WAUGH: Here is what has been written in the report. I know this is a sensitive issue, but here is the statement: Many of the reef balls and other structures have been destroyed or moved since their deployment. The cause of movement cannot be proven; however, the mass of reef balls suggest that they could not have been moved by natural events or recreational fishing activity.

This is based on the input and observations of people conducting the research. That is their scientific perspective. Now, we are coming to you as the AP to get your on-the-water fishing perspective. What is your observation? Those reef balls have moved. The scientists are saying the size and weight of them suggest that it couldn't have been a natural event or recreational fishing activities. What is your insight as to what you think it might have been?

MR. REID: If a shrimp trawler moved those reef balls, the shrimp rig would still be on them. My concern is I'm sure or fairly sure that there was a lot of scallop activity at that time down there. The scallop activity is fixing to return. Scallop boats don't have VMS even. It is not going to be activity like there was in the past with the shelf stock fleet; but there are a couple of processing boats being prepared right now that are going to be down there. I just want to get on record as being concerned about that and make sure that we are not held accountable for what other fisheries do in the future.

MR. PUGLIESE: That is important to note. That fishery is here. I don't know how sustainable it is over time, if it continued, but it came back in a big way. The one key though is in all of these closed areas, all trawling is prohibited. It is going to be important for them to be on top of it. He just indicated they do not have VMS; and that is an important point. Up to this point there really had not been any calico fishery rebound or recurring.

The council had actually looked at developing a calico plan and basically the fishery did not exist anymore. A lot of the detailed information is included in our fishery ecosystem plan, but there is not plan in effect right now. However, they are under the constraints of the gear limitations that we have in these types of areas.

MR. MERRIFIELD: I'm just kind of looking for a way to get past this whole thing here, because they want to talk about counterproductive. This is counterproductive. I'm not saying that in the past there weren't some edge trawling of the reef area that may have occurred; but through the center of a bioherm that is of any reasonable size, I'm having a hard time thinking that occurred.

But we are where we are today; we've got all this past information. We've got closed areas and to keep bringing it up and saying that we've got – there are too many unknowns. Where is the research that is addressing the unknowns here about what is actually happening to this coral? We've got huge die-offs. Why?

It is not all because – you can't just keep saying trawl, trawl, trawl. There are a lot of things going on out there. It is a very intense area as far as the currents and temperatures and everything else are concerned; and then we've got a lot of things that are coming up, a lot of outflows that are going right into the stream.

There are a lot of things going on out there; where is the research? That to me is where we should really be looking at concentrating the research if we're really interested in it. The shrimp industry; we're interested in maintaining this coral. Coral is actually important to our fishery. We're looking at this and saying quit pointing back at the trawling and let's figure out how to maintain these structures and keep this coral alive.

MS. THOMPSON: Gregg, you posed a question yesterday about what has changed in the last three years; what does our industry think happened that might have caused the rock shrimp from being on the southern end of the reef and now they're moving to the north? There have been some huge events that have happened as far as freshwater discharges coming out of Lake Okeechobee.

The satellite pictures show the plume goes all the way out to the Gulf Stream. You have Dade County is putting millions of gallons of treated sewer water into the ocean every day, and all that stuff moves north. Our rock shrimpers last year caught some kind of weird seaweed. It almost looked like kelp; it was like a thick brown leafy seaweed type of substance and it was so thick it loaded up their nets. It took them days to clean the stuff out of their nets when they caught it. That stuff; we have never caught it before.

You've got some kind of weird seaweed growing on the southern end, down towards the southern end that has never been there before. My opinion is that it is being fueled by the same

kind of nutrient overloads we're seeing in the estuaries is happening in the ocean. It is being swept to the north; and the first place it hits is the southern end of the oculina.

There is nothing living down on the south end of the reef. There is no bat fish and lizard fish and crab and all the other stuff. There is nothing there. That could be a factor that caused the rock shrimp to move north, because animals move when you destroy the environment they live in. If they are not killed in the destruction process, they move. They will go somewhere else.

That could have something to do with it; but we're supposed to be determining and monitoring the effect of the closed area on fish distribution and status. I made the statement yesterday that the closed area was put there to study snapper and grouper; and that is not being done. The stressors, the study of the stressors of what is affecting the reef; that is not being done. We're investing so much time and effort into stopping people from fishing and we're not addressing a lot of the causes that are contributing to the reductions in the fish and reductions in the coral. It seems like our priorities are in the wrong places.

MR. WILSON: I agree; also on the issue as Mike was presenting it, I would like to comment. The last meeting; we had the meeting with the Coral AP and it was a good meeting; but they wanted to give us a little slide show. We were interested to see their slide show, but then the one gentleman put up there some netting found in the coral.

He immediately went to the trawl netting. It was monofilament netting. Shrimp trawlers don't use monofilament netting; so he made an assumption. You may think we are being overly sensitive, but for us it is important that we are in compliance. As Mike said, we're interested in preserving the coral as an industry because it is part of the system and we need that.

To be always assuming that it is a trawl; unless you really know, if you are just assuming it is trawling, shrimp trawling; it is as he said very counterproductive. Somebody put out a picture of some other netting on coral and they said it was from shrimp trawling. It was from a cargo net. It wasn't from shrimp trawling.

There are remains of a German submarine out there from World War II; shall we come back on shrimp trawlers or shall we go to Germany and say, hey, you're causing a problem here? But as an industry, when they are immediately pointing the finger at us as shrimp trawlers, well, we are always thinking we don't always just react and say; oh, there they go again; but we're thinking, is that possible, are we doing that? What do we need to do?

But if it is not us, we don't know what we can do, because we are concerned with addressing the problem. This just always assuming there is a shrimp trawl; there are many other possibilities that go on, but even some of the evidence presented wasn't factual. Somehow we need to get down to the facts. That is my comment.

MS. SOLORZANO: There are actually only about ten regular rock shrimp boats that are working that bottom anymore. I think we're down to, what, 90 something permits that are actually valid? There are about ten of them that are getting used. If you look on the list, I think the vast majority of them for some odd reason are in North Carolina and South Carolina.

The few of us that actually are out there pretty much every year unless we have a phenomenal year on the beach, which happened a couple years ago, we're the steady ones out there doing it. We're following all the regulations, we're not destroying anything. That little bit of bottom that you're taking or is planned to be taken is where our money has been made the last few years.

If things move north, for various reasons we can't really explain why – and what Laurilee brought up was a very good point – we are going to need this area that is taken, seriously need it. We don't need it to be taken away for something or speculation on there could possibly be coral formation in the next God knows hundred years. We're not out there year round doing it.

We're there just a few months of the year doing it; but that is when we make most of our money. I'm sure all of you have heard this before. I think there are many other things to take care of out there besides stopping ten rock shrimp boats from catching some rock shrimp three months of the year.

MR. WILLIAMS: I just wanted to make a quick comment. I certainly agree with everyone with what is being said. We can't fix; I'm not saying that we may – I say we – the shrimp industry may not have been guilty of some coral destruction in the past; but what I am saying there is documented coral dives, massive coral dives all over the world, including here.

The shrimp industry cannot fix what environmental conditions cause, climate change or any of that. We can't fix that. The shrimp industry cannot fix it and the council cannot fix it by continuing to close bottom to the shrimp industry. We have to look at something else, but closing bottom because of these reasons is not the right way to go.

MR. MERRIFIELD: There is another statement in here I would like to raise a question about. It says the consensus of the research evaluation team is the proposal – on Page 2, it is the second to the last bullet item, is that the proposal of the Shrimp Advisory Panel to open areas of the trawling in the HAPC and ECA would be extremely counterproductive and would put the few remaining dense stands of oculina at risk.

I think anytime we've asked for an area to be reopened to this fishery, it does not contain the oculina coral. I guess what we would need to know is what does extremely counterproductive mean and how is that viewed? I understand that there may need to be buffer zones; we need to do some analysis on sediment and dispersal and all these kinds of different things. I guess I need to know why is it considered to be extremely counterproductive?

MR. WAUGH: I think what they are getting at there is the original Oculina Bank, which is now the Oculina Experimental Closed Area, had coral in it in the past. There was fishing in the past. When we first started talking about that, the rock shrimp industry came forward with charts that showed their historical fishing grounds. Their historical fishing grounds ran right through the middle of that Oculina Closed Area. There has been damage in the past. There were coral in there in the past. That area is closed. These are slow-growing corals.

If you allow that area to remain closed, you have the opportunity for coral to regrow in that area. If you open up a spot down through the middle where there may not be any or much live oculina coral now, what is there is still serving as some habitat; but if you allow trawling in that area,

you are not going to have coral reestablish in that area that is open for trawling. I think that is the point they're getting at. Did you want to add something else, Roger?

MR. PUGLIESE: Again, you remember this focus is supposed to be on the Experimental Closed Area, which is a marine protected area, which is for snapper grouper species. The idea is that entire area and all the habitats associated with this smaller box of the HAPC have all functional habitats for all the species in the Snapper Grouper FMP.

Also it is designated as an area of habitat area of particular concern for essential fish habitat. Every one of those types of habitats is viewed as part of the deepwater complex that all those snapper grouper species are connected at various life stages. Where you may be looking at different areas, when you are looking very specifically at the experimental closed area, you are looking at the complex of all those habitats supporting snapper grouper.

I think to some degree that is also what the concern was that you are seeing some change in some of the species' use some of those areas; and they are interconnected and the importance for all of those functioning in that as a unit are significant for the experimental closed area.

MR. WILSON: When did we ask that; to open trawling areas within the HAPC?

MR. MERRIFIELD: We presented an option that didn't make it very far, but we presented an option for an allowable trawl area from 110 meters and deeper. We presented that when we first got started on this thing about two years ago. I don't think it was ever an option or anything like that. It was just a presentation.

During the evaluation the evaluation team, I was on that team and they asked me to present that. I basically showed them the area that we had talked about, which actually about one-third of the OECA is in about 100 meters or deeper on the eastern side; and it is soft substrate bottom. I think that is the area where rock shrimp fishing had occurred before it was ever closed. That is what they are responding to by talking about that option or even considering that would be extremely counterproductive.

Really, it was just presented as a can we consider this; can we look at this and say is this an area that is essential to the snapper grouper or to the oculina coral? Do we have justification for keeping it closed or can we open up some portion of it? Was the science there to close that area in the first place; and is the science there today to say that, yes, that area is producing, it is productive, it has been advantageous for us to keep that area closed?

MS. THOMPSON: I want to go on record as stating we did not ask for bottom in the middle of the coral to be opened up again. Yes, they have trawled in between the pinnacles, on the bottom in between. That is not what we asked to be open. We asked for the soft bottom on the offshore side of the reef to be considered to be opened again.

But I agree with Mike; was the science there to close that soft bottom on the offshore side to begin with? Where is the science that supports keeping that bottom closed now? It is not there. I don't know if there is the science that substantiates closing as much of the offshore side of the proposed northern extension either where we have been fishing. It is like history repeating itself.

MR. MERRIFIELD: Are there any other comments at this point on this beginning section or do we want to continue on with the objectives? Where did we leave off, Gregg?

MR. WAUGH: Does what I've got up on the screen capture the important points that you want to make?

MS. THOMPSON: I would like to change the "within" in the second line under the second bullet to "on the offshore side of this area".

MR. MERRIFIELD: I think what we're just asking is we are doing an evaluation of this area. This is what the task is at hand right now. We are evaluating this closed area and what little bit of research we have about it at this point in order to maintain it; is it being effective? We should be looking at things. I guess what we're asking is I just think it should be something that should be at least considered and talked about; and are there any specific reasons why.

It should just not be wholesale discounted and thrown out; at least give it some consideration and at least some kind of an answer that says this is why at this point in time we choose not to open this up. What are those reasons? Instead of just saying it would be extremely counterproductive; what is the reasoning? Is it just because it has been closed?

To me this goes to the heart of everybody's fear about MPAs. This is why I think it is important to address these issues. There is a lot of resistance to MPAs; because once you close an area, it is never opened again or there is not enough research done to say that they are being productive or they are valuable or what their contribution is. I think it is important that everybody understand that when you are talking about MPAs, this is the reservations, this is the concerns that people have about them.

MR. WAUGH: I added this last sentence saying that you request a specific response on what information or science justified the initial closure and justifies this area remaining closed.

MR. MERRIFIELD: In previous reviews I looked at; they have looked at this and said do we need to adjust the size or the shape of this; and they've always come back and said no. Why?

MS. SOLORZANO: It is the research evaluation team that has come to this decision that it would be bad to open it, but they don't have any real research as to why.

MR. MERRIFIELD: Yes; their charge is to evaluate the existing OECA and say do we need to make any modifications to it; what has been done in it since the last review? That is part of the evaluation. As part of that, they are evaluating whether they think that our request to look at allowing trawling on the offshore side of that has any merit to it; and this is the response.

MS. SOLORZANO: But when we had the meeting with the coral people and some of the very – Dr. Reed was there – no one disputed. They all agreed that they saw no problem with giving us the area to trawl in; it would just have to go back to council and be approved. Of course, I don't know what took place after that, but obviously it wasn't.

MR. MERRIFIELD: There were some differing views at that meeting and there were certainly some that had the opinion that just because it has been closed is not a reason to keep it closed.

MR. WAUGH: I think you have made some excellent points here. Having been around when this was first set up and having dealt with the first ten-year review when we almost lost the area because there wasn't any research done or very limited research done; it is tough to be sitting here an additional ten years later and basically in the same boat. I would just encourage you all to be as forceful and as specific in requesting the research results and science and hold our feet to the fire.

MR. WILSON: I have a comment on this and maybe I'm jumping ahead. I'm actually on the third page about will the oculina thicket habitat recover without human intervention? I think the comments that Laurilee made; when you are answering this, are you just looking at fishing or are you going to look at these conditions that Laurilee brought up with the pollution and so forth? That is human intervention.

MR. WAUGH: Yes; we've got that captured here; what is different over the past two to three years; the effluent discharge, the fact that that plume is documented out to the Gulf Stream moves north and could be impacting oculina; the thick, brown, leafy seaweed that was never caught before, and it is clogging the nets; and that is fueled by nutrient overloads in the ocean, similar to what is happening in internal waters; and the fact that the invertebrates have been killed and are not present in the rubble. We've got that in there.

MR. WILSON: One more factor; I don't have any science on this; this is just speculation on my part and I talked with Roger about it a while ago. The chemical dispersant that was used in the BP Oil Spill has been sitting on the bottom there in the Gulf. They did a study; USA did a study on the water. They took water with that particular oil; and they took water with that particular oil and the dispersant.

After a couple of months, the water with the oil still had life in it. Water with the dispersant was totally void of life. There has been some concern. We saw Gulf shrimp coming around to the east coast. There has been concern if that dispersant gets into the Gulf Stream and comes around to the east coast; something like that could have an effect on the coral, I'm sure.

MR. MERRIFIELD: Are there any other comments on this? I think the basic thing here is I think there is a way to be more productive if we are working together on some of these issues instead of it being counterproductive, which is working against one another. I think we can get a lot further, get a lot more research done.

There is a lot of information that these captains have that we could be utilizing that we're not. I think there are just more productive ways to approach it, because this industry is certainly interested in preserving the oculina and whatever fisheries, snapper grouper, that goes along with that. We've kind of talked about that first item on Page 3.

MS. SOLORZANO: I have a question that doesn't pertain to this while he is looking at that. The minutes for the meetings here that took place for the deep water; how quickly can we get the minutes from this meeting? Does anybody know?

MR. WAUGH: We can get with the gentleman that does these and request – I don't know what other workload he has. We have our SSC that met and those are being transcribed. They met last week, so we could put this next in line after the SSC minutes. The audio files will be

available immediately. We can post; do we post those on our website; but you can request those if you e-mail Mike Collins.

He will provide you a link to those audio files so that you could listen to them. We will also request that these minutes get done as soon as possible. The SSC would be in front of this, because they reviewed a number of assessments that the council is going to be taking action on. I think the backlog from our previous meeting has been done; and we'll get these the next in line.

MR. MERRIFIELD: I will let you finish that and then we'll see if we can't cruise down some of these objectives here. Objective 2 under that is to model the biophysical, chemical, and physiological characters. I guess nothing has been done on that, but there are some newly hired researchers that are hopefully going to receive a grant to move forward with that. I think we kind of talked about that. Are there any other comments on that area?

Determine and monitor the effect of the Oculina Experimental Closed Area on fish distribution and status; Objective 1 is assess the spawning aggregations of fisheries' species. I don't think there was anything done on that. right? Track fish movements; we've kind of been through this on the other spreadsheet. There is really not a lot of activity here, if there is anything that we want to talk about here.

MS. THOMPSON: It is back to the cooperative research. There is a statement in here difficulties in acquiring ship time and spawning season for gags is during late winter, a period when weather conditions often preclude vessel operations. Again, that is the time we have the boats there, because that is during rock shrimp season and white shrimp season.

We can respond quickly. If there is going to be a few days in between cold fronts when we can get the scientists out there, we can do that. They can go out on a shrimp boat. They don't have to go out on a big research boat. We can get them out there. We're used to running offshore when we have a couple days in between a cold front. That is what we do.

MR. PUGLIESE: I think it is important. I think we discussed that when we were going through it before. My concern about it because of the way a lot of the routine type of monitoring, the availability of vessels has become so tight, and then the researchers concern about the ability to get out when they can essentially have half the cruise or almost the entire cruise fail because of weather has really complicated getting some of the most critical information on this. We've been working more recently with trying to enhance our understanding of spawning locations. I think this idea that we need to look into cooperate research to sample during spawning season is critical for what we're doing here.

MR. MERRIFIELD: Just from reading a lot of the research and things, it sounds like this ROV bottom time is extremely expensive. I think the amount of information that is gleaned out of that doesn't seem to be worth the amount of money that we're putting into it. We're not getting a lot of this information that we need to know about what stressors impact that coral and those kinds of things. I think that if you get more towards some type of monitoring; I think mapping is an important thing. You keep talking about you are going to get this area mapped.

I think that is a positive move because that will tell us a little more about what areas to concentrate on researching. There is just a huge lack of information here and understanding of what is taking place down there.

We all know it is an extremely violent environment in terms of temperatures and currents. You ask these guys about currents, they will tell me all the time it is 5.8 knots, it goes anywhere from close to 6 knots to 3 knots to no current. It is highly variable environment.

Moving along we've got Page 5, we've got Number 3; what is the population structure of the corals? A lot of the information goes back several years. Are there any questions or comments on that section? I think it is going to be the same. What are the stressors affecting the Oculina Experimental Closed Area? The same comments, basically.

MS. THOMPSON: In 2007 this objective was downgraded to a low priority. I think it needs to be elevated now based on the environmental effects of the freshwater releases and pollution coming up from the south. I think this should not be a low priority objective anymore. If the council does give them another ten years to try and get some of these studies done; I would like to see this one moved up from a low priority.

MS. SOLORZANO: I agree with what she is saying; but as far as it tracked to one being gear impacts, poaching, enforcement; that is not the problem with what is happening out there. It is more the frequency and severity of sedimentation from storms and environmental stressors would be more the natural things causing it or maybe pollution or whatever may be causing some of this coral to not grow as quickly, not come back.

I have a very difficult time believing that eight or ten shrimp boats who don't trawl on coral and never have are the reason the coral isn't growing. It is ridiculous. That is not the reason the coral isn't growing. Things down to the south this past year, for whatever reason, there was very little life down there.

Things move to the north, and we did have the unusual algae. Those things should be placed to the top of the list for studies other than closing some shrimp bottom to trawling, because that is not going to fix the real problem if there are pollutants out there that are destroying the coral and fish and life along that reef.

MR. MERRIFIELD: Moving on; we talked about environmental stressors, severity of sedimentation; identify physiological tolerances of the coral; the environmental stressors we just kind of covered that. Number 5, what are the key trophodynamic functional groups, basically identifying the food web. There has not been much done on that lately either.

Six, develop index of physical and chemical parameters and characterize a healthy economic coral ecosystem. Are there any comments on those objectives? That has got to be a difficult thing to do. There has not been a lot done on that section. Number seven; conduct research on coral feeding ecology; Sandra Brooke has done some things there in 2002. Are there any comments on that section?

MR. WILSON: What were the results of that unpublished study on feeding dynamics?

MR. WAUGH: I don't know, but you raise a good point that rather than just saying a study has been done; it should have some description of what was done there. We'll make sure that gets added.

AP MEMBER: In regards to that; if you are going to have the feeding of the coral, could they look at what might be killing the coral? If something is coming up from the south and things are changing out there and it is killing stuff and shoving the shrimp to the north; it seems like a study could be conducted pretty quickly to see what is going on in that area. I know it is not the boats doing it; but I think they need to look at the ecology of it. Why do animals move from an area; because they can't live there?

MR. WAUGH: Right; and I think that was addressed under Item 4, the stressors affecting the Oculina Experimental Closed Area.

MR. MERRIFIELD: Moving on; assessment planning projects; what is the effect of management measures in the Oculina ECA on the status of fishery stocks? It looks like there is some planned activity for the next three years regarding that.

MR. WAUGH: Yes; that refers to our coral grant that we're giving that money to NMFS/NOAA to do that research; that is what that is referring to.

MR. MERRIFIELD: That has been approved; that is in the works?

MR. WAUGH: It hasn't been approved; the grant is under review. We've responded to additional information that they've requested; but we anticipate it being approved, yes.

MS. SOLORZANO: When they do the stock assessments on the fish, what are they going to compare it to? I understand they are going to go out and do stock assessments to the fish to see how many are there. Are they going to be able to tell if there are more fish or less fish since all this time is closed? If they are doing it, what are they comparing it to; what years, '96, '98, because obviously there hasn't been any done in quite a few years.

MR. WAUGH: Right; this research that will likely be funded is not going to do stock assessments. What it is going to do is characterize the major species and the fish communities. What it will look at is what the counts of fish outside of that area are and what are the counts inside that area to give some reference as to what is going on.

MR. MERRIFIELD: Which is what Objective 2 basically states.

MS. THOMPSON: I have a comment on Objective 2. We can't even get the major research done in the original Oculina Experimental Closed Area; so I think expanding it to the known hard coral areas north and south of the HAPC, you should take what little money you have and do a really, really good analysis from the inshore to the offshore of the experimental closed area.

I don't see how it is possible for you to do the research in the experimental closed area and move out to the HAPC and to the south and to the north. You have three years to do it. You are talking about 300 plus miles. If you do that, if you include the areas to the north and the areas to the south; it seems like if you just stay within the experimental closed area and really concentrate

on the experimental closed area, you have enough of an example of all the different habitat types that are within the original experimental closed area.

You should be able to make some assumptions hopefully on how that would affect the areas to the north and the south. I think if you try to do research in the north and research to the south, and research to the inshore, you are just going to be spreading it out and it won't be a wise use of the money as opposed to if you really, really concentrate on doing a thorough study from inshore of the reef to the soft substrate offshore in that area and really concentrate on that area.

I'm talking about Objective 1 and 2; Objective 2. We don't have a whole lot of money; and let's try and understand – really thoroughly understand at least one section of it. We know that there is coral to the north. We know there is coral to the south. We know it is there; but let's try to figure out really what is in the experimental closed area, which was set aside over 20 years ago and almost no research has been done inside that.

Let's try to understand what is there. I may be mistaken, but I think that this study is to evaluate the effect of the Oculina Experimental Closed Area. It doesn't make sense to be using the funding that is supposed to be determining in the effects of the Oculina Experimental Closed Area on areas that aren't within the Oculina Experimental Closed Area. I know we desperately need the research in those areas; but this funding is for the Oculina Experimental Closed Area. That is where it should be used.

MR. WAUGH: Let me just clarify; the funds that we're using are not specifically targeted to the Oculina Experimental Closed Area. What we've done in this current three-year cycle is prioritize that work within the Oculina Experimental Closed Area. The mapping and the habitat characterization is the highest priority and will be completed by the end of that three-year cycle.

These monies are not just specifically for the Oculina Experimental Closed Area; but since it is our grant, we have written it and specified that will be completed at the end of this three-year period. We've also got other needs and some of the money will be spent on those other needs; but the mapping and the habitat characterization will be completed. That is the highest priority in this cycle.

MS. THOMPSON: The study on the commercially harvested fish needs to be included in the highest priorities, too. I mean the habitat mapping, yes; but if this area truly was set aside for the benefit of snapper grouper, then that needs to be a highest priority, too.

MR. MERRIFIELD: Okay, moving on to Number 3; what are the magnitude and causes of changes in the habitat structure and functionality over time; determine causes and time of coral deaths, origin and functional characterization of rubble zones. There is not much to report there. Are there any comments there?

MR. WILSON: Well, I just have a comment on the overall. It seems like a lot of these things that you identified that are in your matrix here; a lot of them could be dealt with by the same research, because it seems like they are going towards the same – to answer each of these questions, some of their research could be condensed, because some of the same research could answer several of these questions. It seems like it overlaps. It might make your grade look a little better as far as your projects and your completions. That was just a comment on that.

MR. MERRIFIELD: Number 4 is how do oceanographic conditions and episodic events effect production, coral condition, reproduction and growth?

MR. WAUGH: Some of your previous comments would apply here, too, particularly under Objective 4.

MS. THOMPSON: Yes; absolutely. Under Number 4, Objective 4, certainly it needs to be elevated. The coral death; it needs to be elevated from a low priority. I'm not sure that study of the rubble zone is going to be productive; because hopefully since the closed area happened, we're not creating additional rubble zone. I think that the pollution and nutrients effect on the live coral needs to be moved up from a low priority to a higher priority.

MR. MERRIFIELD: I think that has gotten us through the report except for all the publications that are to follow.

MR. WAUGH: Let me mention one thing going back to law enforcement. I e-mailed Richard Chesler with that question about the fiscal year 2013; and that is the full fiscal year. Those large decreases in the numbers were real. That is also the year when we had the federal closure and sequestration of funds and so forth; so I'm sure that impacted the level of on-the-water presence.

MR. MERRIFIELD: Okay; any other comments on the report? Basically we've taken a lot of notes. This is the Deepwater Shrimp AP's comments on the report as it exists and how will that be incorporated?

MR. WAUGH: What we're going to do is the Coral AP will meet starting this afternoon; and Mike is on that Coral AP. I want to make sure they are aware of your comments. As they are going through it, we'll go over these points as well. To the extent that they can provide any assistance in addressing them and incorporate – I'm sure they would be very interested in quite a number of your comments, and they would incorporate those in their recommendations.

We as staff will be restructuring these three – and we will do the outreach in a moment – these three sections into a composite report. Within that, what will be presented to the council in June will show what the Deepwater Shrimp AP recommends for each item or grouped; and it will also show what the Coral AP has recommended. If we have any additional staff recommendations on changes or anything; that will be shown in there as staff recommendations, and then the council will discuss this at the June meeting. Of course, we will copy you all with all of that material that goes to the council.

MS. THOMPSON: While this study is ongoing; are you interested in observations from the rock shrimpers because they are going to be out there. Like the brown seaweed; I think we sent pictures of that to you. Are you interested in any on-the-water observations that the rock shrimpers have doing this at this time?

MR. WAUGH: Very definitely; and I would encourage Mike to make that offer to the Coral AP, because some of the folks that are going to be participating in this research should be at the meeting. We will also follow up and make them aware that the rock shrimp industry has made that offer and to get in touch with you.

MR. MERRIFIELD: There are a lot of trends that we see every year like the fact that the last two years everything has been to the north; like the fact that the previous five years to that were highly productive on the southern end of the box; and now that area is completely devoid. Those are the kind of trends that I think would be valuable.

I don't know who wants that as input or where that gets put in, but there is a lot of that anecdotal. What we've got here is a lot, a lot, a lot of anecdotal data all the way around and minimal amounts of scientific data. We've got to figure out how we put that all together and come out with productive solutions and productive ways to move forward.

MS. THOMPSON: Maybe in the Coral Committee meeting you might want to discuss the ways that the Rock Shrimp Industry can provide input; do you want to do an oral interview with the captains or do you want written reports? How can we get this data to you in a manner that it will be productive that doesn't take up a lot of the captains' time?

I think that would probably be a good discussion is in what form do you want the data to where it is actually going to be used? Let us know; we need to know how you want the data. Do you want pictures? Would images of the stuff that is coming up in the nets help? What can we give you that would help this process?

MR. MERRIFIELD: If there are no other comments on this section, let's take a break and then we'll come back and Kim Iverson will give us an Outreach Report Presentation. Okay; let's try to get back and get started here.

MS. IVERSON: Good morning, everybody; it is good to see everyone. Thank you for the opportunity to present to the advisory panel this morning. What I thought I would do this morning is as you are well aware the evaluation or reevaluation is taking place. As one of the components, we have the research and monitoring, law enforcement, and outreach.

Yesterday I think you saw what is coming in and out of the meeting room. We had the Information and Education Advisory Panel Meeting. I had the opportunity to get input from that advisory panel on the outreach that has taken place and recommendations from the Evaluation Team.

I thought I would go through – and forgive me, I am going to go through this fairly quickly, because most of you are – I would just say all of you are very familiar with this and some of you have been involved since the very beginning of this evaluation plan. It is helpful I think sometimes to go back and look at where you've come from so we know where we're going and just kind of use that as a refresher.

Why do we need outreach for the Oculina Bank? Well, because most people, when you say Oculina Bank, this is what they think of. There is actually an Oculina Bank in Fort Pierce, Florida. It is known as the friendly bank. They have worked with us to promote the Oculina Bank regulations within the experimental closed area and the HAPCs.

They have the brochures within the bank. I don't know if they are continuing to do this; but for a while for every new account that you opened up at the Oculina Bank, they would donate a dollar towards some environmental organization that was helping to raise awareness or increase

awareness of the Oculina Bank and the Deepwater Coral Systems. We all know that is not the Oculina Bank. These are some photos that were taken from some of the earlier research and monitoring cruises that John Reed and others from Harbor Branch to increase the awareness, so that the public understands what oculina varicosa is and deepwater coral systems and how important they are to the fisheries, including the deepwater shrimp fishery, as you have been discussing earlier today as you go through the research and monitoring part of this evaluation plan.

Again, I just present a highlight of the management measures that have been put into place that you are all familiar with since 1984 in the original designation of the 92 square mile area that is now known as the experimental closed area, the implementation of that area in 1994 and the extension of that in 2004; and definitely with this periodic review.

I can tell you that for all of us that have been involved since 2004 and when the evaluation plan was first initiated, we thought 2014 seemed so far away and here we sit. Through Amendment 13A, which was implemented in April of 2004, it required the evaluation plan have three components; outreach, research, and monitoring and law enforcement.

In 2007 the council would look to do an evaluation of the size and configuration and have a team that would provide the report; and here we are again with the Evaluation Team Draft Team Report that we will go through, and then reevaluate all of the regulations. Again, you are all fairly familiar with this, but I just thought it might be helpful to run through quickly.

The outreach component is included in the draft that is included in your briefing book, but how did we come up with this; where did this come from, these recommendations? Well, in 2004 after we were tasked to do the evaluation plan, we went and held constituent meetings in Fort Pierce and Cape Canaveral.

These constituent meetings included some of the folks that are sitting around this table now as well as some charter captains, commercial fishermen, we had the mayor of Fort Pierce that attended, some county commissioners. Then we did some informal canvassing with the marinas and businesses along the coast there between Cape Canaveral and Fort Pierce.

We had planning meetings with the scientists that were involved, with folks from Harbor Branch, John Reed and Dr. Grant Gilmore and some of the NASA folks that had been involved in some of the coral protection. We met at the Cape Canaveral Space Board Authority. We brought everybody together and said what should we do here; how do we increase awareness?

Andy Shepherd, who was with the NOAA Undersea Research Program an UNC-Wilmington, was instrumental in making sure that we had proper outreach. Outreach was really important in all of this; that we need to define or explain what the corals are, the fisheries within that area. The result was this Oculina Experimental Closed Area Outreach Plan.

The goal is very broad; increase awareness and understanding to fishermen, citizens, and visitors of Central Eastern Florida and the general U.S. public. There are four objectives that were identified as part of this process. The first objective is that we would assist in the development of the evaluation plan itself and the outreach component. That is the outreach component that is being updated now.

The council would have a campaign targeting the fishermen, but recognizing that we were going to need partnership to meet the goal in a broader campaign and then evaluation. What I want to do is go through the projects that are identified within that plan. Of course, the evaluation plan, the first objective was met in 2005 when the plan was completed.

We are going to go through the focus campaign and then the partnership project. The council initiated projects or things that have been directly involved with and working with input from our advisory panels, having reprints of the regulation brochures, working with fishing chart manufacturers – and we'll go through each of these in a little bit more detail – partner with Florida Fish and Wildlife for publications and mailings, develop news releases and PowerPoint presentations, and then the Oculina poster and rack cards, which I think you are all familiar with.

Back in 2005 and when they were updated in 2007 and finally reprinted for the last time in 2010; I think you are all familiar with the four color copies of the regulation brochures, which were really handy and wonderful publications. Unfortunately, as regulations have been changing much more rapidly now as you know with the implementation of annual catch limits and accountability measures; these publications have become outdated.

We do have a Deepwater MPA Brochure and the oculina information has been included in that and that continues to be reprinted and distributed. We've moved towards social media, the use of social media, including Facebook page and the Smartphone regulations application. If you have a Smartphone and you haven't downloaded our application, please go and do so.

It is updated every time there are regulation changes. It is a really handy tool; and that includes information on the Oculina Bank. Fishing chart manufacturers; when we went around in 2004 to local marinas, we looked at some of the charts that were available on the rack cards there. This Top Spot Chart in particular was used very widely, so we went to the manufacturers because some of the identifications on the charts actually noted that the Oculina Experimental Closed Area was a "fish haven".

The marina operators said, well, I think you could probably change that nomenclature and maybe make it sure that they know that fishing is prohibited within the area, because we've actually had fishermen come and say, "Hey, man, where is that fish haven? I want to go out here and catch some bottom fish."

Top Spot and the people in the company are local and they were awesome; and we've changed that nomenclature and got the wording changed. It actually increased – if you've ever looked at one of these charts; there are like 17,000 features on there, so we were able to update that and make those changes and also increase the visibility of the HAPCs and the Deepwater MPAs just off the coast there, too.

Of course, we need to follow up now with some electronic chart manufacturers and we'll go through a little bit more about that information here shortly. Partnering with FWC, again we wanted to get fishing regulations information out. FWC has their publications – I'm sure you're familiar with them – about 600,000 copies are printed every six months.

We did a feature on the Oculina Bank. Just recently as part of the evaluation team, Rich Abrams is on the team from FWC, I just recently sent him maps and information, and they are going to

have a regular half-page in their fishing publications now that is going to be dedicated to Oculina Banks. We've moved forward with that already. News releases and PowerPoint presentations; we would have news releases following any of the council action as far as the management processes were concerned.

Then media stories, media are really interested in the research and monitoring activities. As you know, those have been limited recently, but fortunately we have the new project that is coming up, the research and monitoring activities that will be coming up within the next three years. I think, Gregg, you talked about that earlier this morning.

We've had newsletter articles on research and monitoring, law enforcement activities within the area; and, of course, we need to continue to do those news releases and newsletter articles and PowerPoint presentations. The PowerPoint presentation was something that back in 2007 the evaluation team said, well, we don't know if that is a real high priority.

This time around in 2014, because PowerPoint is so easy to manipulate, the team said, well, we think it would be good to have a basic PowerPoint presentation, and then we can pull information and use it at fishing club presentations, et cetera. We're going to be moving forward with that.

The rack cards have been really popular. The marinas, when we went around, and you know anytime you go to a bait and tackle store, there is like a periphery of things on the countertop; so they said make them small. We can put a little rack cardholder next to our register or where the customers come in and out and distribute those.

We've been reprinting those. They have been distributed at marinas and businesses. Enforcement officers use them when they do boardings, because they no longer have the larger four-color regulation brochure. The Smithsonian Marine Station in Fort Pierce has the rack cards and they distribute those.

Of course, anytime we have meetings within the area, we distribute those rack cards. The posters have not been really utilized that much and not that popular, so I don't know that we'll be reprinting the posters. Partnership projects; how do you reach a broader audience and especially working with the scientists and others that are involved and the other agencies that are involved in research and monitoring?

We've collaborated since 2004 for this broader media campaign. Websites; if you haven't had a chance to go to the council's website, I'm sure you have, but it has been recently within the last year updated. It is much easier to navigate. We had information on the old site on outreach efforts and the Oculina Bank and deepwater corals, some of the daily logs from previous research and monitoring cruises.

Harbor Branch had information on their At-Sea Website. Unfortunately, that website is no longer active. NOAA Teacher at Sea – and they have a very broad audience – have featured oculina research and monitoring activities. As I said, we continue to update the council's website. We have a dedicated section just on the oculina varicosa. Joint projects, educational projects for teachers; we've had four teacher workshops; and primarily they have been in Fort Pierce. One was done in 2009 in Raleigh.

They've been in partnership with NOAA, Harbor Branch, and we've had field trips to the Smithsonian Marine Station. These have been very, very popular. There you see John Reed talking to some of the teachers.

They are not just teachers but educators from the surrounding areas. The 2008 Teacher Workshop we did using an intern from the College of Charleston' his primary project that year was to develop this teacher workshop, again at Harbor Branch Oceanographic Institute, which offers a wonderful background for having instructions and classroom facilities. We included a tour of the marine station and then the materials from the teacher workshop were available online.

We've developed a portable exhibit; a display was completed in 2009. We also have a kiosk where the film "Revealing the Deep" about deep-water corals is displayed. Most of you I think have seen that at some point in time. It has been used at council meetings, sometimes at public hearings in the area. It has had limited use by outside organizations.

We were hoping that we could offer it and have it checked out through organizations. We're going to have to update that with the implementation of Coral Amendment 8 to change the map. One of the things that the I&E AP suggested instead of having – this used to be a very streamlined exhibit compared to the old exhibits that we used several years ago.

But now they have become even more streamlined and we have the fabric exhibits that you can actually raise up and they are very transportable. Rather than update this exhibit, which is fairly costly, they recommended perhaps having something that is even more portable. Media kits and excursions; again, the excursions, we tried back in 2005 with FWC and the crew of the CT Randall Patrol vessel to take some media folks offshore.

We made it, I don't know, five miles out of the inlet and it really was rough. Captain Sidor decided – and he's the ultimate decision-maker on the vessel – that we should turn around and go back. We regrouped and in 2009 in conjunction with the research and monitoring crews on the Seward Johnson, we were able to take a group of media folks out and the weather was perfect.

We had representatives from the council. That top left-hand side is Ben Hartig, who is our current council chairman; and Jeff Sidor, who is with FWC; he was a lieutenant at the time. We had film crew and reporters from NBC; and then local papers, Ludi Lelis from Orlando Sentinel, the Daytona Beach News Journal; Jennifer Schull from the Miami Science Center.

We had a really wonderful group on board. Then we were treated to the deployment of the submersible once we were on board. The weather was perfect. We had the scientists at individual stations talking about the research and monitoring activities and what they were bringing up and talking about the corals. The creatures; there is a golden crab that you see down below. We had a really productive full day.

The result was a lot of media coverage, everything from the National NBC Nightly News coverage to the Orlando Sentinel and the Charlotte Observer. The Associated Press picked up on some of the media coverage. It was good.

MR. MERRIFIELD: That's on oculina?

MS. IVERSON: Yes, this was on oculina and deepwater corals.

MR. MERRIFIELD: Okay; so the golden crab was from that lophelia.

MS.IVERSON: Yes; we are kind of mixing them up a little bit. We went to the experimental closed area, but we talked about the HAPCs and lophelia corals and other deepwater corals as well. One of the suggestions came from the constituent meetings back in 2004 was to have buoys out to mark the area.

Well, you guys fish it, you know how difficult it would be to deploy buoys for makers. That just wasn't feasible; but what we could do is go to our partner in the NOAA Data Buoy Center; and most fishermen, when they are putting their boats in at the boat ramp, they will go to these data buoys and check the at-sea state conditions, because it is a really good way of seeing that.

Now we have an active link – and you can't see it there, I apologize for that; but if you want to go to the National Data Buoy Center and just do a search, we have a direct link that says going out to fish offshore, check out these regulations for the Oculina Bank. They can go click directly to the council's website.

We worked with the Smithsonian Marine Station. The picture on the right, if you haven't had a chance to visit this marine station, it is a small marine station there near the boat ramp in Fort Pierce. It is an awesome facility. Of course, it is under the Smithsonian umbrella; but it had the first oculina interpretive display, and there you see it.

It was a series of things posted on a concrete black wall and a monitor with some black and white film footage from the Harbor Branch. Then they actually had a small little aquarium with a black curtain where you could stick your head in and look at live oculina coral, which was awesome and cool.

We've worked with them to develop what you see now, which is a much larger interpretive display. Andy Shepherd and Jennifer Schull from the Miami Science Center and several of us met with the curators and worked together. They have a very beautiful display. It is a static display, but it does show what the bottom would look like in a healthy section of the Oculina Bank and talking about the corals. Because of the little curtain and the live coral display has been so popular; you still can get to do that. You can go stick your head in and see how the coral looks underwater.

MR. MERRIFIELD: I've actually been approached by them and asked if any crustaceans or any bottom live catch came up from the offshore side of the oculina, if we would be willing to help provide them with some species to put in those tanks; but I just don't know logistically how we would accomplish that.

MS. THOMPSON: They need to have rock shrimp in them.

MS. IVERSON: Or we could eat some rock shrimp.

MS. SOLORZANO: As few as there are going to be if this closes, you might want to eat the ones that would be in there; because if they continue to close it, they may be the only ones.

MS. IVERSON: Well, I do want to point out that Laura Diederick, who is their education coordinator, is on the Evaluation Team. We've been e-mailing and corresponding back and forth. They are getting ready to change the interpretive signage on the display with Coral Amendment 8, the modifications and things that are proposed in that amendment, if that is approved.

I would ask you as AP members, please let me know and I can certainly distribute the interpretive information out there. If there is some information that you would like to have – again, this is not our display. This is the Smithsonian Marine Station's display, but we work together closely to provide information. If you want, I can keep you advised as we go through that process. I believe they have a new grant. Laura and I have been e-mailing back since yesterday about this. They are going to update the signage and the interpretive display. It would be great to have your input.

MS. THOMPSON: The Smithsonian Marine Station; they are actually paying for the exhibit then?

MS. IVERSON: Yes; we've just provided images and photographs and information on the management end of things. Then I believe Harbor Branch has been also providing some information. I can find out more from Laura.

MS. THOMPSON: Yes; because Brevard County has the Barrier Island Center, which is part of the Environmentally Endangered Lands Program; and they get a ton of people through that center every year. They have beautiful interpretive displays, but it would be nice to have something in there; but they don't have any money.

MS. IVERSON: Objective 4 is the evaluation; how do we evaluate the effectiveness of the things that we've seen here; and evaluation when you're talking about outreach is always a difficult thing. In 2005, because we are not able to do survey work necessarily without going through the Office of Management and Budget and Headquarters, I went to Florida Sea Grant and we discussed how to have an evaluation of the basic knowledge of the Oculina Experimental Closed Area.

I worked with Sea Grant, but there was limited distribution and the results from that survey were really nominal. Unfortunately, we have some information from the 2005 survey but not a lot. We've talked with the Information and Education Advisory Panel members yesterday and got a little bit of input from them. I'm sure we'll continue to work with the AP to see how we can evaluate the effectiveness of the tools that you have just seen.

Project 2 under the evaluation was continued community input; continue to work with the Smithsonian Marine Station, fishing clubs and marinas, the businesses, the industry; the folks that are sitting around this table. We're open as far as suggestions on how to evaluate the effectiveness of what we're doing and certainly open to suggestions on any of the outreach projects that you see here. Basically we've had really good cooperation with partners to achieve the objectives.

Several projects have been completed, several are ongoing, and others are dependent upon the research and monitoring activities and, of course, law enforcement, too. I should have included

law enforcement activities within that area. We had the Experimental Closed Area Evaluation Plan in 2005, we had the update in 2007, and then in 2014 we've had review and updates to this point from our I&E Advisory Panel members. I wanted to just give you an opportunity to ask me questions, if you have any questions about what has been done thus far.

I would defer to the chairman here if you would like to go through the project objectives individually or if you feel like you can give me input based on what you've seen here. We can do it either way. I have the Word Version, and I can go through each of the projects and show you what has been proposed from 2014 forward and get your input; or if you just want to provide some general comments, I will be glad to do that either way.

MR. WILSON: I'm just curious, I'm not being negative. Many of the things that you presented back in 2009; how do you evaluate these things? This is kind of like in the past.

MS. IVERSON: That is a good point and I'm glad you brought that up. Evaluation, as I said, is always difficult, especially in outreach. You make rack cards, you put them at the bait and tackle stores, and you work with the partners in trying to disseminate information. We put this team together again, because some of the people that were on the team in 2007 were not available anymore or it wouldn't be applicable to have them on the team.

We have some familiar faces and then some new faces as well. People change positions or job descriptions or whatever. I went back to Jennifer Schull, who is at the NOAA Fisheries Miami Lab, and I was like; you know, we did some really wonderful things. We had these media cruises and we were working with the Smithsonian and we increased the display and we did some great things.

What happened; you know, why did we stop; like in 2009, the teacher workshops and all those things. We discussed it, and my opinion is, one, that the research and monitoring activities were very limited after that time with budgets and budget cuts and federal budget funding was decreased. A lot of the activities that you saw there were dependent on that research and monitoring.

Two is that we had achieved some of the goals that we set forward. We had to printed material; we had the information within our website. We had distributed information via the posters. We had achieved some of those objectives; but in the continued – like the regulation application, for instance, there is a whole section on managed areas and a whole section is there on Oculina Bank, so these things had been achieved.

There were some things that were dependent on this research and monitoring. I am going to throw another caveat in, because I have to deal with the outreach and information section; and most all of you know I have been here forever. Also, there was the reauthorization of the Magnuson Act, and things like annual catch limits and the accountability measures came into play.

For me personally and I think for the Outreach and Information Section, we had to explain to the public why red snapper was closing and why black sea bass for the first time you were going to have closures with the recreational fishery and the accountability measures that were put in place as a result of these annual catch limits.

When you have to start prioritizing and things like that start to happen, the outreach efforts with the Oculina Bank and Experimental Closed Area were put on hold. We were doing what we could do to continue to distribute the rack cards, develop the MPA brochure; but you are right, in 2009 and 2010 the shift in focus on outreach activities I think for the most part were to make the public aware of the changes on the reauthorization of the Magnuson-Stevens Act; and to continue the outreach efforts as we could, based on what we had to work with at the time. I hope that helps explain it, but I was thinking that. Trust me, I would much rather be doing a media excursion offshore than try to explain to someone accountability measures and annual catch limits and deal with that issue.

MS. THOMPSON: I fed a lot of the teachers that went on the excursions, because part of their experience was to come to Dixie Crossroads and see the rock shrimp from the reef. I've known Andy Shepherd for years. He actually did Oculina Reef Presentations at some of our first birding festivals as part of environmental education. I see Grant Gilmore; I see a lot of friendly faces, Dinah Pulver from Daytona Beach News Journal.

But you are right, it is the funding. Andy Shepherd's program at the University of North Carolina-Wilmington, gone; Harbor Branch, gone. The deep dive equipment from Harbor Branch is gone. With the drying up of the funding, then the opportunities to educate people went away. Like you said, now you are busy defending yourself against accountability measures.

MS. SOLORZANO: Well, I have a couple or three questions; the first one being how do you get the application, what is it under? I went to South Atlantic Fishery Management Council NSAF and didn't find it.

MR. MERRIFIELD: App Store.

MS. SOLORZANO: I went to the App Store.

MR. MERRIFIELD: Are you on the iPhone?

MS. SOLORZANO: Yes; I went to the iPhone, I went to the App Store and I searched for it.

MR. MERRIFIELD: I can show it to you; I've got it.

MS. SOLORZANO: I didn't find it. All right, the second question is what would you recommend that we provide that could be used in this outreach program for the Smithsonian that we could use to put up that would be beneficial to us as fishermen? The third question is how many square miles additional – and this may be not a question for Kim, but a question for Gregg – we've already got 300 square miles closed. How many more additional miles are going to be closed with this pending Amendment 8, if it should be passed? How many more additional miles; what will be the total square miles added to the already 300 miles closed?

MS. IVERSON: I can answer the first two questions; and I may have to defer to Gregg or Roger. I don't have the square miles off the top of my head. The regulations app is available through Android or through the Apple store, iTunes store, and if you just search SA Fishing Regs you will find it. The information is on the website as well.

But it is a pretty cool app; and I think we've had I believe Amber said yesterday over 13,000 downloads since we started with the app this time last year. We have some postcards; I will be glad to send those to you if you want to put those out to distribute them. We have postcards that are publicizing that. I think I may have some in my bag.

The second question, Marilyn, is I need to talk with Laura Diederick from the Smithsonian Marine Center. I can ask them what kind of information that they are going to cover, how they want to update it. She wants to work with us to do that. Certainly anytime we talk about outreach with Oculina Bank and management, we talk about the VMS requirement within the rock shrimp industry.

We talk about the collaboration with the industry in developing these areas that are protected. Rich Chesler always includes in his presentations, whenever we work together as a team, the VMS tracks showing how the area is outlined and that the VMS is an effective tool in protecting of these areas. With any of the outreach discussions, we talk about that when we talk about management.

I can't specifically answer your question as far as what kind of information, but you as industry leaders and as fishermen, if you have something that you would like to include, as Laurilee pointed out or Mike also mentioned maybe providing samples or providing pictures, photographs of the gear, of how it is deployed, of the fishery itself; helping the public to understand what that fishery entails.

I can tell you working with the NBC crew when we did the media excursion and they went back and I was so excited about having the international exposure on the experimental closed area and the deep-water coral protection efforts; they showed this horrible depiction of the golden crab fishery, because they kept talking about golden crab and traps.

I was like but we don't have a golden crab fishery out here. This is not what is taking place. They invented it; and they actually did an illustration of a trawler pulling golden crab traps over coral and it was horrific. We all immediately making phone calls and e-mails and like what is this? Of course, once you put it on the nightly news, it is out there and you don't get it back.

They did a retraction. They did an explanation on their website, but that was too late. I can tell you, working with media can sometimes be very difficult. Here with the Smithsonian Marine Station they will be – I can't speak for Laura, but I can tell you that they have been open in the past to any information that we wanted to provide and help increase the awareness of the area and the fisheries that are dependent on it. I think we could work together. I am thinking more of video or images, photos and things like that so that the public has a general idea of what is taking place offshore.

MR. MERRIFIELD: Gregg, do you have square miles numbers at all? I've had them before.

MR. WAUGH: The experimental closed area is 92 square miles; and I'm looking on our website.

MS. IVERSON: The Experimental Closed Area is 92 square miles. The HAPCs were 300 square miles, and then the expansion.

MS. SOLORZANO: Currently we have 392 square miles closed to protect, what is it, just a few acres of coral is in that?

MR. MERRIFIELD: You can't add the two together, because the closed area is inside the HAPC.

MS. SOLORZANO: Okay; so it is 300 square miles and we're going to add how many more?

MR. WAUGH: The proposed area under Action 1 is to expand the boundaries of the Oculina Bank HAPC. The preferred subalternative to move the northern area; that would include 267 square miles.

MS. SOLORZANO: We will then have 567 square miles closed to protect the possibility of coral? I'm outraged.

MR. WAUGH: That is not an accurate characterization. It is certainly your opinion, but that is not an accurate characterization. The square mileage is correct and it is to protect existing coral in areas; and it is also to include depth areas that are expected to contain oculina coral and other deep-water corals. The research that has been done to date; any time there have been surveys and groundtruthing done, the coral has been found there.

MS. SOLORZANO: Four times in 2009.

MR. MERRIFIELD: A question for you, Kim; I'll make it kind of real quick. What you were saying was that the average that you are looking at now is really specific to the OECA; correct?

MS. IVERSON: Yes; that is correct.

MR. MERRIFIELD: Is there separate effort in the budget to make the public aware if Coral Amendment 8 is put into place to educate the public on the northern expansion, because there is a huge group of public that are not going to know that is a no bottom-fishing zone.

MS. IVERSON: Well; we've had scoping meetings; we've had public hearings on the measures, and they've been publicized as any other measure, whether it be a mackerel amendment or any other measures, have been publicized in the newsletter. They've been publicized throughout our news releases on the public hearings, but not, per se, that a news release on that particular action.

It is like any other proposed action within an amendment; and those amendments are publicized and then they are also available on the website, the summaries of the technical staff. The way that we normally publicize any actions that are included in an amendment have been publicized.

MR. MERRIFIELD: But there is no specific outreach that is planned to further educate the public on the expansion of the northern area and the western boundary as well, actually, of the current HAPC. That area is moving out as well. We've got that area that I'm sure is being fished now will no longer; so I just wonder if there is an outreach plan for that.

MS. IVERSON: Generally speaking, once the amendment – if it is approved by the secretary; once the amendment is approved, then we have a news release that follows council action at a

meeting. We had that information available from last fall when the council approved the amendment. Then once the amendment measures are implemented, NOAA Fisheries, of course, does a Fishery Bulletin making people aware of that. But as far as having a specific outreach component in Coral Amendment 8, no, the answer would be other than the normal publicity that is used for the public hearing process.

MS. THOMPSON: I think where Mike is going is are you going to go to the marinas and have things at the marinas that tell the fishermen, hey, you can't anchor in the Steeples anymore? In these areas where they have been fishing, now all of a sudden they are not going to be allowed to do certain things that they've done in the past. How do you plan to get that information out to them?

MS. IVERSON: Well, I've covered the tools that we've used in the past; whether it be through publications and printed materials or our website, the same way that any changes to regulations would be publicized. With the Experimental Closed Area Evaluation Plan, that is unique, Laurilee, in that the council – and I will name George Geiger, because as a council member at the time, he said if this is going to continue then you have to evaluate it.

You need to look at – if you are going to continue these closures, then there needs to be an evaluation plan in place; there needs to be outreach to increase public awareness; there needs to be research and monitoring in this area; and there needs to be accountability when it comes to law enforcement. We need an evaluation plan. That is one of the reasons that this plan was implemented.

This is a unique situation in that there has been a specified outreach component to this experimental closed area that has been addressed in the ways in the projects and the way that I just highlighted. I am coming to you and asking you if you have suggestions or recommendations on ways to improve that or things that you don't like or things that you think would work better to help.

I am going to be doing the same presentation to the Coral Advisory Panel this afternoon as I did to the Information and Education Advisory Panel yesterday, and certainly to the evaluation team, and it has been distributed all around. That is where I am coming from as far as the outreach component is concerned.

MS. THOMPSON: I have an observation, and please don't take this personally, because you know I love you dearly; but I see yet another example of where the commercial fishing industry has to be accountable and they get penalized and fined. They are under extreme scrutiny for the fishing regulations; and the recreational industry is going to skate.

MR. MERRIFIELD: I think we have two issues here. One is that her presentation is about the OECA and the outreach programs that they've had. She is looking for input or any suggestions or comments that we have to improve that or any ways that we can contribute to that or – and, Richard, I know in all those classes that you teach I know you talk about oculina. Are there any materials that you could use? That is one issue.

The second issue then goes back to Coral Amendment 8 and how that is going to be publicized; and what Kim is saying is normal channels, what the normal things are, the normal publications

and bulletins and things that go out. I think that our response to that, which is a completely different issue and I hate to get sidelined here, is we're concerned about if that goes into place, what kind of efforts are being made to make the public aware and are the normal channels and bulletins enough and the web app, which is a great app. Maybe there is some kind of a bulletin on that app that comes out that says, hey, when and if it occurs, you need some kind of alert that you need to be aware of this. That is a separate issue than what Kim is bringing to us.

MR. WAUGH: Does that capture the concerns about what is needed should Coral Amendment 8 be approved? Then we could focus on the other.

MS. SOLORZANO: I have one question real quick. If this Amendment 8 is approved; all this area that is closed is also closed to recreational fishing as well?

MS. IVERSON: No, and let me clarify that.

MR. MERRIFIELD: All bottom fishing.

MS. THOMPSON: And anchoring.

MS. IVERSON: Let's go back –

MS. SOLORZANO: Why isn't it closed to recreational fishing?

MS. IVERSON: Let me just explain; the Experimental Closed Area –

MS. SOLORZANO: Not directed to you but more to Gregg, and then why isn't it?

MS. IVERSON: The Experimental Closed Area that was put into place in '94 is part of an HAPC – or 1984 – and then the 92 square miles experimental closed area is the only area that is closed to harvest of snapper grouper species and possession of snapper grouper species. The HAPCs restrict anchoring and trawling and other gear interactions within those areas to protect the coral.

The HAPCs are designed primarily to protect the habitat. The experimental closed area, the 92 square mile area just off of Fort Pierce, is the only area where you cannot possess or fish for snapper grouper species. That is commercial, recreational, charter, aliens, anybody that happens to come into that area cannot have those fish on board. You can't transit.

Commercial fishermen go on the other side of that area and catch fish and they have to come around and that has been a complaint. They have to come around that experimental closed area to bring their fish back into Fort Pierce, because possession of or fishing for is prohibited of snapper grouper species.

The HAPCs do not restrict fishing for or possession of. It is an issue of anchoring or using trawl gear; it is gear impacts that are prohibited. There will be impacts to fishermen, don't get me wrong, but my understanding is that the impacts will be nominal for the general recreational fisherman that happens to launch a boat out of the Fort Pierce marina and head 15 to 18 miles offshore to fish.

MS. SOLORZANO: The fishing line is what is being found; that is the gear that is being found on the coral; and we're the ones getting punished for it. If you're going to close the whole 500 and something up, close it to everything.

MS. IVERSON: That is a management issue. Certainly, we have council members that are sitting at the table here and they have heard your concerns. As Mike pointed out, my job today is to come to you and say if there is anything that you want to add to what has been done thus far for that experimental closed area, with the impetus there to protect the snapper grouper species and the associated coral.

My limitations today are within that experimental closed area and the evaluation plan that was developed. Then when you get into management issues, the management issues that you are wanting to discuss; that is a much broader issue and one that the council will have to address or can hear your comments.

MR. WAUGH: Marilyn, does that capture the point you were making?

MR. MERRIFIELD: There is certainly a lot of interest in that direction.

MS. SOLORZANO: This may get the attention needed for some big people to get up and say no to Amendment 8. I know you all don't like it; I don't like it either; but if it is what it takes to get the attention to say no and for somebody to go tell Roy Crabtree this ain't happening.

MR. MERRIFIELD: It is certainly an enforcement challenge when you've got people that can troll across there as long as they don't have a snapper on board. I can't even imagine fishing out there. If you catch a snapper, you've got to be concerned that you would be in that area at all; because no matter where you caught it, if you are in there you are guilty. It is an enforcement nightmare.

MR. WAUGH: The minutes will reflect this is a viewpoint of Marilyn. Do you all want this in the report as your consensus recommendation?

MR. MERRIFIELD: Why don't we just go ahead; we'll just take a vote of who is in support of leaving that in there as a – what is this, just like a recommendation by our AP?

MR. WAUGH: That is correct.

MR. MERRIFIELD: Okay; who is in favor of leaving that in as a recommendation of the AP? Who is in favor of leaving it in? It is in the minutes; but I don't think that we want to present it.

MS. SOLORZANO: It needs to be noted that we're serious. I do not want Amendment 8 to happen. I don't know if everyone else here agrees. Obviously, some may want it to happen. I do not. I cannot stand the thought of my children and grandchildren losing 267 more square miles for nothing. I'm pissed, and that is not a nice word to use, but I do not want to see this happen, and I will do anything – I don't care who it makes mad – anything to stop it from happening.

MR. MERRIFIELD: Okay; you made that pretty clear. We're going to remove that comment.

AP MEMBER: I've enjoyed your presentation and the work that you've done. It looks like you all have done a great job in putting these brochures out in all the places. Do you emphasize what the penalties are? Are people up front told what the penalties are for being caught in there anchored; and who does the patrolling of that? I know who patrols for the shrimp fleet, but these little boats don't have the same equipment on board.

I didn't know if they get caught; do they get the same penalties? I don't know how it is meted out; I just wondered. You are pushing people to be more interested in the Oculina Banks; so if they go out there, get a way to get out there and then they are subsequently caught doing something wrong; are the penalties up front? Do they know the penalties up front? Was that ever published on your site?

MS. IVERSON: I appreciate your comments. The question as far as penalty is concerned is one that we defer to NOAA General Counsel, because the penalties vary depending on the infraction and depending on multiple things that I am not personally aware of. We don't have a penalty schedule that is publicized for if you get caught within this area, this is what will happen.

Any time that there is an enforcement case that results as a patrol of that area; the council is provided with a quarterly report from NOAA Fisheries and NOAA Office of Law Enforcement on the activities within that area. Who is responsible; it is a collaborative effort. There is a joint enforcement agreement the state of Florida has with NOAA Fisheries Office for Law Enforcement and the U.S. Coast Guard.

As you are aware, there are patrols that go on within that area periodically. Any time that the Coast Guard, it is my understanding, is transiting that area to or from whatever the mission may be, that they are looking for living marine resources violations or infractions within those areas. It is a collaborative effort. Is it enough; no.

I think it has been on the record that law enforcement capabilities are limited by budget. We keep talking about budgets, whether it is in research and monitoring or outreach or law enforcement activities within that area. From an outreach standpoint, any time a case is made we try to publicize that. We try to work with NOAA Fisheries; or we work with NOAA Fisheries and FWC to highlight those cases so that people are aware.

It is important that there is public buy-in to the need to protect these areas, whether it be from commercial or recreational or charter captains, that there is increased awareness and that there is voluntary compliance; and that people are aware of not only the penalties, but the impacts to that fishery, the experimental closed area and the snapper grouper species that are found there as well as the habitat.

That is why for me personally I would like to have some input from you as an industry on how we can better define what your activities are. We certainly talk about it from a management standpoint, the VMS requirements and the collaboration that has historically come from the industry to provide these protected areas; but keeping in mind it is that experimental closed area where prohibition of fishing for snapper grouper species occurs.

AP MEMBER: I think you are on the right trail. I know I'm from the Mississippi Gulf Coast and we have the National Seashore Islands over there. There is a lot of publicity for the public to

transit to the islands; but we've had a big push in the last few years to make sure that the public knows you are not supposed to go on the islands anymore than the high tide line. You can't take plants or foliage from the islands.

You can't hurt any of the alligators or even take oysters out of the ponds. It is a federal park; but they are doing a lot of information in the Gulf Coast, because we have a lot of tourism and gaming; go see the islands but be warned these will get you in serious trouble. I'm not going to say you have to spell out what the actual penalty is, but let the public beware that there are going to be consequences for not observing the proper attitude in that area; that is all.

MS. IVERSON: Yes, sir, and I think that is a really healthy combination; the combination of the threat that you could get fined, voluntary compliance because it is the right thing to do, and a better understanding of the deep-water coral area that really is very unique; and little is known about it.

It is relatively newly discovered that it provides the habitat not only for the snapper grouper species, but a myriad of other animals and creatures, including the shrimp that your livelihoods are dependent upon. From an outreach standpoint and talking about the 92 square mile experimental closed area and the regulations that are within that area; it is very important to get that out.

Not that it shouldn't be an awareness of all the coral areas; but for what we're talking about today, as Mike pointed out, this is that 92 square mile area where having possession of those snapper grouper species is prohibited. One of the things that has been added to this outreach project list and proposed on the draft list is signage at boat ramps.

That was brought up back in 2004 and not a lot of support for it later; but now going and having signage at the boat ramps at Port Canaveral and in Fort Pierce. It is very easy for a center console vessel to go 15 miles out on a pretty day. You can run quickly and be within the experimental closed area in a short matter of time.

As Mike pointed out, you can troll. Trolling is allowed in that area. You can troll for pelagic species, but you can't bottom fish. Getting that information out to the public is what we're focusing on. Having the app is reaching a targeted number of people; certainly a lot of people are having Smart Phones and moving in that direction.

They can download that app, take it directly with them offshore and know that these are the regulations. Publicizing the law enforcement cases that are made within that area is helpful. I think it is a healthy combination of things. Hopefully, we're meeting those goals, and I think tying it in to the upcoming research and monitoring activities to get media and put it out there for the media and the news to increase awareness, just overall public awareness.

I get calls from people from Cleveland that are coming down and they want to know what the rules are for fishing offshore, off the east coast of Florida, and one of the first things I ask is where are you going to launch your boat or where are you going to be vacationing or where are you going to go fishing? If it is in that Port Canaveral area or Fort Pierce area, then explain to them about what is going on.

MR. WILSON: My issue is not quite as controversial. I just downloaded the app, and then I went to click on the app. It says I need Adobe Air; do you want to install, so I said install. Then it says you must sign in to purchase Adobe Air. I have the app on here but I can't use it yet.

MS. IVERSON: Maybe at the break, Steve, we could look at that and see what the implications are there, because the app was developed by O.V. Verona, Verona Solutions out of Miami, and they sometimes do periodic updates. That may be a new requirement that I am not aware of; but we can certainly help you to get it installed properly. Does anybody have any other suggestions or recommendations based on – but keep in mind the experimental closed area and the outreach efforts that are associated with that?

MR. MERRIFIELD: I think that's it; thank you very much. That was very nice. I know that kiosk thing is a very nice presentation.

MS. THOMPSON: If you have some of those outdated brochures that really aren't appropriate to hand out to the public anymore; I'm sure Richard would love to have them to give out to the kids at the tours that they do at Wild Ocean Market. They love that kind of stuff.

MR. REID: We talk to 3,000 third graders every year as a field trip down at our dock just about what is going on out there.

MS. IVERSON: The brochures themselves; remember they have the snapper grouper poster in the middle. We have larger versions of that poster that we would be more than happy to provide you some copies now. Can we provide them in bulk rate? We would have to do that and see for third graders; but we can certainly help you along those lines.

As far as the old regulation brochures, we had them stored and we were having to pay for storage, so they have been recycled. Again, if you want to e-mail or let me know what would be helpful, we can look at printing some materials or providing you with additional information that would be applicable to your targeted audience. Again, to commend you for increasing awareness there and taking the opportunity that you have, a unique opportunity to do the outreach work; it is always appreciated, always.

MR. MERRIFIELD: Thank you, Kim. Is there anything else on the agenda that we need to cover, Gregg?

MR. WAUGH: No; we have caught your input that was not really related to the outreach report. I didn't get any specific points related to the outreach component, but that is fine. It is nice to end on that. That is one where we have achieved virtually all of our goals and objectives. I think Kim in particular and the folks involved in the outreach side need special thanks for that.

MR. MERRIFIELD: Absolutely, and I think they've done a great job. Certainly our industry; we've been aware of it for a long time. It took some time to get there. I think the boat ramps are a good place to focus. I think the app is an excellent tool. I think I would like to have some of those cards to put into our retail locations, because we do have a lot of fishermen that come in.

MS. IVERSON: You will have them this afternoon.

MR. MERRIFIELD: Okay, because I think it is a great app.

MR. WAUGH: Let me just relay that Amber Von Harten, who also works in our office, sent an e-mail explaining that when you are signing on for this with an Android phone, you need the Adobe Air to view PDF files; but she is saying that all you have to do is sign in to your Google Play Store account and this app for Adobe Air is free. If you were in the Apple environment, you wouldn't need that. If you have an Android phone or I guess tablet, all you need to do is sign into your Google Play Store account and you would be able to get that Adobe Air App for free.

MS. IVERSON: You'll have to set up an account whether it be through Google or your iPhone; so you have to establish that account and I can help you do that.

MR. WAUGH: I don't know if you have any other items or any other business you wanted to address.

MS. THOMPSON: I guess this is an appropriate place to bring it up. We are the Deepwater Shrimp Committee and we are charged with being a representative of the royal red and the rock shrimp industry. I just want to get it on record that since the Deepwater Horizon Incident, the very productive fishery that occurs every summer – rock shrimp fishery that occurs every summer in the eastern Gulf of Mexico has not taken place.

There has not been any rock shrimp caught in the eastern Gulf of Mexico since prior to the summer of 2010. I don't know if that has anything to do with the Deepwater Horizon, but we have been in this rock shrimp business since the late 1960s. Warren, you can correct me if I'm wrong, but the rock shrimp come and go and there are years sometimes when they just don't show up.

But, I can't remember a three-year stretch when there has been no rock shrimp, no sign of rock shrimp in the eastern Gulf of Mexico. Maybe it is tied to the Deepwater Horizon and maybe it isn't.; but since the summer of 2010, there has been no rock shrimp fishery in the eastern Gulf of Mexico.

The Mexican fishery, which produces millions of pounds every year, has been way, way down as has the South Atlantic rock shrimp fishery since the summer of 2010. Those three highly productive areas have been highly not productive. In the case of the eastern Gulf of Mexico, south of Apalachicola there has been nothing.

I don't know whether National Marine Fisheries Service can try to get some money from BP to try to do some research to see if the Deepwater Horizon Incident did in fact impact the rock shrimp fishery or not; I don't know. Another thing that has happened, I don't know if it has anything to do with BP or not; but after the BP, there has been a huge explosion of octopi in the eastern Gulf of Mexico, to the extent that it has decimated the stone crab fishery. I know we're not stone crabbers here, but it seems odd.

We have this accident, and then now all of a sudden – I don't know whether the predators of the octopus died in the Deepwater Horizon or what; but it just seems odd that we're having these

unusual occurrences in the eastern Gulf of Mexico since the Deepwater Horizon that has affected fisheries. Then, of course, there are oysters.

MR. WAUGH: Laurilee, did that capture it in general; and then what I sort of added here, which I think is the gist of what you're getting at, is the Deepwater Shrimp AP would like to recommend the council request NMFS to research this issue and provide the council and the Deepwater Shrimp AP a presentation on impacts. Does that get at what you are looking at?

MS. THOMPSON: Yes; that would be good. I guess since National Marine Fisheries never did the research to even determine where the rock shrimp spawn; how would we know whether Deepwater Horizon has impacted a potential migration of rock shrimp from the southern Gulf of Mexico around the Loop Current and passing through the – if we don't have a baseline to start with; doing research now, what will that accomplish, Gregg?

MR. WAUGH: To me I think that is a valid point. To me this isn't to go out and conduct research, it is to look. There has been a lot of money and a lot of observations taken in the Gulf; and it is to look at this issue and to provide the council and the AP a presentation on here is what the scientists within the agency think is going on with respect to this.

Given the fact that there haven't been any rock shrimp landings in the eastern Gulf, what are their thoughts? They've got a lot of information on where the oil and the dispersants have gone within the Gulf; what are their thoughts on potential areas where rock shrimp occur? I wouldn't try and get too specific; I would leave it broad like this and see what they come back with.

MS. THOMPSON: Okay. Well, least my theory is the first summer of 2010 there were rock shrimp in the east Gulf of Mexico; but all the boats went over to be skimmers. Nobody stayed to fish, because they were making more money tied to the dock in Louisiana in the Vessels of Opportunity Program. But then the next summer there was nothing there, and then last year nothing there. It is too early to tell this year whether there is going to be anything or not. Yes, that will be fine; a presentation would be interesting, anyway, and see what they think.

MR. GAUTIER: Just an idea, living on the Gulf Coast, I think we plotted 164 miles straight line from where the rig went down to where we live. On a southwest wind we could smell the oil in the air. Now, that oil as we all know went into the Gulf; and then they put that dispersant on it. That didn't make it come up. It went somewhere, and we believe it went down to the bottom like everyone else.

There are certain algae that are growing there now that National Marine Fisheries is aware of and they are looking at it. The state of Louisiana is looking at it, LSU. Mobiles or whatever they call them is in the oil and it is causing an algae to grow on it in certain areas of the Gulf. This stuff is like a jelly that is moving around on the bottom. It will eventually get carried with the Stream somewhere. I think it is worth the council keeping an eye on what is coming from the west, because it is coming at you. Thank you.

MS. SOLORZANO: I know that this season Woody and Lee both have made some tries on the rock shrimp bottom to the south and they've found tons of that slime already. It is really thick down there, this algae kind of slime, and there is a lot of the wire grass as well.

MS. THOMPSON: You're talking about the south end of the Oculina?

MS. SOLORZANO: Where they would normally check for rock shrimp; like they are out now and they will make a few tries here and there. They said it is really yucky on the bottom at the moment, but something could cause that to clean up, I don't know, you never know. I hope so before the time comes.

But two years ago – I'm trying to think if it was two or three; yes, two years ago we caught a few rock shrimp in the Gulf. We went over and rock shrimped in the Gulf during May and June after the oil spill. It wasn't near as productive as it normally should have been then. It was definitely low in productivity; but there was a few, but nothing like there should have been.

MR. MERRIFIELD: Okay; any other items we want to bring up before we adjourn? Are there any other comments? I think we have been reporting from the last couple of years at the south end of the boxes to avoid. I think if that is it, then we are ready to adjourn. Thank you, everybody, for attending.

MR. WAUGH: Thank you very much for all your input; and Mike Collins sent me an e-mail back saying he is checking with Joe about how fast we can get those minutes done, so we will keep you all updated on that.

MR. MERRIFIELD: Meeting is adjourned.

(Whereupon, the Deepwater Shrimp AP Meeting adjourned on May 7, 2014)

Certified By: _____ Date: _____

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