## SOUTH ATLANTIC FISHERY MANAGEMENT COUNCIL

## JOINT HABITAT PROTECTION AND ECOSYSTEM-BASED MANAGEMENT, SHRIMP, AND GOLDEN CRAB COMMITTEE

Westin Jekyll Island Jekyll Island, Georgia

### March 5, 2018

## **SUMMARY MINUTES**

## **Shrimp Committee Members**

Charlie Phillips, Chair Dr. Roy Crabtree Dr. Wilson Laney Mel Bell, Vice-Chair Doug Haymans Jessica McCawley

## **Golden Crab Committee Members**

Ben Hartig, Chair Chris Conklin Charlie Phillips Jessica McCawley, Vice-Chair Tim Griner

## Habitat & Ecosystem Management Committee Members Doug Haymans, Chair Dr. Wilson Laney, Vice-Chair

Doug Haymans, Chair Mel Bell Dr. Michelle Duval Jessica McCawley

## **Council Members**

Anna Beckwith Chester Brewer

#### **Council Staff**

Gregg Waugh Dr. Brian Cheuvront Kimberly Cole Mike Collins John Hadley Roger Pugliese Amber Von Harten

## **Observers & Participants**

LDCR Trish Bennett Dr. Jack McGovern Leann Bosarge Erika Burgess Dr. George Sedberry Karla Gore Zack Bowen

Mark Brown

Time Griner

John Carmichael Myra Brouwer Dr. Chip Collier Dr. Mike Errigo Kim Iverson Cameron Rhodes Christina Wiegand

Monica Smit-Brunello Dr. Erik Williams Tony DiLernia Rick DeVictor Dr. Marcel Reichert Karen Raine

Other observers & participants attached.

The Joint Habitat Protection and Ecosystem-Based Management, Shrimp, and Golden Crab Committee of the South Atlantic Fishery Management Council convened at the Westin Jekyll Island, Jekyll Island, Georgia, Monday afternoon, March 5, 2018, and was called to order by Chairman Doug Haymans.

MR. HAYMANS: We are going to call to order the joint meeting of the Habitat Protection and Ecosystem-Based Management, Shrimp, and Golden Crab Committees. There is a lot of names on the back, if you flip to the back page of the agenda, and you will see who all is on what committees. We will forego reading those. I would look for approval of the agenda. Does anybody have any additions to the agenda? Charlie would like to add a discussion of shrimp transit to the end, and so that will be Item Number 6.

I do expect, or at least Pat Geer had on his work agenda today that he would be here, and so I will just let you know that he is leaving Georgia to go back home to Virginia to work for Rob O'Reilly. I've got a certificate and a cooler here, just to thank him for his participation for several years on the Habitat AP and getting us through the FEP II process with Roger, and so, if Pat does come over for that, we'll do that at the end of the meeting. Any other additions to the agenda? Seeing none, we'll take the agenda as presented, with those two additions.

Hopefully you've had a chance to look over the minutes. Any additions or corrections to the minutes? Seeing none, any opposition to the minutes? Seeing none, we will accept the minutes as presented. With that, we will turn it over to Roger, who is going to keep us on track and on time.

MR. PUGLIESE: Okay. We're going to move into the next agenda item, which is the Fishery Ecosystem Plan II Implementation Plan and Roadmap, and the Attachments 1 and 2, and 1 is the implementation plan that was provided at the last council meeting, and we had substantial coordination between council members to revise and refine and update this long-term planning document, and the intent today is to advance it for approval and consideration into the future.

These are, ultimately, living documents, and so the intent is to build on what we have in the past of all the different policies and provide a foundation on all the different type of aspects that can be action items under those policies to address the long-term move towards ecosystem-based management and addressing conservation under these different policies and provide a focused effort, which, ultimately, is your two-year roadmap, which are the actions, three to five actions, under each of the policies that can be advanced, either initiated or completed, in the next five years. I think I was just going to open up the statement and start there.

MR. HAYMANS: Okay. I am looking specifically for North Carolina and for Florida, since you have been the two states who have had -- Much appreciated, by the way, but positive comments to helping update this document, and are you guys okay with where we are today?

DR. DUVAL: I appreciate Roger's willingness to allow for such significant involvement on the part of council members, and I am grateful to Jessica and Erika for the conference calls that we've been able to arrange to go through the implementation plan, and I had looked through it. Roger was kind enough to send it out prior to the briefing book being posted, so that we could take sort of one last look through, and I did not see anything else in the implementation plan, but I did have some edits to the two-year blueprint, I think really just some minor things.

I am happy to make note of what those are. It looks like maybe there is a word or two missing here, and I think there was reference to compliance, when I think we were talking about

complementing, and I think there was one word like that, and then I think a few of the actions under -- I think it was really like in the blueprint, under Chapter 4, which is the Submerged Aquatic Vegetation Plan, and it looked like the policy component was repeated a few times with several actions listed. In other words, it listed the same policy component and then had an Action 2 and then listed the same policy component and then had an Action 3, and so I just -- My suggestion was just going to be to remove the repetition of the policy component and just renumber those actions slightly. Mr. Chairman, it's up to you. I can make note of those things here, or I can shoot those to Roger, whichever way you would prefer to run this.

MR. HAYMANS: I think my preference would be to sort of move the plan forward and ask you to send your comments there, and this isn't a management plan, and so I don't know that we do a full roll call vote and all the similar language that we do, or have done, but certainly I would be willing to give the Chairman and staff editorial license to fix any of those sorts of issues that they may find and that you may forward to them, if that's okay.

MS. MCCAWLEY: I also want to echo Michelle's comments about spending so much time with us and allowing us to submit edits in between the meeting. On the FEP, there were two changes, substantive changes, and the rest of what we have is just small editorial things or mis-numbering, and the same thing on the roadmap. There's a couple of spots where it appears to be mis-numbered, and so we can just give those to Roger afterwards, but a couple of things that might be substantive on page 8 of the FEP. It's in the part about food webs and connectivity.

MR. HAYMANS: Page 8 in the document?

MS. MCCAWLEY: Page 8 in the document. The block above the yellow block, where it says "B", it says that you're going to develop these new ecosystem models, blah, blah, blah, because we do not have defined management objectives for all prey species. I think I would like the "because" and everything afterwards deleted.

MR. HAYMANS: This isn't necessarily in the form of a motion, but is there any objection to that? Okay.

MS. MCCAWLEY: The other one is on page 42, and it carries through on page 43, 44, 46, and a couple other pages, but it starts on page 42. Inside the actions, under A, where it says provide the EED policy, and it says to ensure compliance with, and so the thought of one of our comments was to remove "ensure compliance with". We found a number of places where it just seems like it just still got left over accidentally, and so we can show you those particularly places where it was accidentally left over. Otherwise, our comments are really minor.

MR. HAYMANS: That's a pretty significant one. Thank you. Anyone else? We're trying something a little bit new here with this committee, which is to bring a copy of a motion forward, and so we have on the screen Motion 1. If everybody is good with that, I would --

DR. DUVAL: I would be happy to make this motion, but I'm wondering if it should also include approval of the FEP itself, in addition to the implementation plan.

MR. HAYMANS: I think he's got that in a separate motion. Is that right, or no?

MR. PUGLIESE: What I had done is -- Actually, you could have the overall items focusing on the sections that still needed to be added, but what you could do is modify this and say FEP II and sections, but that was where I was trying to do that.

MS. MCCAWLEY: I am not ready to approve the sections. On Chapter 7, the live hard bottom habitat, we had submitted some edits that are not incorporated in there, and so I'm not ready on the sections.

MR. HAYMANS: Michelle, how do you feel about your current motion?

DR. DUVAL: I am fine to make the current motion to approve the FEP II Implementation Plan, with the understanding that the edits that Jessica noted and that I will submit will be incorporated.

MS. MCCAWLEY: Second.

MR. HAYMANS: There is a second from Florida. Is there any additional discussion? Is there any opposition? Seeing none, that's one small step for FEP II. Let's get to the giant leap.

DR. DUVAL: I would also move to approve the FEP II Two-Year Roadmap, again with the same caveat.

MS. MCCAWLEY: Second.

MR. HAYMANS: We have a second from Florida. Any additional discussion? **Any opposition?** Seeing none, that's another small step. Jessica, did you have a specific comment here?

MS. MCCAWLEY: Yes, and so the live hard bottom habitat, we submitted some comments a few weeks ago, and they don't appear to be incorporated yet, and so that's the only one, that the comments have not been incorporated.

MR. PUGLIESE: What I was going to say is we can have the other ones identified, and then I will get with you all and just double-check what happened on that one, because, again, the --

MS. MCCAWLEY: That sounds great. Thank you, Roger.

MR. PUGLIESE: By Full Council, it will be done.

MS. MCCAWLEY: Thank you.

MR. HAYMANS: Would you like to make this motion then?

MS. MCCAWLEY: Sure. I move that we approve the outstanding FEP II sections, including South Atlantic Food Webs and Connectivity, South Atlantic Climate Variability and Fisheries, Shallow-Water Coral, and Artificial Reefs for incorporation into the FEP II Dashboard.

MR. HAYMANS: We have a second from Dr. Duval. Thank you. Any additional discussion? **Any opposition?** We are almost ready. Thank you. **That's approved by the committee.** 

MR. PUGLIESE: That's it. As I said, what I will do is I will get with Jessica and Erika, and we will make sure that those adjustments are made, because something slipped in there, but that will be done, and then what you can do is, at that point, approve that last section and the FEP II in total.

MS. MCCAWLEY: Thanks. Sounds great.

MR. HAYMANS: Then the giant leap will come at Full Council then, right? Okay. Habitat and Ecosystem Tools and Model Development.

MR. PUGLIESE: What I wanted to do was I had provided a number of different documents in the briefing materials that included some of the updated dashboard, and it has the different sections were the frontend of this discussion, but then the actual dashboard layout identifying the new structure that the dashboard is in.

One of the newest components of this is the fact that I've been working with Cameron to figure out a way to be able to get things faster, and so, when you go into the sections on the side, you can actually -- It will pull up and show all of the major areas, and so, if you want to get the coordinates for managed areas or if you want to go to EFH designations or you want to go to the FEP II, those are going to be listed on the side as you go into the site, and so that's one of the changes that's been made, and so you would pan over, and it would give you those.

Right now, they're just lists, and I think we're going to work on seeing if some of those maybe can be live links directly to the policies, to those highlighted areas, and, plus, we will probably add some frontend wording in the introduction to highlight these major areas that are available within the system, because everything is there. We are negotiating how to be able to better expand and provide the access to the information.

Also, we're still following up with our state partners, to get any of the state species information and some of the other habitats refined and expand that entire capability, and so I would recommend members be able to go in and access this, and I know some have been using it already to support some of the activities and how this can be even better refined and provide the availability. After this meeting, all of these areas that are coming, the different sections, will be updated and added in, including the implementation plan and the roadmap and the availability, and then we can get creative too, because I think there is some places we can go with taking the roadmap and having some crosswalk functions to be able to look at actions and needs and how that is actually presented online.

That was the update on dashboard activities and what we're doing with the dashboard, advancing it, and that moves us into the ecosystem tools and model development, and a couple of things. I had provided the latest user manual for the Ecospecies online species information system, and it's a significant thing, because where we have the frontend description of species as very concise recommendations or information on individual species managed by the council, it has links directly to the more comprehensive review of the individual species' life stages and fishery habitat and really advancing that a lot further.

It's a significant part of the FEP II functionality, and I anticipate, as we're expanding our coordination with say the Southeast Center Beaufort on ecosystem needs and with our partners at the fishery-independent surveys, that we're going to expand and refine all of the individual species information to make sure that those are fully populated, and then we can begin to look. Again, this is -- As you look at this, think about other things that maybe should be there when you go to the individual species, the distribution map, the maps of habitat. Different things that you want quickly, maybe we ought to put some of those directly on that front page too, and so that's some of the aspect of having access to the most recent user manual for Ecospecies.

On the ecosystem modeling, we are getting significantly closer. There is a little bit of a delay in timing. It was going to ultimately originally be finalized by February. Some of their other responsibilities and activities have pushed it forward a little bit, but, actually, it has worked out well, because what things have transpired is ensuring even closer coordination with our partners in the Southeast Fisheries Science Center, because some of the work they were doing on investigating production modeling, using all of the information on assessed and managed species, in querying a lot of those different things, we want to have those compatible to whatever those inputs and parameters are going into the ecosystem model.

The Ecopath and Ecosim has a lot of the same information, so that they become comparable tools as they continue to develop. The idea here is we're going to be able to hopefully get it operational that, by the fall -- With the SSC buried the way they are this upcoming meeting, there was no way to advance it that far, plus I think we have time to make sure that it gets into a situation where we can actually begin to look at some what-if type of scenarios and how this can advance for use and tools and maybe even get some clarification from, again, our partners in National Marine Fisheries Service up the chain on how you advance this into building management strategy evaluations directly from the Ecopath model capability and if they're going to look at other aspects, and so there is some direct coordination that's going to happen beyond where we are now with the Southeast Center and in advancing the ecosystem modeling efforts.

One of the last things that I had included in the briefing material was a strategic plan for our partners, the Southeast Coastal Ocean Observing Regional Association, SECOORA, as well as the national plan that was recently put out, and I think what I wanted to make sure everybody was aware is that significant acknowledgement for ecosystem and fisheries is being highlighted within these different planning efforts and strategic efforts, and we're going to try to push it harder to be able to get some commitment at some of our partner levels, and we've been working already, under the ecosystem modeling, working with Ruoying He and others, on integrating oceanographic capabilities and model outputs, et cetera, into that effort, but we want to go further.

One of the springboards I'm going to use is this first discussion at the upcoming Habitat and Ecosystem Advisory Panel to be able to take one of the other documents I provided, which was the information on the buildout plan that we've built with Ocean Observing Association a number of years ago. We want to advance that even further and provide some input on what do we need from those type of capabilities for fish, for fish habitat, and fishing operations, recreational and commercial fishing operations, and so the types of capabilities that can be provided or are available, and so looking at the inventory of assets in our region and looking at what are the other things that we really need to be able to advance there, our use in stock assessment and in the ecosystem modeling efforts and in just characterizing the oceanographic conditions in our region.

That's what we want to advance, and so that's going to be started at the upcoming Habitat AP. That's one of the big sessions at our upcoming Habitat Advisory Panel meeting, and, again, it's trying to push forward some of the efforts that SECOORA has been doing on strategic planning as well as the national plan.

That is pretty much what I wanted to focus on for tool and model development for our region. We just kind of continue to work with our partners on moving these different things forward, and I think the last thing I did include in here, and there was one last thing, was the South Atlantic Landscape Conservation Cooperative update.

As I mentioned, there is some evolving issues with that, because of the funding capabilities. U.S. Fish and Wildlife essentially has been pulling back on some of their support, which is somewhat

of a shame, because that was really paving the way for the real big-picture type of capabilities and funded our ecosystem model work. The good news is that there still is the state-led SECAS effort, the Southeast Conservation Adaptation Strategy, that the directors of the states are still advancing, and hopefully, with that connection in there, and USGS is still staying in the game, regardless of their funding efforts, to advance their Climate Science Centers, et cetera, and so we still have opportunities to see the blueprint advance and how that connects into our region and, hopefully, with other partners, advance some of the model capabilities that we're really starting to look at potential connectivity between the estuaries and offshore as well as how that connects into the bigger ecosystem modeling that we're working on.

That is an important -- Hopefully that advances further and we don't lose the amount of momentum that we've had to advance the efforts in our region, and, with that, those are the coordination efforts and model and tool development.

## MR. HAYMANS: Any questions?

DR. DUVAL: Roger, I apologize if I missed it. I know you said that there had been a bit of a delay in terms of the modeling moving forward, and so what does that mean for having that effort completed and useful?

MR. PUGLIESE: That was what I was trying to say. It was, but what we're hoping is the model is going to be completed so that when we have not this SSC, but the fall SSC meeting, that there is going to be something that we really can get into and maybe begin to look at things such as interaction between black sea bass and red snapper and look at the MSY across all species, and there is one that has been raised potentially outside of the realm that we're working on right now on some of the pelagics, with mackerel and dolphin interactions, and we'll see what we can do, but the idea is to have a model that can begin to understand how that would deal with some of those types of activities by the fall SSC meeting.

MR. HAYMANS: Any other questions? Okay. I actually failed to make a comment back on FEP II, and it just came to mind. I was telling Roger earlier that we're the last state of the coastal states to ask special permission from the Secretary of the Interior, and, when we were developing our recommendations to the Governor, I relied heavily on FEP II and the information that was already there to develop that document, and so it's already paying dividends, for me anyway, and so thank you.

Item Number 4 was sort of a placeholder, I believe, in case there were other habitat issues that might come up, and so, seeing none, then we're going to move into Item Number 5. Wilson, did you have something?

DR. LANEY: Not an issue, but I will just mention, and the North Carolina delegation already knows this, but the Milburnie Dam came out of the Neuse River this spring, and so that provides an additional fourteen miles of really good spawning habitat for American shad, and hopefully Atlantic sturgeon and striped bass, all the way up to Falls Dam in Raleigh, which now becomes the gateway dam, which was built at the historical falls of the Neuse, which, under low-flow conditions, would have been a natural blockage anyway, and so that's really good news. Restoration Systems took that out in order to create a mitigation bank, and so it's great to have that dam out of the river.

MR. HAYMANS: Very good. Thanks for that update, Wilson. We will move into Allowable Fishing Areas and see how this modeled Habitat/Shrimp/Golden Crab Committee thing works

together. Is Chip going to run this one? Ben, we didn't have a chance to talk about this, but you're the Chair of Golden Crab. Are you okay with me calling names out for who is speaking?

MR. HARTIG: Sure.

MR. HAYMANS: Charlie has already said he's okay with that, but please jump in, as your leadership on those committees is very valuable. You have before you a document, and it's Tab 5, Attachment 14, an options paper for allowable fishing areas, and I believe that is what Chip is going to lead us through.

DR. COLLIER: I was hoping to have a presentation for you, but there is slight technical difficulties, and so we're going to go forward with this one. Just to give you a brief background, what this is about is it was a request to include a draft options paper for modifications to shrimp and golden crab access areas, and what that's going to impact is it would be the Coral Fishery Management Plan as well as the Shrimp Fishery Management Plan. The reason the Coral Fishery Management Plan is included is because they would be fishing in CHAPCs. They are requesting an access area in CHAPCs. That is the background for this.

This is going to be, potentially, Amendment 10 to the Coral, Coral Reefs and Live/Hard Bottom Habitats of the South Atlantic Region and Amendment 11 to the Shrimp Fishery Management Plan. I have developed a quick purpose and need for this amendment, and also a need for action, and then I provided some background information.

One of the reasons that this came about were the golden crab fishermen had requested access into an area up off of Georgia and South Carolina within the Stetson-Miami Terrace, where they wanted access into a historic fishing area, and so the first one was to investigate fishing that occurred in that area. There were some landings that were reported.

There was also a paper that indicated that there were some landings, and so that was documented in this as well as areas where coral was observed and also predicted areas of coral habitat. I tried to provide some different graphs in here. This first graph, Figure 1, that is -- In pink are all areas where you're not allowed to golden crab fish, and so I'm going to narrow in on this area up here, right off of Georgia and South Carolina, and I tried to make the maps so it kind of sequenced into these smaller areas.

What I have plotted here in Figure 1.2, this was golden crab catches by Glen Ulrich and Betty Wenner in a research project that they had done with South Carolina DNR. The size of the circle indicates the abundance of golden crab that were caught in that area, and then you can see there's also a somewhat large black dot in the middle of that, and that was a coral mound. I think they described it as being about a fifty-foot coral mound, and so they obviously don't want to fish around that coral mound, because the traps would get caught around there.

Continuing down into Figure 1.3, this is a very busy graph. What it basically does is, as that blue becomes darker, that indicates a higher probability of coral in that area, and all the black dots are actually observed coral points that were pulled from the deepwater coral data portal, and so all those were mapped in there. Once again, this salmon color, that is areas that are closed to golden crab fishing, and then, the white area that's in here, those areas are actually open to golden crab fishing. It's a very narrow band in there.

Combining all of this information that I was talking about together, we have the golden crab closed areas in salmon, and we have the predicted probability of coral habitat. This area up here on the

top part, more or less, is oculina predicted habitat, and the other area is scleractinian coral predicted coral habitat, and then we have the yellow triangles.

Those are actual positive catches of golden crab, and we have the green empty triangles, which that was no catch where they set their pots from that independent fishery study by Wenner and Ulrich. Continuing down, I listed the current catch of golden crab in Table 1, and you can see their catch relative to the ACL, and so they are well below the ACL. Opening new areas up will not put them over the ACL, and so that's all the information that I have provided for golden crab.

For rock shrimp, I started off with a table of landings, Table 2, and you can see, from 2012 to 2014, it was pretty lean years. 2015 was a pretty good catch, and 2016 was pretty low rock shrimp catch, and then 2017 was the best year since 2009.

What the fishermen were requesting was us to investigate this area in the Oculina Bank. It was the extension that occurred due to Coral Amendment 8, and I tried to highlight it here. This is a very difficult thing to graph, if you want to look at it spatially, because the area that was graphed is like a quarter-mile wide by fifty-miles long, and so, no matter how you do that, it's going to be very difficult to see.

I tried to do my best in thinking outside of the box, and I tried to develop some KMZ files that would be useful in developing these, and so you just click on the link. We downloaded Google Earth Pro on this computer already, and so it should load on there. I am keeping my fingers crossed.

We have the Oculina Bank that came up, and now this is the file that can give us problems. What this does is it overlays the current mapping that was done in 2017 onto this file, and, as we zoom in, if you see just gradual changes in color, that is indicating that it's not likely coral mounds in that area. There is an area right up here that actually has coral, and you can see the changes, where it goes from a light green to a bright red, indicating significant elevation change, and that's likely a coral mound in that area.

If you look through most of this, if you go south from there, there were no coral mounds identified in that area, and that is similar to what the fishermen were saying, is there was limited coral in the area, and they wanted access to it. I apologize that it didn't show up that well, but you should be able to load it onto your computer, and it should show up fairly well.

With all of this, this was me going through these different maps and trying to make it and re-project it in a couple of different programs, and so what is actually visualized here might change a little bit when we have a professional GIS person working on it, as opposed to myself. It's not likely to shift too much, but there are little tweaks that some of the GIS people will do and make it more accurate.

Now, continuing into the possible management actions, I have two actions that are listed in this document. The first one is adjust golden crab access areas in the Stetson-Miami Terrace Habitat Area of Particular Concern, and I had an example area there in Figure 1.6. It doesn't have to be that exact one, but that's just an area that I was considering, and you guys are more than welcome to adjust that, or you can recommend us to take it out to scoping and have the fishermen recommend other areas. Action 2 is adjust the Oculina Bank Habitat Area of Particular Concern. Once again, adjust the eastern edge of that boundary, potentially move it westward, and, once again, on this graph, on this Figure 1.7, it's going to be very difficult to see, but there is a slight modification there.

I provided a draft timeline, if you guys want this to go forward, and it would move fairly quickly, with scoping in August. I would bring back a draft scoping document to you guys in June, and we would take it out to scoping in August, and you guys would review the comments and revise the actions and alternatives and review the effects analysis in December. There would be public hearings in January/February of 2019, and then, in March, you would review those public comments. Then, in June, approve it for final action. Are there any questions on this one?

MR. HARTIG: Chip, the area that you have for the rock shrimp only pertains to the CHAPC and not to the experimental closed area, correct?

DR. COLLIER: That's correct.

MR. HARTIG: Okay. I just wanted to make sure.

DR. COLLIER: The experimental closed area is well south of that.

MS. MCCAWLEY: Are you looking for a motion to start this amendment? I am kind of at a loss.

MR. HAYMANS: I am looking for some discussion on what we've seen, and I will throw out there that, at least from the rock shrimp, or from the shrimping portion of this, in the closed area that we set up, or the expanded area, I guess is what we did, they're at the highest landings in a decade right now, and I'm kind of scratching my head as to why we're looking at expanding more area for them when they've got five-times their landings.

MS. MCCAWLEY: On both of these, I feel like this is something that we had committed to work on a long time ago, both the golden crab and the rock shrimp. The rock shrimp seems like -- I would have to go back and look, but I felt like there were some nuances there at the last minute, and we told the rock shrimp guys that we were going to come back and look at that additional boundary, and so they thought it was going to be one thing, and we thought it was something else, and we ended up going back and forth, and we decided, at the last minute, that we didn't want to stop that amendment, because we had worked on it for so long, and we promised them that we would come back and look at this. I want to continue moving forward with both the items that I see in here.

MR. HAYMANS: I believe that there were council members who said that we would come back and look at it, but I don't know that we had any sort of motion to the effect that the council was holding itself to it. I mean, you hear me, and I'm opposed to expanding anything right now, but that's okay. I'm only one vote.

MR. PHILLIPS: We were trying to get this done, and there wasn't really a good consensus between the fishermen and the scientists, but it looks like they have pretty much narrowed down that just about all of this stuff, except for maybe one mound, could be draggable, and, yes, they had a really good year last year, but, the year before, they were like one-tenth of that, and, being an old shrimper, I know how critical it is to be able to move a quarter of a mile or a half of a mile closer to where the shrimp are, rock shrimp or white shrimp or whatever. If we are pretty comfortable that we can move this, I am inclined -- I would like to go ahead and move it forward, again, on rock shrimp and the golden crab.

MR. HARTIG: Just to follow-up on what Charlie said, the rock shrimpers have told us that these rock shrimp occur in different areas in different years, and, if it happened to fall into this one little

area where they are, it would be of critical importance, and so I don't have a problem going forward.

DR. DUVAL: I agree with Jessica, and my recollection also was that it was -- It would appear to be a fairly minor -- It appeared to be a fairly minor change on I think the eastern boundary of that existing rock shrimp access area, but that small change makes a big difference. We did commit to do it, and so I agree that we need to think about how to work this into our priorities.

DR. LANEY: I think we ought to exercise some due caution here. I am on Doug's side of it, I think, for the moment, and for a variety of reasons. Relative to the Oculina Bank northern extension, remember that when we established that eastern boundary that we acknowledged the value of all the sand and shell and coral rubble and live low-relief coral habitat that was out there and that whole complex of species using that deepwater ecosystem, including the early life stages of some of our snapper grouper species.

It was established initially based on reducing the area two-times with the last and approved coordinates used and implemented that were provided by industry, and the entire area is managed as essential fish habitat and habitat area of particular concern to conserve all the interconnected habitats that are part of that deepwater ecosystem, and who is to say that the increasing rock shrimp catch may in fact not be based, at least in part, on the protection that we have already provided by the previous designation of boundaries and the habitat conservation that is benefitting the entire deepwater ecosystem?

Then, finally, I think, while some base mapping has been completed, the high-resolution mapping and habitat characterization and documentation of species use of the proposed presently protected habitat still doesn't exist, and so, for all those reasons, again, I am on Doug's side on this. I would be inclined to just leave things as they are, especially in view of that tremendous increase in harvest.

DR. CRABTREE: When this all came about, there were a lot of concerns, and I heard enough concerns by folks to give me cause that we ought to go back and look at this again. If we can make some adjustments and make some more bottom available to the fishery without compromising coral protection, then it seems to me that's worth doing, but I do feel like we made a commitment to revisit this issue, and so I think we need to follow through on that.

MR. BELL: That was my recollection, too. I mean, I can remember the meeting, and I can remember the discussion, and I can remember that we said that we would look at this, and that was a couple of years ago, it seems.

MS. MCCAWLEY: Are you ready for a motion?

MR. HAYMANS: Not yet. I just -- From those same meetings that we all had with them, I mean, we went through this ad nauseum with the shrimpers, and we pulled out VMS data points from as far back as they would supply them, and the areas were drawn based on some of those maps. This stuff was thrown in at the very last minute, and, again, I go back to the fact that they're now at 2.7 million pounds, realizing it was a really bad year last year, and I just have heartburn over that, but, if there's no more discussion, then, yes, I would entertain a motion.

MS. MCCAWLEY: I move that we begin an amendment for shrimp and golden crab access areas.

MR. HAYMANS: Do you want to just tighten it up a little bit with just Amendment 10 and 11?

MS. MCCAWLEY: I didn't know if you wanted those numbers in there. It would be Amendment 10 and Amendment 11.

MR. HAYMANS: Amendment 10 to rock shrimp and 11 to coral, and is that right? Is the motion adequately captured on the screen?

MS. MCCAWLEY: It's clear that this is about access areas for golden crab and rock shrimp, even though we're modifying coral, right? Okay.

MR. HAYMANS: The motion is to begin an amendment for Shrimp Amendment 11 and Coral Amendment 10. Is there a second? Second by Charlie. Is there additional discussion? Seeing none, is there any opposition? The motion is approved by the committee with two in opposition.

MS. BOSARGE: You know, I almost wore my necklace that says "Mississippi" today, just for you, but I just wanted to say thank you. You know it's hard for me to bite my tongue, and I didn't say anything during that discussion, but thank you very, very much from the shrimp community. We appreciate you taking another look at this. I remember that I was very pregnant at that meeting where they came up at the last minute and they had their printouts of their tracks and everything, and you could tell that they were shrimping there, and this bottom is important to us, and we just want to say thank you for looking at it.

MR. HAYMANS: On behalf of the committee, you're very welcome. Okay. Charlie, shrimp transit. Jack, did you have something?

DR. MCGOVERN: Yes, sir, Mr. Chairman. Recently, we had the cold-water closures off of Georgia and South Carolina, and it came to our attention, through Chairman Phillips, that there were fishermen catching shrimp off of Florida and they were landing them in Georgia, and the transit provision for the cold-water closure was different than other transit provisions, and so we looked at the regulations, and there are actually three different transit provisions in place for different things in the South Atlantic.

For the cold-water closures, for the transit provision, nets are to be stored below deck while transiting the area. For the MPAs, the trawler trynet may remain on deck, but the trawl doors must be disconnected, and then a third one is for area closures for corals and for transiting in the Oculina HAPC, and it says fishing gear appropriately stowed means that doors and nets are out of the water.

We have three different transit provisions, and there may be a need to have three different transit provisions, and I don't know, but it might be that this could be something that could be examined and considered in this amendment that the committee is moving forward with, and so I just wanted to bring that to your attention, and we talked to law enforcement about this too, and they said it would be nicer if they were all the same.

MR. HAYMANS: We've seen an options paper, and I would assume that, through direction to staff, that we could perhaps add that additional discussion of whether there is actually a need for it or not in what we're going to see in June.

MR. PHILLIPS: I can tell you the shrimpers are going to tell you there is a need for it. First of all, the steel hulls, the transit provision we have right now says you have to have your nets stowed

below deck, and the freezer boats can't even put their nets below deck. They store them in net racks over the winch or over their brine tanks, and so they couldn't get there if they wanted to. I'm sure law enforcement would understand if their nets were balled up, but, still, they can't get there from here.

Then it costs South Carolina and Georgia landings, because people want to bring their boats back and unload. They want to go make that trip, whether it's a week or two weeks or whatever, and they want to come home and tie their boats up at their dock and unload at their dock where they normally stay and do their maintenance. It's just not practical sometimes to keep your boat down the beach, and so it would mean a lot to be able to -- For those guys to bring the boats back.

Yes, they can come in at Fernandina and travel up the Intracoastal, but I've been informed that some of those places in the Intracoastal, especially here, they can't pass at low water, and so you have to be trying to time when you're coming through, and so just to fix a transit provision that made sense would be -- That would be some common sense that a lot of the fishermen would say needs to happen.

I've talked to John Wallace, and he thinks that just having your doors on deck would be -- Most of the people coming home are going to have their doors on the deck, and so that would be a provision that they would probably go along with and think would be a good answer, and I don't know if one of the other provisions exactly mimics that, and, if it does, it would be great, but, yes, I know they would like to see that as an action added to the shrimp amendment. Thank you.

MR. HAYMANS: Thank you, Charlie.

LCDR BENNETT: Just because my district itself covers both the Southeast Regional Office and the Greater Atlantic Regional Fishery Office, if you guys can take a look at the transit provisions listed through the New England Fishery Management Council and the Mid-Atlantic Fishery Management Council, that could definitely help. For the New England, it's more groundfish-specific, and then, for the Mid-Atlantic, especially when it came to the deep-sea coral protection area, as applied to the squid, that was on a case-by-case, because there were smaller areas that they had to cross, and so those transit provisions were a little bit more lenient than the groundfish vessels up in New England, and so that's a good place to start, especially for consistency for enforcement, at least in my area, would be fantastic.

MR. HAYMANS: Thank you for that. Anything else? I'm sure that our distinguished Chair will work with Chip on ideas as this is developed into the next paper.

DR. COLLIER: I just want to make certain that, when we're talking about these shrimp and transit provisions in the deepwater MPAs, we're only talking about the shrimp fishery and not other transit provisions that might be included for the deepwater MPAs.

MR. HAYMANS: Anything else? Okay. I don't see Pat Geer here yet.

MR. HARTIG: Chip just reminded me of something. I mean, we have transit provisions for the king mackerel fishery and transit provisions for the Oculina Bank, I believe, and did we ever come to some kind of standardization of the transit provisions? I know the fishermen were concerned about what they had to do in Oculina Bank compared to other transit definitions, and so circle back to that, Chip, and see if they're different. Then we can take a look at that.

DR. COLLIER: I will include that in the next paper.

MR. HAYMANS: That triggered something in Jessica's thought process.

MS. MCCAWLEY: Yes, because I remember working on this with law enforcement, and I don't need to say anything else, if Chip is going to look into it, but I feel like we, at least on the Oculina, we worked on it pretty well.

MR. PHILLIPS: I am just checking to make sure we don't need a motion to add this action and direction to staff is going to be adequate.

DR. COLLIER: Yes, and it's just a draft options paper right now.

MS. BOSARGE: I was just going to mention, in case your staff wanted to look at it, in Shrimp Amendment 17B in the Gulf, we kind of threw something like this in there with some transit provisions for the shrimp industry, mainly for shrimpers that didn't have a federal permit, but might be transiting through federal waters, because I know that sounds strange, but, the way our coastline is, that could happen between Mississippi and Louisiana and stuff like that.

We may have a transit provision that you might want to look at. It's a little different. We were trying to strike a balance, where you wouldn't have to actually deck your doors, because, depending on how far offshore you are and what the weather is like, that can be kind of dangerous. You just have to have your gear out of the water. Your doors and nets have to be out of the water and your bag straps removed. That way, you're not ready to shrimp, but you don't have to actually deck those doors if the weather is bad. That can get hairy, and so just to throw it out there in case it was something you wanted to consider.

MR. HAYMANS: Thank you. Chip is good, and the rest of the three committees are good. Thumbs-up all the way around. Excellent. Mr. Chairman, I believe that concludes the business of the joint committees, and I am prepared to yield back two hours and forty-nine minutes. That concludes our business.

MR. PHILLIPS: Very well done.

MR. HARTIG: Are there any changes, corrections, or deletions to the Golden Crab minutes? Seeing none, the Golden Crab minutes are approved.

MR. PHILLIPS: They are approved. Did we do the Shrimp minutes? I don't remember. No? Are there any adjustments or changes to the Shrimp Committee minutes from June of 2015? Seeing none, those minutes are approved.

(Whereupon, the meeting adjourned on March 5, 2018.)

Certified By: Date:

Transcribed By: Amanda Thomas March 26, 2018

## SOUTH ATLANTIC FISHERY MANAGEMENT COUNCIL 2017 COMMITTEES continued

#### INFORMATION & EDUCATION

Mark Brown, Chair Charlie Phillips, Vice-Chair Chester Brewer Michelle Duval LCDR Jeremy Montes Staff contact: Cameron Rhodes

#### LAW ENFORCEMENT

Mel Bell, Chair Anna Beckwith, Vice-Chair Zack Bowen Mark Brown Ben Hartig LCDR Jeremy Montes Staff contact: Myra Brouwer

#### MACKEREL COBIA

Ben Hartig, Chair Doug Haymans, Vice-Chair Robert Beal Anna Beckwith Mel Bell Zack Bowen Mark Brown Roy Crabtree Michelle Duval Jessica McCawley Charlie Phillips Mid-Atlantic Liaison: Rob O'Reilly Mid-Atlantic Liaison: Dewey Hemilright & Tony DiLernia Staff contact: Christina Wiegand

#### PERSONNEL

Jessica McCawley, Chair Michelle Duval, Vice Chair Mel Bell Doug Haymans Charlie Phillips Staff contact: Gregg Waugh

#### DR GEORGE SEDBERRY

DN GRIK WILLIAMS

DN MANLEL REICHENT

\*-Denotes date of appointment KANA GORE

### PROTECTED RESOURCES

Wilson Laney, Chair Jessica McCawley, Vice-Chair Mel Bell Zack Bowen Michelle Duval LCDR Jeremy Montes Staff contact: Chip Collier

#### SSC SELECTION

Charlie Phillips, Chair Wilson Laney, Vice-Chair Chris Conklin Roy Crabtree Michelle Duval Staff contact: John Carmichael

#### SEDAR

Charlie Phillips, Chair Mark Brown, Vice-Chair Robert Beal Mel Bell Zack Bowen Roy Crabtree Michelle Duval Ben Hartig Staff contact: John Carmichael

#### SHRIMP

9

Charlie Phillips, Chair Mel Bell, Vice-Chair Roy Crabtree Doug Haymans Wilson Laney Jessica McCawley LCDR Je<del>remy Montes</del> Tたいらけ Bにいべて Staff contact: Chip Collier

TONY DILENNIA ERIKA BURGESS KANGO RAINE LEERNN BOSANGE MONICA SMIT-BRUNELA DR. JACK MCGOVENN

# RICK DEVICTOR

## SOUTH ATLANTIC FISHERY MANAGEMENT COUCNIL 2017 COMMITTEES

### ADVISORY PANEL SELECTION

Chester Brewer, Chair Mark Brown, Vice-Chair Chris Conklin Michelle Duval Ben Hartig Charlie Phillips Staff contact: Kim Iverson

#### CITIZEN SCIENCE

Mark Brown, Chair Ben Hartig, Vice-Chair Robert Beal Zack Bowen Chester Brewer Chris Conklin Michelle Duval Tim Griner Charlie Phillips Staff contact: Amber Von Harten Staff contact: John Carmichael

#### DATA COLLECTION

Mel Bell, Chair Doug Haymans, Vice-Chair Robert Beal Anna Beckwith Zack Bowen Mark Brown Tim Griner Wilson Laney Ben Hartig Staff contact: John Carmichael

#### **DOLPHIN WAHOO**

Anna Beckwith, Chair Doug Haymans, Vice-Chair Zack Bowen Chester Brewer Mark Brown Chris Conklin Roy Crabtree Tim Griner (Dolphin Wahoo continued) Jessica McCawley LCDR Jeremy Montes Mid-Atlantic Liaison: Tony DiLernia & Dewey Hemilright New England Liaison: Rick Bellavance Staff contact: John Hadley

#### **EXECUTIVE/FINANCE**

Charlie Phillips, Chair Mark Brown, Vice Chair Chester Brewer Michelle Duval Jessica McCawley Staff contact: Gregg Waugh

#### **GOLDEN CRAB**

Ben Hartig, Chair Jessica McCawley, Vice-Chair Chris Conklin Tim Griner Charlie Phillips Staff contact: Brian Cheuvront

#### HABITAT PROTECTION AND ECOSYSTEM-BASED MANAGEMENT

Doug Haymans, Co-Chair
Wilson Laney, Co-Chair
Robert Beal
Mel Bell
Mark Brown
Michelle Duval
Tim Griner
Jessica McCawley
Staff contact: Roger Pugliese
FEP: Chip Collier – Coral/CEBA

#### HIGHLY MIGRATORY SPECIES

Anna Beckwith, Chair Zack Bowen, Vice-Chair Chester Brewer Mark Brown LCDR Jeremy Montes Staff contact: John Hadley

## SOUTH ATLANTIC FISHERY MANAGEMENT COUNCIL 2017 COUNCIL MEMBERSHIP

### COUNCIL CHAIR

Charlie Phillips Phillips Seafood/Sapelo Sea Farms 1418 Sapelo Ave N.E. Townsend, GA 31331 (912)832-4423 <u>Ga capt@yahoo.com</u>

#### VICE-CHAIR

Mark Brown 3642 Pandora Drive Mt. Pleasant, SC 29466 (843)881-9735 (ph.); (843)881-4446 (f) <u>Capt.markbrown101@gmail.com</u>

Robert E. Beal Executive Director Atlantic States Marine Fisheries Commission 1050 N. Highland St. Suite 200 A-N Arlington, VA 20001 (703)842-0740 (ph); (703)842-0741 (f) rbeal@asmfc.org

Anna Beckwith
 1907 Paulette Road
 Morehead City, NC 28557
 252/671-3474 (ph)
 AnnaBarriosBeckwith@gmail.com

Mel Bell S.C. Dept. of Natural Resources Marine Resources Division P.O. Box 12559 217 Ft. Johnson Road Charleston, SC 29422-2559 843/953-9007 (ph); 843/953-9159 (fax) bellm@dnr.sc.gov



W. Chester Brewer 250 Australian Ave. South Suite 1400 West Palm Beach, FL 33408 (561)655-4777 (ph) wcbsafmc@gmail.com

Chris Conklin P.O. Box 972 Murrells Inlet, SC 29576 (843)543-3833 conklinsafmc@gmail.com

Dr. Roy Crabtree Regional Administrator NOAA Fisheries, Southeast Region 263 13th Avenue South St. Petersburg, FL 33701 (727)824-5301 (ph); (727)824-5320 (f) roy.crabtree@noaa.gov

Dr. Michelle Duval NC Division of Marine Fisheries 3441 Arendell Street (PO Box 769) Morehead City, NC 28557 (252)808-8011 (ph); (252)726-0254 (f) michelle.duval@ncdenr.gov

Tim Griner 4446 Woodlark Lane Charlotte, NC 28211 (980)722-0918 (ph) timgrinersafmc@gmail.com

Ben Hartig 9277 Sharon Street Hobe Sound, FL 33455 (772)546-1541 (ph) <u>mackattackben@att.net</u>

(continued)

## SOUTH ATLANTIC FISHERY MANAGEMENT COUCNIL 2017 COUNCIL MEMBERSHIP (continued)

Doug Haymans Coastal Resources Division GA Dept. of Natural Resources One Conservation Way, Suite 300 Brunswick, GA 31520-8687 (912)264-7218 (ph); (912)262-2318 (f) haymanssafmc@gmail.com

Dr. Wilson Laney U.S. Fish and Wildlife Service South Atlantic Fisheries Coordinator P.O. Box 33683 Raleigh, NC 27695-7617 (110 Brooks Ave 237 David Clark Laboratories, NCSU Campus Raleigh, NC 27695-7617) (919)515-5019 (ph); (919)515-4415 (f) Wilson Laney@fws.gov

Jessica McCawley Florida Fish and Wildlife Conservation Commission 2590 Executive Center Circle E. Suite 201 Tallahassee, FL 32301 (850)487-0554 (ph); (850)487-4847 (f) Jessica.mccawley@myfwc.com LCDR Jeremy Montes U.S. Coast Guard 909 SE 1<sup>st</sup> Ave. Miami, FL 33131 305/415-6788(ph); 305/710-4569(c) Jeremy.J.Montes@uscg.mil

Deirdre Warner-Kramer Office of Marine Conservation OES/OMC 2201 C Street, N.W. Department of State, Room 5806 Washington, DC 20520 202/647-3228 (ph); 202/736-7350 (f) <u>Warner-KramerDM@state.gov</u>

## SOUTH ATLANTIC FISHERY MANAGEMENT COUNCIL COUNCIL STAFF

Executive Director Gregg T. Waugh Gregg.waugh@safmc.net

Deputy Directory-Science & Statistics John Carmichael John.carmichael@safmc.net

Deputy Director-Management Dr. Brian Cheuvront Brian.cheuvront@safmc.net

Fishery Scientist Myra Brouwer <u>Myra.brouwer@safmc.net</u>

Admin. Secretary/ Travel Coordinator Cindy Chaya <u>Cindv.chaya@safmc.net</u>

Purchasing & Grants Kimberly Cole Kimberly.cole@safmc.net

Fishery Scientist Dr. Chip Collier <u>Chip.collier@safmc.net</u>

Administrative Officer Mike Collins <u>Mike.collins@safmc.net</u>

Outreach Specialist Kelsey Dick Kelsey.dick@safmc.net

Fishery Biologist
 Dr. Mike Errigo
 Mike.errigo@safmc.net

Fishery Economist John Hadley John.hadley@safmc.net Outreach Specialist Kathleen Howington Kathleen.howington@safmc.net

Public Information Officer Kim Iverson <u>Kim.iverson@safmc.net</u>

Senior Fishery Biologist Roger Pugliese <u>Roger.pugliese@safmc.net</u>

Outreach Specialist Cameron Rhodes <u>Cameron.rhodes@safmc.net</u>

Financial Secretary Suzanna Thomas Suzanna.thomas@safmc.net

 Citizen Science Program Manager Amber Von Harten
 <u>Amber.vonharten@safmc.net</u>

Fishery Social Scientist
 Christina Wiegand
 Christina.wiegand@safmc.net

SEDAR Coordinators Dr. Julie Neer- Julie.neer@safmc.net Julia Byrd- Julia.byrd@safmc.net

11 Back to top MANCH

CONNELL MTG 2018 DAY 1

Last Name First Name Email Address Abeels Holly habeels@ufl.edu Alvarado Nicolas Nicolas.Alvarado@noaa.gov Bailey Adam adam.bailey@noaa.gov Bennett Patricia patricia.m.bennett@uscg.mil Bianchi Alan Alan.Bianchi@ncdenr.gov Binns Holly hbinns@pewtrusts.org **Bubley** Wally bubleyw@dnr.sc.gov Buckson Bruce bruce@buckson.net Bush David davidbush@ncfish.org Byrd Julia julia.byrd@safmc.net Christophoer Michael mchristopher@elementalmethods.com Clarke Lora Iclarke@pewtrusts.org Cockrell Craig cockrellcraig@yahoo.com Dale David david.dale@noaa.gov DeVictor Rick rick.devictor@noaa.gov Dick Kelsey kelsey.dick@safmc.net Eric Fitzpatrick Eric.fitzpatrick@noaa.gov Kristin Foss kristin.foss@myfwc.com Foster Dean dfoster@pewtrusts.org Pat Geer pat.geer@dnr.ga.gov Godwin Joelle joelle.godwin@noaa.gov Gorton Julia gortonic@g.cofc.edu Gugliotti Elizabeth gugliottief@g.cofc.edu Guyas Martha martha.guyas@myfwc.com Hadley John john.hadley@samfc.net Hart Hannah hannah.hart@myfwc.com Helies Frank frank.helies@noaa.gov Howington Kathleen kathleen.howington@safmc.net Hudson Rusty DSF2009@aol.com Iverson Kim kim.iverson@safmc.net Laks Ira captainira@att.net Mehta Nikhil nikhil.mehta@noaa.gov Merrifield Michael mikesm13@gmail.com Miller Kyle kyle.miller@myfwc.com Neer Julie julie.neer@safmc.net Pearson Rick rick.a.pearson@noaa.gov Pulver Jeff Jeff.Pulver@noaa.gov Ralston Kellie kralston@asafishing.org Recks Melissa melissa.recks@myfwc.com Records David david.records@noaa.gov Rhodes rhodesr@cofc.edu Ray

3 5 18

Schwaab	Ali	alexandra.schwaab@accsp.org
Sedberry	George	george.sedberry@gmail.com
Seward	McLean	mclean.seward@ncdenr.gov
Shipman	Susan	susanshipman@att.net
Smart	Tracey	smartt@dnr.sc.gov
Spencer	Erin	etspencer14@gmail.com
Stephen	Jessica	jessica.stephen@noaa.gov
Takade-Heumacher	Helen	htakade@edf.org
Williams	Erik	erik.williams@noaa.gov
bergmann	charles	charles.bergmann@noaa.gov
bowen	zack	fishzack@comcast.net
brennan	ken	kenneth.brennan@noaa.gov
brewer	chester	wcbsafmc@gmail.com
brouwer	myra	myra.brouwer@safmc.net
burton	michael	michael.burton@noaa.gov
colby	barrett	bcolby3@cfl.rr.com
conklin	chris	conklinsafmc@gmail.com
knowlton	kathy	kathy.knowlton@dnr.ga.gov
krueger	shelly	shellykrueger@ufl.edu
sandorf	scott	scott.sandorf@noaa.gov
vara	mary	mary.vara@noaa.gov

Name	Last	Select a Choice	How do you participate in fisheries in the South Atlantic? (Check all that apply)	How do you participate in fisheries in the South Atlantic? (Check all that apply)	How do you participate in fisheries in the South Atlantic? (Check all that apply)	If Other, please provide more information:
		Contact				
		Information				
		already on file				
Robert	Lorenz	with SAFMC	Private Recreational Angler			
		Contact				
		Information				
		already on file				
Robert	Crimian	with SAFMC		NGO		
		Contact				
		Information				
		already on file				
Dean	Foster	with SAFMC		NGO		
		Contact				
		Information				
		already on file				
George	Sedberry	with SAFMC			Other	SSC
		Contact				
		Information				
		already on file				
Kathy	Knowlton	with SAFMC			Other	GADNR
		Contact				
		Information				
		already on file				
Kevin	Mitchell	with SAFMC			Other	NOAA OLE

March Council Mtg 2018 Day 1 - 3/5/18

		Contact			
		Information			
		already on file			
Lora	Clarke	with SAFMC	NGO		
		Contact			
		Information			
		already on file			
Leda	Cunningham	with SAFMC	NGO		
		Contact			
		Information			
		already on file			
Susan	Shipman	with SAFMC		Other	