SOUTH ATLANTIC FISHERY MANAGEMENT COUNCIL

SNAPPER GROUPER ADVISORY PANEL

Hilton Garden Inn, Charleston Airport North Charleston, South Carolina

APRIL 18-19, 2012

APRIL 18, 2012

SUMMARY MINUTES

Snapper Grouper Advisory Panel:

Don DeMaria, Chairman Steve Amick Jim Atack Robert Cardin Phil Conklin Kenny Fex Terrell Gould **Rob Harris** Robert Johnson Mark Marhefka Scott Osborne Richard Stiglitz Rodney Smith Robert Thompson Megan Westmeyer Gretchen Bath-Martin

Council Members:

David Cupka Ben Hartig

Tom Burgess Dr. Michelle Duvall

Charlie Phillips

Council Staff:

Bob MahoodKim IversonRoger PuglieseMyra BrouwerAnna MartinDr. Mike ErrigoDr. Kari MacLauchlinDr. Brian Cheuvront

John Carmichael Mike Collins

Julie O'Dell

Presenters:

Dr. Chris Koenig Sera Drevenak

Additional attendees attached at end of document

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WEDNESDAY MORNING SESSION

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The Snapper Grouper Advisory Panel of the South Atlantic Fishery Management Council convened in the Hilton Garden Inn, Charleston Airport, North Charleston, South Carolina, Wednesday morning, April 18, 2012, and was called to order at 9:00 o'clock a.m. by Chairman Don DeMaria.

MR. DeMARIA: Okay, the first item is the approval of the agenda. The only changes I wanted to make were to delay the election of the Chair and the Vice-Chair until tomorrow, and I sent an e-mail out, if everybody is fine with that. Then I wanted to have Chris Koenig talk a little bit earlier today so he's got plenty of time to talk about the shelf-edge reserves.

That would be the only changes that I could recommend. Is everybody fine with the agenda? Of course, the approval of the minutes from the last meeting; does anyone have a problem with the minutes from the last meeting? Okay, I think we should go around and introduce ourselves again. We've got a few new people; and then after we finish with the AP introductions, we'll have the people in the audience introduce themselves too. We can start with Phil.

MR. CONKLIN: Phil Conklin, Grouper Snapper AP, wholesale/retail seafood business, Murrells Inlet.

MR. STIGLITZ: Richard Stiglitz, commercial fisherman, Florida Keys.

MR. SMITH: Rodney Smith, Satellite Beach, Florida, media.

MR. GOULD: Terrell Gould, Carolina Princess, Snapper Grouper AP, Poverty Enterprises, Incorporated.

MR. THOMPSON: Robert Thompson, charter commercial fisherman.

MR. PUGLIESE: Roger Pugliese, council staff.

MS. BROUWER: Myra Brouwer, council staff.

MR. DeMARIA: Don DeMaria, Chairperson and diver.

MR. HARRIS: Rob Harris, recreational and Florida charter for-hire.

MS. WESTMEYER: Megan Westmeyer, I'm with the South Carolina Aquarium.

MR. OSBORNE: Scott Osborne, commercial fisherman, Stuart, Florida.

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MR. JOHNSON: Robert Johnson, charter headboat, commercial, Florida.

MR. ATACK: Jim Atack, spear fisherman, North Carolina.

DR. BATH-MARTIN: Gretchen Bath Martin with Environmental Defense Fund.

MR. AMICK: Steve Amick, for-hire, Savannah, Georgia.

MR. FEX: Kenny Fex, North Carolina, commercial fisherman.

MR. CARDIN: Bobby Cardin, Florida commercial fisherman.

MR. DeMARIA: Mark is still not here. Why don't we have the general public introduce themselves.

(Whereupon, introductions were made from the audience.)

MR. MARHEFKA: Mark Marhefka, Charleston, commercial.

MR. DeMARIA: I'm going to do something a little bit different this time, since this is my last meeting as chairperson. I've heard all the rumors and what not about some of the NGOs and we've got one of the main Pew people here with us. I think we ought to have her come up here and tell us a little bit about Pew and ask her some questions, so would you mind sitting up here? I've heard all the rumors about Pew, and I've done some reading up on them. It's an interesting group. Pew really doesn't stand for the Pew Environmental Wacko Group.

It's a family, and maybe she can explain to us exactly what Pew is and what you are trying to accomplish. From what I understand, it doesn't seem to be a bunny hugger organization. Every time I talk to somebody they are showing me pictures of fish or deer or hogs or something they've killed, so it's kind of a unique type organization. Maybe you can tell us a little bit about it.

MS. DREVENAK: The Pew Charitable Trust was created by the Pew family, and they made their money from Sunoco Oil in the sixties and fifties, and the trust does a lot of things. They work on prison reform and early childhood education, a lot of social issues. Then there is the environment group part of the charitable trust.

Their motto is sort of bring science into civic life. Most of us are fishermen. I started fishing when I was three years old at the Outer Banks with my father. My husband and I ran a kayak fishing business in Geiger Key for several years. I have a masters degree in fisheries management from Duke.

I'm glad to get a chance to introduce myself to those of you that I haven't met. It probably goes without saying – did I say my name, Myra? Sera Drevenak, I'm sorry. I know that we don't

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want fishing to end. We don't want the ocean to be an aquarium. Our goal is sustainable fishing, which I think is the same goal as everybody at the table. If anybody does have questions, I'm happy to answer them now or I'll be here over the next couple of days.

MR. CARDIN: You said you had a masters in fishery management. We hear a lot of talk about quotas, and you catch 100 percent, 80 percent, 120 percent. Really, in the management perspective, even at 120 percent; isn't that basically a bull's eye?

MS. DREVENAK: Do you mean in terms of targets and limits?

MR. CARDIN: Yes.

MS. DREVENAK: Yes, I think it's a bull's eye, and I think there have been these buffers created. Fisheries management started out at maximum sustainable yield, which is a theoretical number. You could never actually manage at maximum sustainable yield because you would be overfishing at that level. The buffers are just to sort of keep you away from that limit where you cross the line. I don't know if that's what you mean.

MR. CARDIN: You hear someone with 102 or 105 percent you overfished; that's not really representative of overfishing, per se.

MS. DREVENAK: Okay, when they set the ACLs, that is not at the overfishing limit, you are right. The ACLs should be much lower than your overfishing limit. The problem we have - and you know this better than I — is that most of our fisheries, we don't know what the overfishing limit is. You just have to guess at that number. They can make good guesses, hopefully the scientists can, but it's a guess. You have to set that limit and then sort of live and die by it, unfortunately, until we get better information.

MR. DeMARIA: I've got a question about Pew. You hear all this talk about the NGOs and they are just money-grubbing organizations. What about Pew; do you actually have a membership? I don't see any membership drives or anything like that ever going on.

MS. DREVENAK: I wish I knew all the details, but we have members although we don't raise money in that way. All of our operating expenses come from the family trust and from other foundations that donate to the causes. But, yes, you're right, it is sort of unique among NGOs that way, I think.

MR. HARRIS: I hear a lot of talk about Pew and the relationship between Pew and EDF with regard to catch shares; what are Pew and EDF's relationship in that regard?

MS. DREVENAK: Again, I'm not an expert. I think that in the past there has been some funding from Pew to EDF, and I don't think that that is the case now. Again, I'd have to double check that. Pew has put out a paper called "Design Matters" on catch shares, and that is kind of our position paper on it. It basically just says that catch shares are a toolbox. They are a tool in

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the toolbox and that the details of how you design them are really what makes them successful or not successful. They can be harmful if they are not designed correctly. We don't advocate for their use, or not advocate for their use. We are catch share agnostic.

MR. DeMARIA: Well, Sera is going to be here for the rest of the day and this evening and tomorrow. I would encourage you if you have any questions to get together and talk with her. I think it is better rather than throw rocks at each other from a distance like we've been doing a lot with these NGOs is just to sit down and talk with them. I've gone out of my way to do that with some Pew folks and it was kind of an educational experience for me. I think we ought to move on with this and get on to some of the updates with Myra.

MS. BROUWER: Up on the screen I have the revised agenda, which I passed hard copies of. As Don mentioned, there were just a few minor changes. What I'd like to do first is give you an update on amendments that are currently under review and a few other things. The SSC met in Savannah at the beginning of the month and they had a couple of recommendations that are pertinent to snapper grouper, so I'll go over those as well.

First of all, Amendment 24; this is the amendment that would put in place a rebuilding plan for red grouper. The comment period on the proposed rule is currently open until April 30. That's where that amendment is at. There is a statutory deadline for that amendment to be implemented by June 12, I believe it is.

Then there is Amendment 18A; a lot of you are familiar with this one. This is the one that would put in place an endorsement program for the commercial black sea bass fishery. The comment period on the proposed rule for that one is open until April 23. Again, we are at the proposed rule stage.

The document was initially submitted with the wrong preferred for one of the actions; the one that would deal with the transferability of the endorsements. That's being taken care of in a different document that will be submitted to NMFS after the June meeting. We've worked on that; it's very much an administrative type of action.

There is an emergency rule that is going to possibly be issued to delay the opening of the commercial season to actually give time to the endorsement program to be in place before the season begins. The council at the March meeting approved a motion that the commercial season should open no later than July 1. This would not apply to the recreational segment. That emergency rule is currently under review at the regional office. Any questions so far?

Okay, then there is Regulatory Amendment 11; this is an amendment that would take away the deepwater closure that was implemented through Amendment 17B. This amendment was approved by the council at the September meeting 2011. It was submitted to NMFS in October, and it is currently still under review. Yes, Jim.

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MR. ATACK: I had a question back on the black sea bass, the opening, delaying it. I made a suggestion that we just delay the opening of the pot season and let the regular commercial season open on June 1.

MR. CUPKA: I appreciate the opportunity to speak about that. As Myra indicated, we did submit a request for emergency action to delay the opening of the commercial sector up as late as the beginning of July. I did receive a number of e-mails from a number of fishermen, including some members of this AP body, suggesting that what we ought to do is delay the opening just for the pot season but allow the hook-and-line to go ahead and open at the regular time.

But the letter I submitted or the letter that was submitted under my signature to the regional office asked for the delay for both segments; hook-and-line and pot. As chairman of the council I can't unilaterally request something different from what the council has voted on. Unfortunately, whether I agree with it or not, when they voted they voted to delay the opening for both sectors; the hook-and-line and the pot sectors.

That's what was submitted; that is what I had to submit. Like I say, I don't have the flexibility. Particularly where the council has voted on a specific action, we have to submit exactly what they voted on. I didn't want people to think that we had ignored their suggestion, but our hands were tied. I think everybody pretty much recognizes that.

But I did want an opportunity to get that on the record and to thank people for their suggestions, but unfortunately as chairman I was not able to do that. I had to carry out the wishes of the council and actions they voted on. That's what happened, but I did receive an e-mail not only from you, Jim, but from a number of persons suggesting that approach, but I just couldn't take that approach, unfortunately.

MS. BROUWER: Any other questions on Amendment 18A? Okay, then at the March meeting the council approved Regulatory Amendment 12. This is an amendment that was put together in response to the completed stock assessment for golden tilefish, which was finished last fall. That stock assessment indicated that golden tilefish was no longer being overfished and overfishing was not occurring.

The council put together this Regulatory Amendment to adjust the annual catch limit based on the projections of that stock assessment. That amendment was approved for submission to the National Marine Fisheries Service at the March meeting. The proposed increase for the total ACL would be for 558,036 pounds gutted weight, and that's the total ACL. Then you would still have the allocation 97 percent commercial and 3 percent recreational.

Then as we will discuss eventually when we get to Amendment 18B, there would possibly be another split of the commercial ACL for longline and hook-and-line. Any questions on that? Then there is Amendment 20A; this is the one that was put in place to deal with the redistribution of shares for the ITQ program based on the adjustment that was done to the ACL through the Comprehensive ACL Amendment.

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That amendment; there is a comment period on the proposed rule; again that is open until April 30. Those are the amendments that are under review right now. Do you have any questions on those? Okay, the SSC, as I said, met in April in Savannah. They had a couple of recommendations that I wanted to share with you.

What I'll do is I'll just go ahead and read this. This is what the SSC discussed. Their report, however, has not yet been distributed and finalized, and so for that reason I haven't passed these recommendations along, but I would like to read them to you.

As far as the ABC Control Rule, the SSC is considering modifying that control rule to incorporate a methodology that was described in a report called the ORCS Report, and that stands for Only Reliable Catch Stocks. This is a methodology that would deal with stocks for which we have very little information, for which we only have catch information.

The SSC looked at this report, evaluated it, and determined that it was a robust approach that they could use. What they want to do is look at the control rule that has been implemented through the Comprehensive ACL Amendment, and adjust that Tier 4, the very bottom for the stocks that only have catch data available, with what the ORCS Report has put forth.

The SSC requested that a workshop be held to address the specific details of that modification and develop scoring values for managed stocks and that a final proposal be considered at the next SSC meeting in October of 2012. That's where we are with the modification to the control rule. Then the SSC had a long discussion of available information for evaluating the spatial distribution of speckled hind and Warsaw grouper.

This is where I think we'll spend the majority of today discussing, and so I wanted to go through exactly what they said. Their findings and recommendations will be documented in the report of their meeting, which will be available by May 1. This summary that I'm reading right now is based on SAFMC staff interpretation of their discussion and the consensus statements developed during their meeting.

The SSC considered direct observations provided by fishery-dependent and fishery-independent monitoring, as well as various research programs that have encountered these species. This includes, of course, the MARMAP program that a lot of you are familiar with. The SSC also considered habitat mapping and bathymetry records.

It was recognized that most available data sets have limitations in terms of identifying where speckled hind and Warsaw grouper occur currently. Determining their current abundance and quantifying the extent to which they are encountered by existing fisheries is difficult, because as you know there is a moratorium on their harvest, and so there is not a lot of information.

The SSC acknowledged that the lack of information on abundance and current removal rates makes it difficult to quantify the level of additional protection that may be required to ensure

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overfishing does not occur and to rebuild the stocks. The SSC went on to note that area closures could be beneficial in reducing encounters and related bycatch mortality for these two species.

However, based on the currently available information and analyses, the SSC could not determine the benefit to the stocks of speckled hind and Warsaw grouper provided by additional closures, could not recommend the magnitude of an area necessary to close to reduce bycatch mortality, and could not recommend that additional closed areas are even necessary.

I was there at that meeting, and I think some of you in the audience were there, too, and they spent a considerable amount of time, the entire afternoon, discussing this issue. In the end they couldn't really come up with recommendations that they felt comfortable with. The primary reason for the committee's inability to recommend a specific amount of area to be closed or that closed areas are necessary is the lack of information on the stock status and bycatch losses of speckled hind and Warsaw grouper; so insufficient data.

The SSC stated that current tools identify areas where speckled hind and Warsaw grouper were historically caught or occurred. The committee did not believe available analyses are sufficient for identifying areas where speckled hind and Warsaw grouper now occur or are encountered by existing fisheries.

Therefore, the committee requested an analysis of the effects of recent regulations for the species in the deepwater complex or most commonly associated with speckled hind and Warsaw grouper. The analyses should determine the trends and landings, discards, and effort for those species, evaluate spatial patterns and target species by fishing location, and be based on the most recent data available considering impacts over the last ten years.

The SSC also recommended expanding fishery-independent monitoring and observer programs to obtain the information necessary to evaluate fishery encounters and species occurrence. That pretty much sums up the position of the SSC on this issue. Are there any questions so far?

MR. DeMARIA: When they're talking about they are not sure if additional closures are necessary. I guess they are referring to in addition to the 240 foot and beyond, I would suspect, because that's in place.

MS. BROUWER: Right, exactly.

MR. DeMARIA: Not instead of the 240 foot, but in addition.

MS. BROUWER: Yes.

MR. HARRIS: My only question is we've got two major issues here before the AP. One was the golden tilefish that the council – you know, we had the e-mail exchanges that went back and forth that had to be talked about the month before we met. Now we have this that the SSC is looking at, but the final report is not going to come in until two weeks after we've met.

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Is there a way to get these schedules a little better so that we can actually be part of one of the decisions that can come up, because we're going to spend an incredible amount of time talking about this deepwater closure for the Warsaw and the speckled hind, and for all we know we are just spinning our wheels, because the SSC could come out with something in that May 1 report that is going to counteract everything that we sit here and talk about.

MS. BROUWER: Well, yes, and that is the reason why I read to you their recommendations, because I wanted you guys to be aware of what was discussed. We try very hard to coordinate the meetings, as you know. We also try to put meetings during times that are going to impact the least amount of people.

Groupers are going to open May 1, and so a lot of you folks are going to be out fishing. It is very limiting, the amount of time that we have to schedule meetings. Unfortunately, sometimes we have to rely on e-mail reviews and such or webinars and such to get these things done.

MR. HARRIS: One of the things I noticed just a couple days ago was that now there is a petition to have the Warsaw grouper put on the ESA list.

MS. BROUWER: That petition has been out for a while. It was submitted in 2010. Okay, the last couple of things I wanted to touch on was the Law Enforcement AP met on Monday of the March meeting, the council meeting in Savannah. They had a couple of recommendations that are pertinent to snapper grouper, so I just wanted to go over those. One of the things that they talked about was potentially limiting the number of black sea bass trips.

We got a request from a concerned fisherman who said it is not fair that folks in Florida, because the fishing grounds are a lot closer to shore, can make multiple trips in one day whereas further north in the Carolinas this is not the case. He thought the council should potentially consider limiting the number of trips.

We brought this to the Law Enforcement AP and asked them what they thought about that. They considered it challenging as far as enforcement goes. Their suggestion was to consider a call-in and call-out requirement, VMS, things like that to facilitate enforceability. Then the Snapper Grouper Committee talked a little bit about this and they decided that it was too soon to be thinking about that. Even though they discussed it and they are aware that this is a concern, they've chosen to delay discussion of that until possibly the fall.

MR. HARRIS: I'm just going to comment on that just real brief. That's not really what's going on in Florida. These guys are running 20 miles one way probably to fish. Everybody thinks of Florida like the Keys where the deepwater is two or three miles. That's not the case. That's a waste of time.

MS. BROUWER: Okay, we went over Amendment 18B with the LEAP and Regulatory Amendment 12. Their recommendation was to require VMS for the golden tilefish fishery and

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all highly regulated fisheries for both enforcement and safety reasons. But, of course, as you know this has been a recommendation from the LEAP for quite some time. They also thought the council should consider a bycatch allowance for the longline golden tilefish fishery should a longline fishery develop back again for snowy grouper.

As far as CE-BA 3 and the possible area closures for speckled hind and Warsaw grouper, they basically just said refer back to what we've recommended previously as far as area closures go; think boxes, straight lines, stay away from depth contours and that sort of thing. That is all the updates that I had if you have anymore questions.

MR. DeMARIA: Anna is going to give a brief presentation now or an update.

MR. MARHEFKA: Myra, is there anywhere we can go and see the list of the recommendations from the SSC for the deepwater; are they anywhere for us to see?

MS. BROUWER: No, unfortunately they are not, and that is why I read them to you. They are finalizing their report, and we've asked that it be available by May 1. That report, of course, will be in the briefing materials for the council meeting. We'll just have to wait until it's been finalized.

MS. MARTIN: Okay, I am just going to give you all kind of to preface the discussion for today a background about the Comprehensive Ecosystem-Based Amendment 3 and the measures that are currently contained in this developing amendment. This serves as a bit of a platform for your discussions on additional protections for speckle hind and Warsaw grouper for today.

This is the council's third Comprehensive Ecosystem Amendment. These are measures that we reviewed at the last Snapper Grouper AP meeting. A number of items in this amendment were out for public scoping during our meetings in January and February. What we reviewed with you last time was a more lengthy list of issues.

I wanted to give you an update on what the council decided to defer for future development in another amendment and to table considering developing for now. As you know, we discussed in addition to the actions that you currently see on the list there a designation of Snapper Ledge, which is a small area within the Florida Keys National Marine Sanctuary, as a marine protected area.

Sean Morton was at our March Council meeting and he provided an update on the Sanctuary's plan for a strategic review. They are looking at doing some rezoning down in the Sanctuary. He discussed with the council that any type of support in designating Snapper Ledge as a marine protected area would come in the form of a more formal recommendation after their process is complete, so that wouldn't be until 2014.

We also discussed with you that the council was considering a powerhead prohibition. This again was a request from the North Carolina Division of Marine Fisheries. The council also had

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on the scoping docket a consideration of prohibition throughout South Atlantic federal waters. This was something they discussed as taking a good bit of time to develop.

As you know this is a bit of a controversial issue. They decided to remove that from developing in this specific amendment and defer developing this measure if it is something that they decide to pursue during the Fourth Comprehensive Ecosystem Amendment, and that will likely be starting at the beginning of next year.

We also presented to you – actually I believe these were Snapper Grouper Advisory Panel recommendations – a change in the minimum size limit for hogfish and changes in the size and bag limit for gray triggerfish. These are two species that are undergoing stock assessments in 2013. The council discussed it would be best to wait until the assessments have been complete for these two species and pursue any needed management measure changes in a framework amendment after the assessment results are in, in 2013.

We also presented, during the scoping meetings, adding African pompano to the fishery management unit. I believe this was also a Snapper Grouper Advisory Panel recommendation. This was something that Florida Fish and Wildlife Conservation Commission has already extended management for in federal waters off of Florida.

The council discussed this during the March meeting and decided to drop this from further development in this specific amendment here simply due to the fact that Florida is already managing this species in federal waters off of Florida. There was another measure that included developing a recreational tag program for deepwater species.

Again, this was something that was discussed during our Ad Hoc Data Collection Committee during the March council meeting. They recommended that the state representatives bring back information to the council table on existing state tag programs since likely this is a program that will be administered through state existing programs.

The council decided to defer development of that measure until more information from the state level has been presented; and again it was seen as something that could potentially slow down development of CE-BA 3. That would be reconsidered at a later time. What remains in the third Ecosystem Amendment primarily are place-based management measures and improvements in data collection in our tracking of annual catch limits.

To give you an idea of how this will be if you choose to follow this developing amendment during the council meetings, our Ecosystem-Based Management Committee will be reviewing measures relative to expansion of the Coral Habitat Areas of Particular Concern. Our Snapper Grouper Committee will be reviewing and developing the measures for additional protections for speckled hind and Warsaw grouper and also designation of these two species Habitat Areas of Particular Concern designations for those two species.

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Our Ad Hoc Data Collection will be developing the measures specific to modifying permits, data reporting and bycatch reporting for the commercial and for-hire sectors. As far as the timeline for this amendment, the council will be reviewing all of the advisory panels that are providing input on this amendment.

They will be reviewing their input during the June council meeting and selecting preferred alternatives for each of the measures and potentially approving this document for public hearings also during the June meeting. Those will be held later this summer, in August. The council again will have an opportunity to review the public input for these measures during the September council meeting and final approval is slated for September or December, for formal submission of CE-BA 3.

Now I'd just like to walk through what we have as far as the actions in the document and give you a little bit of background, and then we'll get into some more specifics with the other presentations on the agenda. The first issues deal primarily with expansion of the Coral Habitat Areas of Particular Concern, and I'll run through these quickly.

I know it doesn't pertain to many of you. These are recommendations from our Coral Advisory Panel, and they are based on research that many of the Coral AP scientists have conducted under NOAA's Deep Sea Coral Research and Technology Program for the past few years. Essentially they have discovered new areas of deepwater coral habitat.

Their recommendations have translated into potential management measures here in CE-BA 3. Action 1 would expand the boundaries of the Oculina Bank Habitat Area of Particular Concern. Alternative 1 here is that the current regulations – this is the existing boundary of the Oculina Bank.

Alternative 2, and the range of alternatives that follow, modify the northern boundary of the Oculina Bank, and 2A is the Coral AP recommendation. This recommendation extends the northern boundary up to off of the St. Augustine area, and it would follow the 60 meter and 100 meter depth contour of the west and the east boundaries respectively in that area.

I'll just show you Figure 1 is an image that depicts what the Coral Advisory Panel has recommended to the council here. This is the existing Oculina Bank; and the green box there, as you all know it's the experimental closed area. That green box is closed to all Snapper Grouper fishing. The yellow is the existing boundary and the northern boundary recommendation is the blue box here.

Okay, the range of alternatives that follow; Alternative 2A, it is a little hard to see here, but if you pay attention to the data box inset, these were developed based on comments we received during the public scoping meetings. A northern expansion of the Oculina Bank does impact the rock shrimp fishery in their traditional areas of operation here.

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As you know, this is the only fishery in the South Atlantic that we do have VMS data for. This range of alternatives modifies the Coral Advisory Panel recommendation, taking into account areas of mapped habitat and also areas of traditional fishery activity as indicated by that VMS. Each different alternative has a different range of VMS points that are included within.

We have a Shrimp and Deepwater Shrimp Advisory Panel meeting this Friday that we will be reviewing this information with them. Alternative 3 is depicted here. This alternative modifies the western boundary of the existing Oculina Bank, and again this is a Coral Advisory Panel recommendation based on discoveries of new deepwater coral habitat in this area, a simple depiction of the Coral AP recommendation there.

Lastly, pertaining to Oculina Bank HAPC; Alternative 4 would modify the transit provision for this area. This again was something brought forward by shrimp industry representatives during the public scoping meetings back in January and February. There is significant activity off of the eastern Oculina boundary, and their concern here with a northern extension is not being able to access those eastern rock shrimp grounds.

They are requesting the council consider a transit provision that would allow them to motor through the HAPC with a minimum speed restriction while possessing Oculina coral. Currently the transit is such that you cannot possess this type of coral while in the HAPC. This is something the council is considering.

We have a couple of more actions relative to the Habitat Areas of Particular Concern for Coral. Action 2 expands the Stetson-Miami Terrace Coral HAPC. This is to incorporate a shallow coral ecosystem that has been discovered off of the coast of Jacksonville. Again, this is coming from the Coral Advisory Panel, and Alternative 2 is their recommendation here.

This modifies the area along the western boundary bounded by the 200 meter depth contour. The area in purple here is what the Coral Advisory Panel is proposing. As you can see, there is some interaction here with an existing fishery access area. This is habitat – well, this is grounds for deepwater shrimp, so royal red shrimp. You can see these fishermen are also – most of them that we understand are also fishing for rock shrimp.

They are carrying the VMS equipment, and so we do have some data for where they are operating in this area. Because of this interaction with the Shrimp Fishery Access Area 1, which allows deepwater shrimp activity in the HAPC, council staff developed Alternative 3, which modifies the Coral AP recommendation while taking into account the area of mapped habitat, which is the little box there off to the fingerling structure in the southern boundary; while minimizing the fishery activity based on the VMS data.

Again, the intent here is to review the alternatives with the Shrimp and Deepwater Shrimp Advisory Panel and also the Coral Advisory Panel. They are meeting at the beginning of May. Lastly, for the Coral HAPC measures, Action 3 would expand the Cape Lookout Coral HAPC.

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This is the deepest of the existing HAPCs that were designated in the first Comprehensive Ecosystem Amendment back in 2009. This is in waters off of North Carolina.

The recommendation from the Coral Advisory Panel is to extend the northern boundary to incorporate an area of newly discovered coral habitat in this zone.

MR. DeMARIA: I just have something to say on this Oculina Reserve and extending the boundaries; it's not the hook-and-line fishermen that destroy the Oculina coral out there, it is the rock shrimpers. That's pretty well documented. There are photos, and Chris can even get into some of that.

I'd be cautious with proposing any more restrictions on hook-and-line fishing in the hopes of bringing back the coral, just as I'm kind of questionable about the additional restrictions on lobster traps in the Keys to protect the elkhorn staghorn. It wasn't the traps that killed elkhorn and staghorn; it was a water quality issue, and restricting trappers isn't going to really do a whole lot

It might make people feel good, but it is not going to do a lot to bring back the elkhorn and staghorn. The same with Oculina, too, restricting hook-and-line fishing in that area, other than anchoring, maybe that will tear up some coral, it's not going to do a lot to bring this coral back, and I'd like see the council really think about this one and think it out well before they establish any additional expansion of this reserve.

MS. MARTIN: To that point, Don, regulations within the Oculina Bank HAPC pertain primarily to mid-trawl and bottom trawl. Hook-and-line fishing is still permitted within the HAPCs aside from the experimental closed area, which is in that southern portion. Just to clarify what the regulations are and what is potentially going to be considered.

Okay, moving on to establishing marine protected areas across the mid-shelf and designating Habitat Areas of Particular Concern for speckled hind and Warsaw grouper, I'm not going to get into too much detail here because we do have Roger's presentation, so I'll defer to him for some more specifics there.

But I can provide you with some background on what the council has decided to pursue in this amendment and the decisions that they have provided as guidance to staff as we are developing this. As you know they are seeking additional protections here to reduce bycatch mortality for these two species.

Regulatory Amendment 11, as Myra reviewed with you, was approved last December and it does remain under secretarial review. This was the amendment that implemented the 240-foot closure for six deepwater species. Under Action 4 the council would designate Habitat Areas of Particular Concern for speckled hind and Warsaw grouper.

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Alternative 1 identifies Essential Fish Habitat-Habitat Areas of Particular Concern that are already in place for snapper grouper species. Just to remind you, this designation elevates the significance of these areas during a permit review for a non-fishing activity. Alternative 2 would designate any new and/or expanded existing marine protected area with this designation; Essential Fish Habitat-Habitat Area of Particular Concern for speckled hind and Warsaw grouper.

Action 5 would establish marine protected areas for speckled hind and Warsaw grouper. While we don't have specific alternatives yet for this measure – I think as Myra has pointed out the complexity surrounding this issue, we do have some guidance that the council offered in the March meeting.

They were presented with a number of questions to help guide how this issue is to be analyzed. The first question was what type of closure is to be evaluated here? The council provided guidance that marine protected areas where all bottom fishing is prohibited should be analyzed and also temporary marine protected areas that remain in place until an assessment provide more information about these two species; so an MPA with a sunset clause, essentially.

The existing MPAs are all Type 2 MPAs. They allow some types of gear and currently there is no sunset clause so they are in place indefinitely. The second decision was what type of approach should council staff take for developing these areas? The council directed staff to use the known habitat distribution for speckled hind and Warsaw grouper, similar to what was done for the corals as I just talked about, and these Habitat Areas of Particular Concern in CE-BA 1. Also use the known sites of occurrence for these two species. That is something that was used as the analysis in Regulatory Amendment 11, so we do have a lot of that data that was already used in Regulatory Amendment 11.

MR. SMITH: Has there been a stock assessment of the speckled hind and the Warsaw grouper?

MS. BROUWER: No, and that does present a bit of a problem.

MR. SMITH: When was the last one?

MS. BROUWER: Speckled hind and Warsaw were attempted to be assessed during SEDAR 4, so back in 2004 there was a stock assessment that was supposedly going to cover several deepwater species, but at that time it was determined that there wasn't enough information to pursue an assessment of speckled hind and Warsaw. They ended up actually assessing I believe golden tilefish and snowy grouper. Right now speckled hind and Warsaw grouper are not on the current SEDAR schedule for a stock assessment in the near future.

MR. SMITH: There are a lot of things I could say from that statement. What we're doing is we're just running forward without the stock assessment. Okay, I know that's obvious to everyone but I thought I might state that.

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MR. CARDIN: What kind of socio-economic impacts have there been studies on some of these MPAs that are in place, and is there any more scheduled stuff?

MS. BROUWER: I really can't speak for the socio-economic impacts. I'm not aware of studies that are looking specifically at that, but I do know that the Science Center has been conducting evaluation of the effectiveness of the MPAs as far as fish abundance. They started before the MPAs went into place in 2004 and they have continued. They have a data set that can compare before and after, but like I said just for biological abundance of species. But I'm not sure; I don't know that a socio-economic study has been done or is planned.

MR. CARDIN: Well, that's because some of the benefits that have been made maybe through the closure of Oculina Bank was a heavy price for my area. The snapper grouper fishery, we paid a big price. Here not only was that a social and economic impact; now we're talking about going to IFQs and stuff like that.

The grouper fishery in my area, our landings histories are basically 20 years null from these types of closures. I wonder if there is any way this could ever be tied into like, say, a regional fishing association or if there should be some kind of community allocations because there is supposed to be a benefit from these closures, and we've been paying a price in my area for 20 years. I wonder if we could incorporate this into any kind of analysis we do in the future on MPAs.

MS. BROUWER: Bobby, I think that's a really good point, and I think the council would definitely consider a recommendation like that. Certainly, you guys, as you know you are more than welcome to recommend things like that to the council at any point.

MR. CARDIN: We're not really talking about IFQs today or this day, but I think maybe we should start including this type of thought process. Since IFQs are supposed to be a tool, maybe we should incorporate some of these studies in as we go along, so if we do go to IFQ it is not a big problem all of a sudden.

MS. BROUWER: Just to clarify, you're requesting that socio-economic studies as they relate to IFQs be undertaken?

MR. CARDIN: Well, what we've got in the Gulf now is now they're looking at the social impacts of their IFQ. But the problem is the fishermen that are gone are gone and now they're not party of any study or looked at half of it. In Fort Pierce just several years back we had a guy that grouper fished before he went in World War II, and got a GI loan and got a grouper snapper boat and went and fished Oculina Bank.

There is no record of this type of fishery; and as we go along years, years and years go by, we're losing more and more access to that type of information. I just think we need to put more emphasis on looking at some of these social and economical impacts, because what this council

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does and the way the fishery is managed has created a fishery - I mean, changed the face of the fishery through management.

One of our council members, Mr. Hartig was talking about like in the golden tile fishery, and the council's talking about the way the fishery looked 30 years ago. If this council wants to keep the fishery the way it was, I think we need to be consistent and across the board and maybe even be more open minded to putting more emphasis or at looking at social and economical impacts.

MS. MARTIN: Okay, just to kind of wrap up; the guidance that was discussed and they provided during the March council meeting; the third decision here, what percentage of occurrence or habitat is appropriate to be closed in this scenario; so council has directed staff to evaluate a goal of closing 20, 30, and 40 percent of existing areas or new areas of occurrence or habitat.

Decision 4, who will be developing these alternative sites; again, I'll defer to Roger and his presentation for this specific point here. He is going to be presenting an interactive GIS tool that will allow the AP and the public during these series of public workshops to modify the existing marine protected areas that are already in place, and then draw new marine protected areas, and in each case calculate the percentage of known distribution or known habitat of these two species.

It is a tool in the toolbox and something Roger is going to speak a little further about in a minute. Lastly, the council discussed how to measure impacts – what percentage rather of impacts should be measured here. They provided guidance that council staff and regional office staff should analyze 20, 30, and 40 percent reduction in catch for these two species.

MR. GOULD: Let me get this right; we don't have a good analysis of what we've got here with the speckled hind and Warsaw grouper. To protect something there that we don't have any idea how many there is, how many there isn't, I don't catch many of them, hardly any; no Warsaw at all, speckled hind occasionally, so what we're going to do to protect something there that we have no idea how many there are, whether they are overfished, underfished, or what not, we're going to start closing off little mini-areas up and down the coast to protect something we don't have any idea what we're doing? What I'm seeing is it is just a gradual grab for land to protect everything under the guise of doing something that we don't have a valid analysis. If you could comment on that, I would appreciate it.

MR. DeMARIA: I think a lot of these questions can be answered when Dr. Koenig gives his presentation, and if we can kind of hold off on the questions and let him get through that. He is going to do his in sections and then pause and take questions. But Chris would be unquestionably the world's expert on shelf-edge reserves.

He's done more work on them, done submersible work, diving, and catching fish. I think it would be more appropriate. You'd get probably a better answer to your question than asking any

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of us up here. If we can kind of hold off and let him give his presentation, I think that would be pretty good. But go ahead, if you want her to answer that question, that's fine.

MR. GOULD: That's all right; just write my question down; because I won't remember it by the time he gets around. Just bear it in mind there and we'll ask it later on the record.

MR. HARTIG: If you don't mind, Darrel, that is a great question. We have the 240 foot and we still have the 240-foot closure. We instituted Regulatory 11 to remove that and then to go with these additional closures, smaller closures instead of the entire 240-foot area. But to Rob's point, too, that he made earlier, how can we comment on this when we haven't gone – we don't have everything to comment and we don't have the SSC report.

This is an ongoing process. You are part of it. We've got the scientific group, most of the experts that know these fisheries at depth, they are going to come together – Chris is one of those persons, and Don is on that also – we are going to have that Expert Workgroup that is going to occur. We've got two Fishermen's Workgroups are going to occur, one tonight and then one in Pooler, Georgia, later.

It's a process as we're going along, and we're gathering information along this whole process. Then in the end hopefully we'll be able to make a more educated decision. Frankly, the fishermen's input on this are going to be critical; the fishermen's input on what they've seen over time. Some of us has fished a long time out in the deepwater and seen some of these changes and frankly want to try and address it.

What you don't ever want to happen in this – and you see Warsaw being listed. Warsaw and speckled hind both have been petitioned to be listed under ESA. Neither one of those petitions have gone forward, because NMFS was able to thwart it with the information that they were able to put together on those listings.

We've got that going; but if we don't in my opinion take some sort of action to have enough insurance to allow some of these fish to get back to the reproductive potential they once had, to get back to the size and some sort of abundance, some abundance so these fish can actually get together and spawn and have that reproductive potential introduced back into that stock; because, frankly, what I see where I am, we've removed most of those large animals from the reefs that we fish. We don't have those large fish.

Yes, Warsaw from my perspective, I catch the same amount of them all the time, every year, but I don't see the 300 pounders that I use to catch when we first started jack fishing. Yes, we have Warsaw, and we are getting recruitment from somewhere, but they are still – in our whole area we are not able to get them up to the size and that reproductive potential that we need to restore.

It is a process, and we're going down this process, and you all are certainly part of it. We're going to be able to get more information as we go. The reason it probably isn't structured quite like we probably should have done is we were kind of under a time constraint. We thought that

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the 240-foot closure was going to be removed, and we wanted to get these in place as soon as possible. Some of that pressure was brought about by the region. They wanted to get this done on a faster track. That's where we are now. I just kind of wanted to explain to you how we are going about this and how you are fitting into this process.

MR. GOULD: Thank you; tat was a great response. One other concern about the mini-MPAs, it's a bit of a "feel good" thing. Where is the enforcement? Where are the funds for the enforcement? Coast Guard and Homeland Security is getting cut back all the time. Patrols are down, but we'll get into that later; I can see Don is getting a little antsy here.

MR. DeMARIA: I think Chris is going to be able to answer all those questions.

MR. CARDIN: This isn't directed to Chris; this is to our staff. We're talking about doing some reconfiguring and readdressing some of the MPAs. I was wondering if maybe this AP could ask a recommendation to perhaps talk to law enforcement and recommend that council be more consistent in their management. Most MPAs you are allowed to transit; however, Oculina Bank is no transit. Even on Florida fishermen that fish on the west coast, you can transit the Madison-Swanson Hump and all that. Just for consistency, maybe they could readdress transit in Oculina Bank.

MR. DeMARIA: You can make a motion on that later if you want.

MS. MARTIN: Bobby, just to clarify; that's something that is under Action 1, Alternative 4. It is a transit provision clause. The council is considering modifying the transit provision in Oculina. We're moving forward with that.

MR. CARDIN: Can the AP support it?

MS. MARTIN: Sure, that would be helpful, actually.

MR. CARDIN: Can we make that a recommendation if no one opposes?

MR. DeMARIA: Do you want to do it right now?

AP MEMBER: Yes.

MR. DeMARIA: Do it.

AP MEMBER: I'll second it.

MR. CARDIN: I don't know if I want to make a motion. For a motion to council, I'd like to recommend that council allows a transit in the Oculina Bank.

MR. DeMARIA: All those in favor.

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MR. CARDIN: All other ones transit is allowed. Oculina Bank is the only one that it's not allowed; more consistency in the transit provision in all MPAs, which would include allowing transit in the Oculina Bank.

MR. DeMARIA: Do you want to read that and then we can vote on it?

MS. BROUWER: The motion is the AP recommends that the council allow transit in the Oculina Bank and be consistent with transit provisions for all MPAs.

MR. DeMARIA: Is anyone opposed? I guess it passes unanimously.

MS. MARTIN: The last issue that we have included in CE-BA 3 would modify – these pertain to data collection – these modify permits and data reporting for commercial and for-hire sectors. This is to ensure that annual catch limits are not exceeded. These are a result of the council's concern of the existing system's ability to track all of these annual catch limits that are forthcoming under the Comprehensive ACL Amendment, and again ensure overages aren't occurring with all of the snapper grouper fisheries.

Action 6 in CE-BA 3 would modify permits and data reporting for for-hire vessels. Alternative 2 would make changes to the existing regulations by increasing the frequency in reporting for charter and headboats. What is being considered here is weekly, daily or intervals shorter than a week. Again, the issue here is frequency in reporting.

MR. GOULD: Hasn't the biggest detriment to the reporting process been not getting the data in but the lag time from NMFS in being able to analyze it and get it out to the people that implement?

MS. MARTIN: I think it has been both. I think both have contributed. Certainly, there have been some issues with dealers failing to report consistently and then waiting until the last minute. Then when those reports come in, a big overage occurs. The council is just trying to alleviate that problem while NMFS is going to try to keep better track on their end.

MR. GOULD: Also, in some of the reporting processes, I think with black sea bass there has been a bit of a middleman there where the data would go to Maryland, I think, and then back down to Florida, which creates more of a lag time. I'd like to see that cut out where it goes right straight to Florida instead of having a middleman and save a week or two.

MS. MARTIN: Yes, I think that issue is being addressed in an amendment that the council is doing jointly with the Gulf. It's an amendment to improve dealer reporting. I don't know the details of that, but it is an amendment that is in the process of being developed. The council is going to discuss that at the June meeting, so the AP will probably get to see that the next time you meet.

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MR. GOULD: Thank you, we'll hold them to it.

MR. JOHNSON: Just real quick, that charter headboat, is that going to be electronic reporting? Please tell me it is.

MS. MARTIN: Yes.

MR. ATACK: The question I had on the reporting was I know gag grouper was estimated to exceed the ACL back in December by two of the three models or one of the three models, I think. The actual landings weren't really updated until like March 26. Here they were looking at closing the gag prematurely, before we ended the season, and then it took like until March 26 to actually get the landings updated. Do we know why it takes so long?

MS. MARTIN: Jim, unfortunately I can't answer that question. That would be a question that should be directed to the Science Center. I assume you're referring to them updating the information online. Certainly there is going to be a delay in putting that information out there, just from the information just not being ready.

MR. ATACK: It was more than being ready. I think NMFS couldn't report the number I think until March 26. I was talking with Jack down there.

MS. MARTIN: Right, NMFS has to announce closures based on projections. As you pointed out, they have to run these models and then based on a projection that is when they close it. They never know the final number when they announce the closure. That number needs to come later and sometimes the actual number indicates that an overage has occurred.

MR. CARDIN: On something like that, when you knew the grouper season was closing December 31, anyway, there was no sense in announcing the estimates. Like you say, you would wait until the final numbers came in. I think what happens with that if a season is closed due to a closure date and NMFS turns their model making and their estimating into something like tilefish that was catching 200 something thousand pounds, I think that would be a good excuse for them to stay off of it.

I think what we are going to see with this electronic monitoring, if it all comes in, these kinds of problems are going to go away. It is going to be real-time reporting instead of estimating. It is going to stop a lot of these lag times. Well, there is really no rule right now. As a dealer I can actually wait a year to report and there is no penalty for waiting for a year to report it.

MR. GOULD: North Carolina, when they deal with their flounder fisheries, they have such a system – and you can correct me if I'm wrong, Michelle, but they have such a system they know within a couple of days that when they are going to be able to shut it down or projected when it is going to be shut down. I would highly recommend that the federal government adopt such a system. Maybe they can learn from North Carolina to get a better process going.

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MS. MARTIN: Okay, in the spirit of kind of wrapping this up, we'll just move on here to the last couple of items. Action 7 would modify permits and data reporting for commercial vessels. This is a measure that carries over from something the council has previously considered in Snapper Grouper Amendment 18A.

Alternative 2A here would require all vessels with a federal snapper grouper commercial permit to have an electronic logbook tied to the vessel's GPS on board the vessel. Alternative 2B would provide the option for fishermen to submit their logbook entries electronically through the means of an electronic version of the logbook made available to permit holders online.

Alternative 2C here would require commercial landings and catch-and-effort data be submitted in accordance with ACCSP standards using the SAFIS system. Action 8 modifies bycatch and discards reporting. Again, this is something that the council has discussed before and this carries over from their decisions in Snapper Grouper Amendment 15B.

The intent here is to recommend the council moving forward with Alternative 2. Alternative 2 would adopt the ACCSP release, discard and protected species module as the preferred methodology and require a fully funded program to be in place, and the requirement here for bycatch and discard reporting. Those are the data collection actions for CE-BA 3 in sum. Those are the three issues that are included in CE-BA 3.

MR. DeMARIA: Why don't we take a ten-minute break, and that will give Chris time to get set up and he'll be the next one to give a presentation.

(Whereupon, a recess was taken.)

MR. DeMARIA: The next presentation we are going to have is by Dr. Koenig. For those of you that don't know Chris, like I mentioned before, he is probably the world's expert on the shelf-edge reserves. When we talk about these shelf-edge reserves, they are a little bit different, just so it's clear in everybody's mind. They are not being set up as like diver playgrounds or anything like that, or a purpose to just separate user conflicts like the Snapper Ledge thing obviously is in the Keys.

They are for the production of fish and Chris will get into all of that. Chris is just recovering from ankle surgery and he managed to hobble over here from Tallahassee. If everybody can just hold off on their questions until you take a break and you ask for questions, and let you get through each section first, I think it would be a lot better.

DR. KOENIG: All right, as Don says, if you'll hold your questions, this is a long and involved talk because it is based upon the work that I've done in Madison-Swanson Reserve, which is located in the northeastern Gulf of Mexico. The reason I'm here is because I put in some comments about what I thought needed to be done about Warsaw grouper and speckled hind based upon my experience in Madison-Swanson, which is about seven years of research experience in that reserve. It was closed in June of 2000. I'll tell you about that history.

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My interpretation of the needs is very different from what was done in terms of that 240-foot closure. As I go through this, you will see my rationale for that. Now, I started working with commercial fishermen in the early 1990s because at that time we knew virtually nothing about the spawning biology of gag grouper.

Since that was an important fishery species in the northeastern Gulf of Mexico, I thought the best way to get to understand the species was to actually go out with the commercial fishermen on their trips, and that is what I did. Many trips I went offshore and learned where those fish were spawning, when they were spawning. I learned about the male component of the population just from those trips. During the research that we were doing, I realized – how is that going forward?

MS. MARTIN: I'm sorry, Chris; I'm having a little technical issue here.

DR. KOENIG: Anyway, on those trips I learned that there was a lack of males in the population when I compared the data to the historical record of how many males were in the population; dramatic loss of males. We looked again and we saw it again, and NMFS looked at it, and it was looked at in this region as well and a very similar pattern showed up.

Basically what was going on was the more intense the fishing the fewer males in the population. Madison-Swanson was all about figuring out what the mechanism was that caused the loss of males in the population. That is the way it started. There was a lot of fishermen opposition to it in the beginning because they all perceived this closed area, which is a little over 100 square miles, as something that you may perceive now as something taken away from them.

That is a logical thing; that is a logical conclusion to come to. What I'll try to show you in this talk is that it was actually something that they voted to keep in perpetuity over time based upon the data that I am going to show you and so they saw it as a benefit. I've got a letter from one of the top-end fishermen that works and has fished around this area and that northeastern Gulf Area for 37 years, and he is the strongest proponent of that reserve in that area.

These are the things I am going to present. I am also going to go into enforcement and how important enforcement is and how important scientific verification is. I had one reserve, right, there was no replication, there was no randomization, I had to do with it what I could, but we learned a lot and that is what I'm going to present to you here today. Steamboat Lumps was the other reserve, but basically that is a very flat bottom area. It is very different in structure than Madison-Swanson and it is an important red grouper habitat, but that is practically the only grouper that is there in abundance. We learned a lot about them and published that information, too.

Today I am going to stick with Madison-Swanson, because it is the most appropriate to the Warsaw grouper and speckled hind issue. Now as Don said, we'll stop periodically during this talk and I will give you kind of a question-and-answer period, because it will take some time. First I want to give you a little background on the basic biology of groupers.

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They tend to be very vulnerable to fishing in general for these reasons. They are long lived. Warsaw grouper lives to 41, probably longer than that, years. Even a red snapper, the oldest red snapper was 53 years old. Gag probably lives to about 30 years or more; Goliath grouper, 40, 50, 60 years, something like that. They are fish that live a long time. They are slow to mature.

A gag will mature in about three to five years. The maturity is based on size, not age, so there is a big disconnect particularly in those early years between size and age. They mature at a little less than two feet long, gag do. That is 50 percent maturity; that is not 100 percent. Goliath grouper spend the first five to six years of their life in mangrove habitat. Then probably after seven, maybe even eight years they mature.

You've got these long-lived, slow to mature fish. Sequential hermaphrodites; all the ones that we know of in the Gulf and in the South Atlantic are sequential hermaphrodites. There was one grouper in the same genus as gag in the Gulf of Baja that is not. That is one of the few that has been published that is not.

Nassau grouper and Goliath grouper are very different. Most sequential hermaphrodites that are going from female to male have a strongly female-biased population. The reason for that is that a single male will monopolize the mating of multiple females. It is roughly 20 percent, 25 percent males in a population, which is the natural population size.

They have complex social interactions because there is a social basis for sex change. That is when the males and females get together in a social group or a spawning group, there is somehow perceived a lack of males, and then the dominant females in that population will be triggered to undergo sex change.

This has been demonstrated in aquariums with very small sex-changing species that will change sex in two weeks. Groupers seem to take on the order of months to do it. The trigger is set off in that social group, but then they take a longer time to actually be and function as males. There is a high degree of - oh, they spawn in large groups. Now that is true for most of them, but it is certainly not true for red grouper.

Red grouper invest a lot of energy in their excavations. They dig up the bottom and they live in those excavations. What you'll typically find is a male and then multiple females around the male. The females from all of our observations always come to the male's excavation for this courtship and eventual spawning behavior. We've got a paper out on the courtship sounds that they make.

Groupers make a lot of sounds under water and they are very specific for the times that they reproduce. They have a high degree of site fidelity. We've got pingers in Goliath grouper now and we've seen that. Again, it depends on the species; red grouper extremely high site fidelity. We did tagging studies and they just never moved. They stayed right where they were on their

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own excavations. This is on the shelf-edge I'm talking about. In shallow water they'll move a little bit more.

Goliath grouper also go back to their original sites from their spawning aggregation periods. It appears that gag do, too. Again, the bottom two species we don't know much about. They are top-level predators. That is true of species like gag and scamp, which are fish eaters, but it is not necessarily true for Goliath grouper or Warsaw grouper or the fish that are in the genus Epinephelus, the broad stubby ones. They're mostly crab, shrimp eaters, crustacean feeders.

They are more low on the trophic ladder, the food chain ladder, because of what they feed on. Presumably the two species at the bottom, scamp and Warsaw grouper have a very small population size; but again to answer a question that was posed in this room earlier, it is very difficult to estimate population size and do a stock assessment on a species that there is no catch on.

Now when they did a stock assessment earlier – and I'll point this out later. I'll show you what conclusions they came to at that time. All right, in the South Atlantic Region – this is on the NMFS Website as of the 31st of December of last year – overfished species were red grouper, red porgy, red snapper, snowy grouper, and, of course, Goliath grouper is protected. Undergoing overfishing is that series of species; but you notice the asterisks, those are all sex-changing species.

The vast majority of these are. There is a problem, and you will see in terms of this sex-change business with these species that make them a bit more vulnerable than the other species. In that assessment that Myra referred to in the Publication NMFS 203, it determined that the populations are overfished and undergoing overfishing in the South Atlantic Region by incidental catch. Those are not my data; those are the data of NMFS.

When you capture these fish, you are running nearly 100 percent mortality. You can imagine, just with the number of Goliath grouper that you've caught, imagine what the population would look like if everyone you caught died. Well, this is the impact that these two species are experiencing. Goliath grouper don't die especially if you catch them in water less than 100 feet deep. This is definitely a problem with incidental catch.

Catch locations were on the shelf-edge, and I define shelf-edge about 150 to 400 feet. This is in the NMFS document that was published by the Southeast Regional Office that showed both association of other species and this shelf-edge depth. Now, if most of the fish are caught on the shelf-edge depth, obviously the association with those catches is going to be species that occur on the shelf-edge. Most of the shallow water grouper and snappers spawn on the shelf-edge, not exclusively; only gag and scamp do it exclusively on the shelf-edge, but a lot of species spawn on the shelf-edge.

It makes sense that the species that are associated with Warsaw grouper and speckled hind catch are going to be species that are shallow water, and that is the way it looks from their data. There

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is also a problem with small populations. Small populations become unstable and they can actually go extinct.

It is true we don't know the size of these populations, but they are nothing like they appeared in the past, nothing. They are much smaller. We don't know how much smaller, but they are much smaller, and they are continuing to be caught. Now some of the people in the stock assessment group – Gene Huntsman said that the males are rare in the Warsaw population, so it is kind of reminiscent of the gag situation.

Okay, you all know what these things look like. Sometimes Warsaw grouper, when it's small, will look a bit like a snowy grouper, but it is easily distinguished by ten dorsal spines, and the second one is longer, quite a bit longer, and you can see that one is longer, especially in a bigger form. But the snowy has 11 dorsal spines.

The picture of this Warsaw; this one is about a six-foot one. You can see that they change morphology and color pattern as they get big like this. This one was taken in Madison-Swanson, on Madison Ridge, which I'll show you. Now, this is one half-a-day catch in 1963, and this picture was kept by this Dr. Robert Bass. He's a medical doctor now, but he was a kid then. That's the arrow points to him, the guy with the dark-rimmed glasses.

That was a half a day on Madison Ridge; just to give you an idea how many Warsaw were out there. There are about eight of them in this picture, maybe more. The perspective is not good, so I can't tell. But this is what they were catching out there in that time before fishing. With speckled hind, you've got also color changes. The very smallest ones have this zanthic or yellow coloration pattern, but they always have that speckled appearance even as larger adults.

The pictures that Grant Gilmore, working out of the Johnson Sea Link down to Harbor Branch, took back in 1980, and there were other pictures during the seventies, and this was on Jeff's Reef where there was still intact Oculina coral, and still is presumably. In this one photograph there are seven speckled hind.

They were quite common; and if you talk to the fishermen who have been in the business for 35 plus years, they will tell you the same thing. Now this is a statement – I just wanted to make this point – that was published in 1999 by stock assessment biologists; particularly Doug Vaughan is the last name there. Gene Huntsman is the first name. They are at the Beaufort NMFS Lab. Basically what he says is the numerical population is 10 percent in 1990, the population biomass was 5 percent, and the biomass of mature fish was 2 percent of that existing in 1973.

Warsaw grouper is now so rare – now this was 1999 when this was published – that too few intervals were available to assess the population status. Then after a paragraph or so he goes on to conclude that marine reserves seem to be the only way to protect these animals. Okay, now what I'm going to do is talk to you about Madison-Swanson, but I want to give you a broader perspective first.

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Shelf-edge areas have been identified in many different studies in our area of the world as being important for spawning for reef fish. In Belize, Hayman showed Cubera snapper and a multitude of other species that spawn out on the shelf-edge. These shelf-edge areas where they tend to select are areas that the fishermen in the Gulf call breaks; that is, they are rocks on the edge of a drop-off, and the drop-offs aren't precipitous. They are more like maybe anywhere from 7 to 10 degrees slope. This is the same thing – in the West Florida Shelf we see the exact same thing. Gag, scamp, red snapper, red grouper, all the dominants spawn there, including vermilion snapper and Creole fish and some of the others also spawn there. Again, not exclusively, there are only a few that spawn there exclusively.

You'll find the big ones – in the Gulf they call the big snapper sows even though there are males and females together. They tend to exist out on that shelf-edge. Now there is a thing in fish biology, we tend to see the world through our own eyes. Our eyes are that if we become old and senescent, we reproduce less and our reproductive system shuts down. But we're mammals; we're not fish.

In the case of fish, the bigger, the fatter and the older, particularly the older, the better reproducers they are; not only in terms of quantities of eggs, but quality of eggs. They call them BOFFs, big old fat females. When they get to that size, they are the best reproducers, and it has been demonstrated particularly with rock fish that those very old fish – see, you've got a growth curve and a lot of the energy – energy is like a metabolic pie.

Energy goes into either growth or reproduction or maintenance. You've got fish that are growing rapidly; and once they reach that asymptote where they stop growing so much, they put huge amounts of energy into their reproduction, the energy from their food. When those fish get old like that, they are putting virtually all their energy into reproduction, which means the eggs have more fat globules, they have more energy to allow the larvae to survive longer. This has been demonstrated.

What we think is going on is a lot of these old fish, they persist on these shelf-edge areas, and they have historically persisted on these shelf-edge areas. Of course, when we found them in the seventies and earlier, they were hit pretty hard. A lot of these fisheries in the Gulf of Mexico, commercial fisheries were centered on that shelf-edge. One of the reasons that those fishermen were so furious about giving up Madison-Swanson was that that's where they – in the late nineties that is where they still fished heavily, and they do to this day, which I'll show you a little bit later. All those areas have been demonstrated as basically the breaks on the shelf-edge are the areas where the fishing is taking place.

In Florida Keys it is mutton snapper and black grouper and so forth. Basically when you fish a spawning population, it's like I say there, it is sort of like living on the principal of an investment and not on the interest. It is not sustainable. You are actually killing the goose that lays the golden egg. Protecting these areas is not something that you are giving up; it is actually something that you are protecting for the future, your future fishery.

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There are more reasons to protect it, and I'll show you those in a minute. All right, just to give you an overview of what I'm going to be talking about, the shelf-edge reserves can benefit threatened species like Warsaw and speckled hind. Out on Madison-Swanson Shelf-edge, too, you see these species, and I'll show you that.

But it provides opportunities to understand the biology of these animals, like I understood the biology and came to the conclusions about gag that I have. If you just close a huge area like the 240 plus, there is virtually no chance you can learn anything about those fish, because, number one, you don't know how good it is doing. You can't monitor it, it's huge. Where do you monitor; what is going on out there? You don't know.

If you've got discrete areas and you monitor them, and you police them – and I'll talk about policing, because I worked my tail off trying to get the Coast Guard and the legal system involved in this thing to get it corrected, so I could get accurate data to the Gulf Council so they could make decisions on whether to keep this thing or toss it out; but it's been a battle, I tell you.

Benefits for the shallow water species and sex ratios in gag, I'll show you those data. Age and size structure, I'll show you that. The protection of the reproductive output, benefits to fishermen, spillover, and that's an unfortunate name, because a lot of time it is not spillover, and I'll show you, its other things. There is attraction, it's spawning migrations, and it is all sorts of things that increase the population of fish around these reserves.

Benefits to management; there is such a thing in biology, in marine studies of fisheries is shifting baselines, and I am sure many of you have heard of this. Shifting baselines is basically a descriptor of what we all do. We think the world is normal according to what we've experienced. If we've been in the fishery ten years, we think, my God, these Goliath grouper are eating everything, because we haven't seen Goliath grouper before.

I grew up in West Palm Beach and Goliath grouper were pretty abundant back then, and then also black grouper and all these other groupers were quite abundant, too. Basically the shifting baseline moves along as generation and generation. We accept as normal what we experience. It could be completely depleted like the fishery in the Yellow Sea, completely annihilated, and we think, well, that's about normal. Any changes we see we perceive as either bad or certainly not for our benefit.

That monitoring of shifting baseline is very important, because you'll see what right there in those reserves, what things were like or could be like. At the end of this talk I'd like to show you a letter written by this high-end fisherman. I tried to get him here so he could talk to you, but he's got charters in this timeframe so he couldn't come.

They can monitor this; what were things like; how can you compare the outside with the inside; things like that. Habitat protection; there are lots of reasons that habitat gets destroyed; not only from direct impact from fishermen, which is fairly minor with hook-and-line fishery, if at all, but from changing the structure of the community.

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There is a thing in biology called trophic cascades. It has been identified mostly on land but also in the sea where if top predators are killed off you get these changes in abundance of the trophic levels or the feeding out of the food web below those top predators. That can have tremendous effects on the habitat, too.

I'm not going to go into that but there are books on that, and it controls for environmental impacts. After the Gulf oil spill, the Deep Horizon Oil Spill, we actually took the Johnson Sea Link Submersible, that Harbor Branch submersible, and we went along that coast so we could see where things were affected, habitat was affected by the oil spill.

It turns out the oil spill didn't get to Steam Boat Lumps or Madison-Swanson. It mostly stayed up in the Northern Gulf or moved west, so we lucked out. But if there are changes that are due to an impact like that, nobody can say, hey, the fishermen caused this, because you go into the reserve where there is no fishing, and you see what is there after the impact or what has changed. But this requires monitoring. You can't just put these things up and say, uh, we're done. They have to be monitored and they have to be verified that they're doing what they are supposed to do. All right, I gave you a bit of the history already with the problem with gag. Basically Madison-Swanson was the study of this sex ratio problem.

I started out trying to do that in the Oculina Banks in the mid-nineties and it was totally futile, because the gag spawning aggregations that were recorded during the seventies by the Harbor Branch people was gone. Basically it wasn't there. And the hundreds of scamp that spawned on Chapman's and Jeff's Reef in the lower part of the Oculina Banks were depleted to such an extent that they were made – on Jeff's Reef I counted eight scamp and they were all about that size, so it was impossible.

I went back to the Gulf and we started petitioning for a reserve over there so we could study this problem. I didn't expect all these things to happen that I'm going to talk about today. I didn't expect to get into it. I just wanted to know why was the sex ratio changing in this species; but when I got funding to do this, I looked at a lot of other things, too.

Initially the fishermen were I mean so vehemently opposed to this, because I wanted the edges. I wanted the area in between Madison-Swanson and Steamboat Lumps, and it was at the time being actively fished. They didn't want to give that up. We finally settled on Madison-Swanson, which was, talk to any fisherman, it was almost totally depleted. The fishermen out of Apalachicola, Port St. Joe, and Panama City didn't even stop there anymore. They went right past and went down to the edges to fish, and I went on these trips so I know.

I asked for a ten-year closure so I could study this problem. They gave me four, the Gulf Council gave me four, and the fishermen were reluctant to do that. After three years they opened a comment section, and not all but the vast majority of fishermen, the better fishermen said keep it. We are seeing things change – three years. Then it came up again in six years – no, it went

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from four to ten, and then it went from ten to in perpetuity, which is what it is now. They wanted to keep it, for sure.

They were perceiving a benefit to them, a direct benefit to them from that reserve. I'll talk about protection of Warsaw grouper and speckled hind in that reserve, and I'll talk about habitats a little bit. Movements, size and age structure, abundance, gag sex ratio, and spillover – now spillover was hard to measure, so I took as many different types of data to do it.

If you don't have any clear before and after, it is very hard to say things change, so what you do is you get a lot of data. There is anecdotal data from fishermen as well. Here is about where they are located. You can see Apalachicola is right in here, Port St. Joe is up in here, and Panama City is here. This was very accessible to those major fishing communities, reef fish fishing communities.

When they first started fishing, they fished heavily in this area. This area here that goes about, I guess from about here down to here, it is called the edges. Again, in the late nineties that was still highly – okay, that's where they are located and as I said I'm not going to talk about Steamboat Lumps because it is a totally different kind of habitat. Now this is a multi-beam view of the shelf-edge there, and you can see these drop-offs. Where the gag spawns is right along that shelf-edge drop off, and these numbers were all given to me by fishermen, which I later verified were in fact spawning sites.

These were the ones outside. Again, they weren't on this particular projection out into the deeper water, but these are all deltas that formed about 28 to 50 million years ago. This one has a lot of rock along the top, this one does not. This is mostly sand waves; you can't see it in this picture, but that's what it is.

Well, most of these – not all but most of these aggregations are on these drop-offs. Those are gag aggregations. The depth goes down to probably 600 feet, something like that, and drops off. Now the slope here is 8 degrees dropping off down here to the side of this area. Expanding and turning about 45 degrees to the Madison-Swanson Reserve, you can see where these spawning sites are.

These are pinnacles back up in here, limestone pinnacles. These are called carbonate pinnacles, but it's really rocky, it's extremely rocky back here. But all these are gag spawning aggregations, and there is a couple up here, but they never seem very productive. This is all red grouper spawning habitat in here.

There is a ridge called Stu's Ridge that runs out here, but you can't see it from this perspective. Basically, virtually all the gag spawning was along here. The protected species that we saw occurred along that ridge, and I'll call this Madison Ridge; that's what we call it. Even though there are high-relief habitats that are in here like Stu's Ridge, which is about 60 to 80 feet off the bottom, the only species that we saw spawning there were scamp right on the ridge.

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This is the pattern, so habitat is everything when you want to protect these species. You have to get the right habitat or you are just wasting your time. Okay, we only saw Warsaw on Madison Ridge. We saw speckled hind in and around Madison Ridge; and actually outside the reserve to the north there were a few of those.

Snowy grouper were mostly associated with Madison-Swanson, but we also saw a few on the outside. I'll go ahead and give you a graphic perspective with these maps. You can see the fishing locations that we did. This was several years' worth of data, so these sites were intensely fished all the way from here up to here. Then again these were Warsaw grouper that we actually caught along that ridge.

Now when we went on that submersible study after the Deep Horizon Oil Spill, this was July of 2010, these submersible dive sites, those dots, and the zero or the number refers to how many Warsaw grouper we saw. Now these weren't long transects; these were maybe 100 meters long, something like that.

The only place we saw Warsaw grouper, and that photograph I had in there of one was one of the ones we saw, most of them were not that size. They'd be three or four feet long. All right, so again with visual, actually going to the bottom on these high relief areas that we thought we'd see Warsaw, zip.

The only ones we saw were on Madison Ridge, again because that was protected. I've heard fishermen on the radio say they had three or four Warsaw floating away from the back of their boat when the fishing was intense out there. They do catch them, and they do kill them, but I think they can only land one in the Gulf. I can't remember, I think it's one. All right, for speckled hind, the same pattern; fishing throughout all of this – again this was the important habitat that the fishermen didn't want to give up.

No speckled hind there, all we saw was in here, through here and then a couple over here. Here is from the dive survey. None were seen on these submersible dives except in the reserve, and there were six observed in there. Now for snowy grouper we caught some on the outside, but we caught them in the reserve, too.

Then we saw them commonly in the reserve and there were five of them we caught out there on two dives south of the reserve. Now one thing we discovered about snowies is that they live in these excavations. Now, again this is information that came from a fisherman, one fisherman, Tom Harris, who runs big snapper boats out there, said that when he grouper fished on that Madison Ridge Slope, he said they fished the slope, they didn't see anything on their bottom machine but they'd catch these groupers, these snowy groupers.

He said I bet you there are caves out there, so I couldn't resist. We ran the submersible up the ridge, and I ran into two, and one little trans up the ridge. They live in these caves; they might be like red grouper and excavate them themselves. No other fish around, just them in there. You

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can see these little galathea crabs, there's one there, sticking their little heads – this is reminiscent of tilefish burrows, but you can see them around here.

That's where they were hanging out, in those holes. This must be like a clay bottom, because it holds its consistency, unlike the red grouper bottom which is sandy and rocky. I'm going to go into the Madison-Swanson data now. If you want me to keep going, I will. If you want to ask some questions, that would be okay, too.

MR. DeMARIA: Yes, I think there are probably some questions.

MR. CARDIN: Yes sir, we're talking about spillovers. Can you tell us a little bit about what you've seen?

DR. KOENIG: That's coming.

MR. CARDIN: Oh, okay. Can I ask you this? I remember times in the past – I'm from Fort Pierce and I occasionally go out to, say, Archie's or something and quite often crew members and scientists from the Harbor Branch are there. I remember several years back I was sitting there and Sandra – I won't say her whole name –

DR. KOENIG: Say it again, I'm sorry.

MR. CARDIN: Sandra.

DR. KOENIG: Sandra Brooke; yes, she worked on the coral.

MR. CARDIN: Yes, and Andy and several noted scientists were there.

DR. KOENIG: Andy Sheppard.

MR. CARDIN: They were almost in tears about how they went to Oculina Bank and didn't see anything. The first thing I said is let me guess, was it like 45 degrees? Their eyes lit up and said, well, yes, it was real cold. I see all the time these events that push fish around, and, of course, you schedule your trip months ahead of time. I've heard you talk about you've seen things wiped out, there is nothing there. Do you ever factor in these events like tide strength and temperature and do you ever chalk it off to that or are you always just thinking they are just not there?

DR. KOENIG: No, no that's a good question. We don't experience those upwellings that you experience on this coast, and we don't experience the currents that you experience. The highest current I've ever seen was a half a knot, ever, in all this work. In 1994 there was an upwelling event, but it must have been due to a tectonic shift or something.

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The Gulf of Mexico is like a bowl, and you could see with the satellite photographs all this cold water coming up. It killed a lot of animals that couldn't move, like snails and things like that in the shallow water. We saw that; that was in 1994. We haven't seen an event like that since. That is in the record; you can actually see it, and it started in that Northern Gulf Area, and you could see the blue increase out from there and then come up to the east of that area and to the west. And the water was anoxic, too, no oxygen, zip. We measured that and saw that, but the fish moved out of it, the fish moved up.

Gilmore saw the same thing, the fish moved off the bottom when these upwelling events occurred in the Oculina Banks, all except gag. Gag would just lie there and they would lean over against the coral. He said he bumped them with his manipulator arm and they'd fall over and then get back up. Yes, go ahead.

MR. CARDIN: We see the gags go up in the water column and, of course, when the sharks come get them during the nighttime, they drop down. You see puked up sardines and bait. They are up trying to feed and the sharks drive them down. The cold gets to them they start puking the sardines or what have you.

Here we are talking about MPAs and you are very experienced with the gags. What I'm starting to see a lot of – right there off Fort Pierce we have the SMZs, where they have sunk metal ships and what have you, we have the cold water events that push the fish in. You can go there daytime in 150 feet of water, and the groupers will be 10 foot under the surface. Well, we see them driven down – some days I find 30, 40, 50 dead groupers and snappers, what have you, in the wrecks because the steel is so much colder. I kind of view these wrecks and artificial reefs as fish traps when it comes to these events.

DR. KOENIG: I don't know if the steel could be colder than the ambient temperature.

MR. CARDIN: Well, it is. On a cold morning walk outside and hug your car or hug the tree, the car is a lot colder, but diving you feel it, it hits you, it radiates, you see the cold coming off the steel.

DR. KOENIG: That's more conductivity, but that's all right, go ahead.

MR. CARDIN: Well, the groupers get down there and they die, and I wonder when we have events like this, could we be losing genetic stocks? I mean gags that are imprinted to go to these certain areas; could things like this be why the gags aren't going all the way to the Keys like they use to? How much genetic studies have you done?

DR. KOENIG: That would have to be purely speculative. I haven't a clue, none. I mean they did studies on – they did genetic populations. Basically there is no difference in the Gulf population and the South Atlantic population. That has been shown with these migration studies that McGovern and others from the South Carolina DNR did.

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In fact, a good number of them went from South Carolina, which they were all tagged, all the way around into the Gulf up to Madison-Swanson and spawned. They went into the shelf-edge spawning area. To answer your question, I think you've got one unified stock here and tremendous migration.

Now I don't know what stimulates that migration, what factors why one fish will go all the way around the tip of Florida and end up in the Northeastern Gulf and another one will stop off the coast of Florida and move out. I don't know.

MR. CARDIN: I believe it might be time of year they made the move. The earlier they travel, the further they go.

DR. KOENIG: Well, these were all pre-spawning moves.

MR. CARDIN: One question; aren't there genetic identifiers that can actually tell, like the salmon, which salmon go to certain rivers; is that genetically possible?

DR. KOENIG: Yes, but it's pretty complicated, but it's possible.

MR. CARDIN: But you don't think – if you took gags down to that level, you don't think there are those identifiers that could – you are sure they are one fish, one group.

DR. KOENIG: Well, let's take salmon, for example. Salmon, they go back to a natal stream. In other words, the individual that grew up in that stream comes back to it to spawn years later. They do that because they are imprinted in the stream. They are imprinted on the smell, and they also show that there is a visual aspect to it as well.

When they get to a certain – they make decisions as they are moving up the rivers to get to that little natal stream and about 95 percent of them get there. You are talking about a repeated process that causes genetic differentiation between other streams; whereas, with the gag it is like mixing everything up in a bowl and throwing it out there and see what we get, and then some come back to the spawning site because they survived and other ones don't. You mix it back up and throw it out there, so there is a lot of mixing; whereas, with the salmon there is not, you see.

MR. CARDIN: Well, I understand the salmon are genetically imprinted to that. I'm wondering if gags could be. I guess what I'm asking; it is my belief that they genetically can look at salmon and tell where they return to. My question to you is have they looked at gags that detailed, their genetics, or is like you say proven that it is all one bunch mixed together.

DR. KOENIG: Proven, no. The problem is that nobody can conceive of a mechanism. When a salmon is imprinted, when any organism, even a little bird, anything is imprinted, it's got all of its sensory systems. That is what the imprinting operates on, the sensory systems, vision, smell, and things like that.

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When a gag offspring leaves a spawning site, it is a single cell, no division, nothing. It is drifting away, they all float. The grouper eggs I've measured are floating – at seawater concentrations they float right at the surface. They are gone from the site before they develop anything. They could be 50 miles away by the time they develop any sensory systems at all.

When they first hatch out, which is about in a day and a half, they don't have any eyes, they don't have any mouth, all they have is a huge yoke sac and they are three millimeters long. There is nothing to sense. There is nothing there to sense, and they are moving away from the site. It's a different situation.

There could be a regional thing, to answer your question, where let's say a large proportion of the offspring of a particular spawning aggregation settles in the Big Bend Region, okay and then those fish grow up to move out to there and like that, so there could be something like that in operation, but no one has looked at it in any detail.

MR. CARDIN: I just wondered if we've ever wiped out a genetic stock, but thank you.

DR. KOENIG: I don't think so.

MR. AMICK: Thanks for coming, it's real interesting, but I had two questions really as far as the interest in the Madison Ridge. Have you seen any spawning aggregations of red snapper in those depths?

DR. KOENIG: Oh, yes, they spawn right on the same sites gag spawn on in the summer. Gag spawns in the winter; absolutely.

MR. AMICK: Then on the Atlantic Coast here as far as spawning aggregations of gag grouper, we've been told there has been spawning aggregations in shallow water. I found it interesting that all your spawning sites were in that deeper water and that you had this live bottom with pinnacles inshore and you didn't see any spawning aggregations there. Is that the case?

DR. KOENIG: That's the case. I think about 140 feet is the shallowest we've ever – and again, these are fishermen data mostly that they've seen. What I ask them is did they see a copper belly? Okay, where were the copper bellies, where are the males, the black belly males; never any shallower than 140 feet.

Now you've got to remember if you look at these things underwater, they can change color, and a female will look just like a male in those pre-spawning aggregations that occur in shallow water; underwater, but you put them on the deck and it fades out.

MR. AMICK: I'll just comment that's great information and we've been told off the coast of Georgia there is a possible spawning aggregation in what we call Grays Reef, you know, 60, 70 feet of water. I always believed that you needed the large males to have any kind of spawning

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aggregation. The unknown public has been fed information, and this is where we need to take these spawning aggregations, and it is nice to see good information for a change.

DR. KOENIG: I never say never, but I doubt very seriously that you'd find a spawning aggregation of gag in 70 feet.

MR. DeMARIA: Wait a minute, Kenny, let me just clarify something with Chris. There are really two types of aggregations. There is a pre-spawning and there is a spawning, and I think a lot of what people see in the shallow water were gags that they attributed to a spawning aggregation is more of a pre-spawning where they gather up and then move to these spawning aggregations.

DR. KOENIG: That is correct.

MR. DeMARIA: So it's completely different.

DR. KOENIG: That occurs in December and January, the pre-spawning aggregations in shallow water.

MR. FEX: I grew up in the Gulf, so I've talked to fishermen in the Gulf; and you are right, that has been a big effect on rebuilding of stock. We've had several MPAs put in effect here, several longer than the other ones, and we've had spawning closures for the grouper now. What gets me is sometimes when we're dealing with regulations and people say, well, you're not rebuilding the stock. Well, having MPAs is rebuilding a stock.

Having a spawning closure, when you were talking about the red grouper, you are taking them off their bed or whatever with their breeding; you are messing up with rebuilding. I was just wondering if you could actually quantify that sometimes with the scientists, when they do a stock assessment, because I've been involved with stock assessments, and sometimes I think, well, they're not even taking these in consideration. Is there ever a chance in the Gulf when they did assessments or you'd been involved where they actually said, you know, this is actually helping rebuild the stock?

I've heard too many times they say, well, you are not doing nothing to rebuild it. From my perspective, knowing that – I've fished since '85, started back then, I've seen the stock decline, now I see it progressing forward. It is just hard for me when I hear scientists – no offense to any of you scientists – they are, oh, we are not rebuilding it, because in fact you are with these MPAs, which we have more over here I think than we do in the Gulf. I just didn't know what your feel on that was.

DR. KOENIG: Well, I don't know how they could quantify it. What the stock assessment scientists do is they look at numbers. They are mathematicians, and they look at numbers; how many fish are out there to catch? They pay attention to the biology, but a lot of times they don't know how to quantify it. They'll quantify it in ways like, oh, let's see, what percentage of the

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fishing grounds has been taken away? Then they average the catch per that fishing ground and that will be it. But that is far from it, as you'll see.

MR. FEX: One other regulation. They set the longliners out to 50 fathoms back in the day -I mean a long time ago in the nineties, and then all of a sudden they've eliminated snowy groupers. Well then all their longliners shifted down to Florida, like a lot of you guys know. Where I'm at in North Carolina and South Carolina, there is no longlining going out there.

A lot of people don't hook and line out in that deep water, and a lot of times I'm thinking there is an MPA in itself. When you're taking away longliners that traditionally longline, laid gear out there and now you're not doing that, you hook and line here and there, but rarely do people go past 300 feet. That is another regulation I think that gets unseen in the scientists' eyes.

DR. KOENIG: That's true. If nobody is fishing there, it's a de facto protected area.

MR. HARRIS: Good morning, very interesting stuff, love to get a copy of your presentation if you'd be willing to share it. I've got a question for you, because we're looking at a lot of the data and analysis that you've done from over in the Gulf of Mexico. Apples and oranges are both fruit. We're talking about South Atlantic to Gulf stocks.

I believe that my swimming pool has more current in it than the areas that you've been looking at. How can we take some of this data that you're looking at given just the severe differences? Typically I fish in three knots of current down in the Florida Keys. I can get into even more current, like what Bobby said, with the water variations and things that happen in his area. I see our fish moving around a lot. How can we take some of this information and apply it to the South Atlantic to where we're actually comparing apples and apples?

DR. KOENIG: Well, one of the things about these shelf-edge areas is what is happening at the surface is not necessarily happening at the bottom. That is number one. I think that is one of the reasons, aside from the habitat, the structured reef, rocky reef system, you've got pretty neat real estate down there. Those fish are in a pretty good condition.

I'm not saying that's the same thing over here, but there they are, because when hurricanes come over, you're talking about maybe most of these aggregations between 260 and 300 feet. It doesn't even affect the bottom. There is not even a surge down there. The wave structure, when Ivan came over, the waves were 40 feet high according to the data buoy out there. That is only 20 miles away from Madison-Swanson.

I had receivers and everything and nothing was moved. It was like all the fish were there that I had tagged. They didn't move; nothing changed. Because of depth alone, you add depth to habitat and you've got something very different than exists in shallower water occurring in those things. I don't know if that answers your question, but you are right and there are different areas. Different areas have different ecologies and different behaviors of the animals.

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When I go further in my talk, I'll lay out why we need to monitor these areas and where we have to set it up in an experimental framework to answer your question is this operating in the same way as the Gulf Reserve. If it is, it is going to be a benefit to you, not in two years, maybe not in three years, but over time if the spillover is over here as it is over there, you are going to see some positive results from this. I'm no better at predicting the future than anybody else, but all I'm going on is I'm trying to show you my experience in the Gulf, and that it is not simply taking away from. That is the idea I want to present here. There is more to it than that.

MR. SMITH: I saw my friend Dr. Ken Lindeman's name in there, and he is one of my mentors, and this is just kind of blanket statement, not a question. For me, to begin with the end in mind is how do we sustain recreational fishing into the next few generations; and looking at this quagmire of fisheries management, it seems that spatial planning and MPAs and protecting spawning stocks would be pinnacle; do you agree.

DR. KOENIG: Yes. The question is how can we protect our stocks, our fishery production, the endangered species or the threatened species, whatever you want to call them, the habitat into the future? How can we do that; that is the question? It is not how can we take everything away from you guys? We're all human.

The problem people have in their mind is they separate humans form the environment. That is wrong. Humans are part of the environment. We're part of it; we're totally part of it. We're dependent on it, and we interact with it continuously whether we know it or not. That is the question; how can we continue our interaction with that environment in a productive way to us and not destroy the goose that lays the golden egg? That's the problem in a nutshell.

That is what I've been trying to do. You can't separate humans from the environment, it doesn't work. Then you have a protectionist attitude, which means nobody touches it, take it away. I want something that produces. I want to keep from destroying what the future generations deserve to have. That is what I want to do. That's what I've been working on this for.

MR. DeMARIA: Before you go, Robert, let me just ask a quick question. Chris, if we were successful in setting up these reserves like the one in the Gulf and they produced fish, lots of big fish and the stock assessments took into account these fish; would it be possible in some years to come to have enough fish to have the stock recover to a certain level that we could relax some of these restrictions and let these guys fish year round? Would that be possible and is that one of the goals?

DR. KOENIG: That's one of the goals. That is definitely one of the goals.

MR. DeMARIA: And it is possible?

DR. KOENIG: It is possible. When I read you Danny's letter, this is that top-end fisherman in the Gulf who was initially opposed to the reserve and then became its strongest proponent. what

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he's mad about is that he's included with everybody – here he has got a wonderful area around this reserve where he does his fishing and a lot of other fishermen do, too.

They signed a petition stating this – I don't have it with me, but they did – and submitted it to the Gulf Council. But what they're saying is why should we be restricted by the red snapper restrictions when our red snapper are more abundant here than I have ever seen in my 37 years of fishing out here? But they are included with the rest of the stock, you see, and so their restrictions are the same. That's going to be the future problem, I think, is regional management. How does this region differ from that region?

MR. JOHNSON: Thank you for your time. I think you'd have wide support for regional management in this room, but we're not going to get into that. My concern here is the two species that we are really the most concerned about, that's Warsaw grouper and speckled hind, and the benefits of these MPAs to those species directly.

We have a spawning closure for gag grouper, and I think no one would argue the benefits that we are going to see from that. This has been in effect for a few years, you've been studying; have you seen an increase in the spawning activity of the Warsaw and the speckled hinds, because again that's what we are really looking at is how do you –

DR. KOENIG: I haven't seen any spawning activity, none, and the reason why is because – and I'll talk about it later on in the talk – this has been heavily poached particularly during – as I say there on the bottom – particularly during 2004 and 2005 when we had all those hurricanes in the Gulf. What the Coast Guard decided to do is not pay any attention to the reserves at all, zip.

I got that from the commander of the Mobile, Alabama, Coast Guard Station. Every time I went out there, three or four fishermen on Madison Ridge and they can pull in a thousand pounds a day easily, easily. This reserve really has been closed since 2006 because they brought the gag sex ratio, which had risen to 8 percent from 2 percent, significantly now, down to 2 percent again; simply by heavy fishing during those years.

I know they caught those two species, Warsaw and speckled hind. Basically that reserve is like five to seven years old. It was completely destroyed during that time period. If more reserves are closed over here – and I'm going to talk about it at the end of the talk – enforcement and surveillance are absolutely necessary, because they are going to tell you that everything is cool. I'll show you how I proved that everything wasn't cool.

MR. JOHNSON: Well, I agree with that and we all know there is always going to be people that are going to poach and break the law. It occurs right now. The red snapper has been closed for years and there are still people fishing just like probably they never were closed, but I think it is a very small number of people. My concern is we were talking about increasing MPAs, expanding MPAs, and the reason we're talking that is to ease the restriction, my understanding, of the 240 and deeper closure because we're concerned about Warsaw and speckled hind.

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DR. KOENIG: No, not only easing those restrictions, actually doing targeted research.

MR. JOHNSON: Right, but in the South Atlantic the council voted to rescind that and they haven't done it because they have to have something to replace it with. We just want to make sure that if we are going to establish more MPAs or expand on existing ones – we know it's going to benefit other species, but is it going to benefit the ones we are concerned about?

DR. KOENIG: Well, what I'm saying is that we know zip about their biology. We know some life history parameters, yes, but we know zip about where they go, where they spawn, what they do. We're in the stage with those two species that I was in the early nineties, late eighties actually. The council didn't have a clue where they spawned or when they spawned or anything about their sex change, even.

The work that I started back then is where we are now with this. To find out about two fish that are knocked down as far as these are, we have to get something to work with because everyone we catch we kill. If you don't have focused reserves in habitat on the shelf-edge where we know they exist, how can we tag them with pingers? I'll show you how I did that in the Madison-Swanson. How can we monitor their movements?

They've got pingers that are three inches long that you can put in the body cavity of fish that last ten years, and you can detect them a quarter of a mile away. Those are the kinds of studies we need to do. Where are they spawning? I don't know where they are spawning. There is probably some data.

I know there is some MARMAP data that showed reproductively ripe individuals. We can go back to that. But actually seeing where these fish migrate seasonally to their spawn; we know when they spawn. Warsaw spawn pretty much overlapping with Goliath grouper; August and September is their dominant spawning.

We look for them, where are they going, but we have to have something to work with. You just closed 240 feet plus. You've got nothing, because they are all being killed in these focused areas. I'm saying close off these areas and find out where they are moving, find out what you need to protect. For all I know they are moving all the way down to the Gulf of Mexico; I don't know. I never dreamed gag from South Carolina would end up in Madison-Swanson, but they did. We don't know.

Hell, all of those juveniles that we're seeing may come from the Gulf of Mexico, for all I know. We know nothing. To me this is a first step with benefits on it. That's how I perceive this shelf-edge closure. The 240 gives you nothing, and you can't even verify whether it's doing any good or not; it's just simply close it all. That's my perspective; that's how I feel about it. We need to learn something about it.

MR. MARHEFKA: When do the Warsaw and speckled hind on the South Atlantic, when do they spawn?

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DR. KOENIG: When do they spawn? Warsaw is August and September like Goliath grouper. Speckled hind I've got April, May, and then a disconnect and then July and August. Those are the two bits of data I found. This person, Ziskin, who will be at this other meeting, has done some work on that. I have that paper on my computer, but I don't have it. I don't know all the details, but those are the times of spawning, and that would be reasonable for them.

MR. DeMARIA: Bobby, did you have something to say and then we could move on with Chris' talk?

MR. CARDIN: Chris has said a lot, and I have more than one question. Chris, you talked a lot about the Gulf, but I know you have quite a bit of experience in the South Atlantic. I think in the nineties I collected for – weren't you and Jack McGovern on a study?

DR. KOENIG: Yes, I worked on the Oculina Banks a lot trying to recover the damaged habitat, which was damaged in itself by trawlers.

MR. CARDIN: I keep hearing you say like you don't find many gag aggregations less than 140 feet, and, of course, you are talking about a lot of deep stuff in the Gulf. Per se, we keep hearing a lot of talk about the divers, and Grant actually did a think in Florida Sportsmen that said the divers had wiped out some gag, some snowy and Warsaw aggregations.

DR. KOENIG: Divers?

MR. CARDIN: Divers.

DR. KOENIG: I don't agree with that.

MR. CARDIN: I don't agree with it either, but I hear you talking about you saw the male population of gag go from 2 percent to 8 and back to 2 percent, and this is areas that were strictly fished; is that not correct?

DR. KOENIG: This is Madison Ridge.

MR. CARDIN: Right. Our friends in North Carolina say that divers target big fish; and I as a fisherman and diver, my bigger fish are from fishing and not from diving. It sounds like you would agree that it doesn't matter what gear it is, you can still fish the big stock, the male fish down?

DR. KOENIG: I'm sorry; I didn't hear the last part of that. I would agree with what? If I've got to agree with it, I've got to hear it.

MR. CARDIN: It sounds like you can fish the male population down with all types of gear; it's not just diver gear, but it is just as likely to do it with fishing gear?

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DR. KOENIG: Yes, I'm going to talk about that. It is a little more complicated than that but I'm going to talk about it, yes. You're absolutely right, any kind of gear can fish them down. MR. CARDIN: Well, if you're going from 8 percent to 2 percent, you've wiped out 75 percent of the males in deepwater with strictly fishing gear, 75 percent of the ratio.

DR. KOENIG: Yes, it's even worse than that and I'll get into that in detail. If you'll save your question until then, I'll most definitely.

MR. CARDIN: Well, one more thing' I noticed that they were going to do the Warsaw closure in the South Atlantic. I'm only allowed to catch one fish a day, so as quick as I could I put together 18 Warsaw samples, if you can use them. I've been trained by SC DNR on how to collect. I used SC DNR gear, both the genetic and otoliths and stuff like that if it can ever be used.

DR. KOENIG: Oh, it's all useful, sure, absolutely.

MR. CARDIN: If you do need some stuff for the Warsaw of the South Atlantic, I'd be more than glad to pick my tools back up, and council has given me LLAs before, so I'd like you to keep that in mind if you would. Now a question I've got to say is I could kill a Warsaw a day, maybe 40 days a year. I could probably kill five a day at certain times a year. But what I don't recall ever seeing roed up Warsaw in the depths that I dive.

DR. KOENIG: No, there is somebody in here that told me, I think it was Robert Johnson, said that sometimes he'll see the juveniles in shallow water off of – is he here?

MR. JOHNSON: Yes, we actually have caught juvenile Warsaw groupers with black sea bass in the wintertime. I'm talking six and seven pound Warsaw, little teeny guys, still have white spots all over them. After talking to you, most of our Warsaw obviously are juveniles if they don't become sexually mature until, what did you say, seven or eight?

DR. KOENIG: Nine years.

MR. JOHNSON: Nine years of age so that means a 20-pound fish is not even probably sexually mature.

MR. CARDIN: Well, this year there was an 80 pounder taken by a free diver in 45 feet of water where I live at. The fish that come in are usually, I believe, either reproductively inactive or perhaps they are males.

DR. KOENIG: When I was a kid, I collected tropicals just for fun off of West Palm Beach. I used to see in really shallow reefs those little snowies come in because they were so pretty with the little spots on them, beautiful little things. I don't know if they still exist there or not, but they would be there. They'd be in the shallow reefs.

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MR. DeMARIA: Okay, do you want to move on with your talk, Chris?

DR. KOENIG: Yes, unless people want to take a break.

MR. DeMARIA: Keep going.

DR. KOENIG: All right, so as I said there was intense poaching, and I witnessed it myself and a lot of the fishermen friends of mine told me that it was repeatedly happening, so things changed. I'm going to give you an overview now of what we found from this reserve after all our work, but keep I mind it has been poached almost continuously during its inception, when it was first put in place in 2000, higher and lower levels depending upon Coast Guard involvement.

I developed this method of getting these fish up from about anywhere from 260 to 300 feet of water. Basically what I did and my students did was dive down and we'd catch them in these traps. These are the same traps that the MARMAP program uses. We also catch them hook and line for some hook-and-line catch-per-unit effort data I wanted to get.

What I would do is bring them up to a certain – we had the lines marked off, of course – and depending upon where we were fishing and what depth we were fishing, looking in terms of feet, I was catching them in 230 feet of water here. I'd bring them up to 98 if I wanted two times the volume of the swim bladder as they came off the bottom.

If I wanted two and a half times, which is what I typically used, two and a half times the volume—that is sort of like catching them in about 45 feet of water and bringing them to the surface. But you have to vent them there, because if you don't what happens is they come to the surface and they're hemorrhaged. About 90 percent of them are hemorrhaged from those Madison Ridge depths. It would have been futile to tag them, obviously.

This is what I did and I got an 85 to 95 percent survival on these fish on the tests that I did and putting them back down in cages, so it's pretty darned good for catching fish in that depth. Venting at depth was the way I did that. Okay, here is some of the movement data we got. And a lot of the pinger data; I put a lot of pingers in fish along that ridge, but I'll show you why I don't present it. Most of the fish move in this area. Here is the amberjack moving that far.

You can see this is 40 kilometers, so that could probably do, I don't know, maybe 100 miles, something like that. The brown dots are gag, and you can see that they've moved off Madison Ridge. This one moved down here and one moved to the north. But the picture I want you to see is that most of them are red snapper.

And as I said, and Danny will say in his letter, red snapper populations rose dramatically around this reserve, and gag, too. This is a close-up of the same thing, and you can see there is non-directed movement. I mean, it is kind of like here, there, and back. A lot of these stocks are just dots like here, and are fish that didn't move at all. This gag didn't move at all. But this is just – I did this just to get a perspective on how these things are moving around.

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Are they all moving in and moving out; are they moving away? It looks like they are just hanging around, basically, except for a few. Okay, when you compare size structure in and out, keep in mind poaching was heavy all along this time period, but it wasn't as heavy as the fishing density was outside.

There are amberjack that saw a dramatic increase. These error bars are basically the amount of uncertainty about that level. With this one there is kind of more uncertainty, but they are all significant, except for scamp. Amberjack, almaco jack, gag, red grouper, red porgy, red snapper, scamp and vermilion snapper, so inside there are definitely larger fish.

Now what we used, because we released virtually all of these fish, we developed an age structure using fin spottage and fin rays, dorsal fin rays. Here is the red snapper fin spine. What we do is we clean it up, clean all the juices out of it, and then dry it, and embed it in epoxy, and then take a lapidary saw and cut off fin sections. This is the epoxy around it that you're seeing. These are the saw marks on it.

What you get is sort of like cutting a layer through a tree. You get the annual log of the tree. Then we compared these with otoliths, and we saw that there was a one-to-one relationship, so we were doing pretty good. You don't have to really be super interested in being absolutely precise in terms of the otoliths, because we used the same method inside as we used outside.

Well, if there was a problem, we wanted comparative data and not absolute data like stock assessments need. Anyway, but it was pretty darned close, and so that's how we got these age structures. And again, there is all of them except scamp. It was older, by not nearly as much as I thought it should be, but remember the poaching was going on right through 2008 and 2009.

This is catch-per-unit effort hook-and-line catch. Inside it was clearly higher, the abundance was higher, but it was much higher than this shows. As you all know these reef fish, they are very clumped in their distribution. They occur in very precise spots. Getting this data requires that the fishermen that I work with; first of all, they showed me these spots in Madison-Swanson, but on the outside that they focus on spots that are similar, and so it's not that easy to do.

But we used an ROV in this case, and what we saw was that there is some more on Madison ridge again. On the outside, these are gag spawning sites. One size was much smaller than the inside, and red snapper was very large. As I said, they spawn on these same sites. The scamp; there was more outside than there was inside. Red grouper, it wasn't red grouper habitat, so I didn't expect – it wasn't in that northeastern part of the reserve, so I didn't expect that there'd be a change.

The reason we went in there and started working with these fish was for this gag sex-ratio problem. Basically groupers are either typically one to four or one to three males to females. Convert that to percentages, you're talking about 20 to 25 percent males in the population, and that's what it was historically both in the South Atlantic and in the Gulf.

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Now, how these things interact with the females I haven't a clue, because nobody has actually seen them spawn, so we don't know. It is really hard to see them spawn. Anytime a fisherman tells me that they're spawning in shallow water at diveable depth, I always go to see because I want to get it on film, but I never get that spawn.

The two questions we entered into this project with was gag sex ratio declining in the face of fishing pressure, and now that's like 1 to 5 percent from 20 to 25 percent, which seems to be pretty serious, and it's persisted like that at least on the sites we know about. Now when George Sedberry did that work and Jack McGovern off the South Atlantic, they found one site that one fisherman was fishing off Savannah, one area. It was in 30 fathoms of water.

That had the historical proportion of males. This fisherman is no longer alive, so you'd never get a chance to talk with him. That was the only site that had it that I'm aware of. The second question is did shelf-edge reserves protect the natural sex ratio? Every biologist I've ever talked to said it is important to preserve the natural sex ratio. I think it is, too, because basically you're bottlenecking your reproductive output with this.

I don't know what the capacity of one male is, but I doubt one male can fertilize the eggs of 99 females. It seems unlikely to me. This is what the fishermen call a copper belly, and I'm sure all of you are familiar with it. Black belly males have a really dark back and typically have a black moustache here, and black on its sides, pectoral fins.

Now all of those are male. Everyone that I found and checked was a male, but not all fish – the discoloration are females. In fact, some of the new males – I think they're new males; they are males that just developed from females and still have female coloration. Some of them will be gray, they won't be black, and they'll be gray through here, but you can't count on them.

As I said before, I've had videos that Bill Parks gave me from pre-spawning aggregations at Boynton Beach, the Boynton Beach Outfall and some of those. When I was a kid I'd spearfish off West Palm Beach, off the Palm Beach Jetties, I knew that the gag showed up. This was in the early sixties, yes, during January and December, and we'd go out and spearfish them. I didn't know they were even gag. I just knew they were big fish, using a spear and it's good to eat. But that's another pre-spawning aggregate.

Now, when they're on those aggregations, those are pre-spawning, as I said, in December and January. They will change – and I've got a video to show this, Bill Parks took it. They will change. A lot of them look like males, you see all the nuclear gradation of color from this to this. Then Bill was, of course, fishing these, so he killed and gave me I think it was about 40 gonads. They were all female, all of them.

They've got this ephemeral color change that they can turn on and off. Now there were a few transitional that were individual half male and half female would show up after that initial prespawning aggregation. There is something going on behaviorally there, but I haven't been able to figure it out. I haven't put a whole lot of energy into it, but there is something going on.

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If you see a fish under water – see, I wanted to count all the males in the videos that Grant Gilmore made, but it didn't work, because I know some of the females can change to look like a male while they're in the water. When they are on the deck they don't; it's like that. Anyway, the life cycle, which I pretty much talked about; the females have come.

First they'll form a brief spawning aggregation in here. On the east coast here where you guys are, they'll – McGovern in his dive showed that they'll move south and a lot of them, not all of them, obviously, but will move south and they'll hold these pre-spawning aggregations in water like 80, 60 to 80 feet deep, something like that along the east coast, and they are like staging areas, and then they disappear from them.

Well, we see the same thing. The shelf in the Gulf is huge, so it is really hard to find, but some wrecks in the Florida middle grounds are pre-spawning sites. A lot of fishermen go there to get what they call their winter fish. Those are all females, and then they move out to the deep water. Now males stay out there. We managed to get data to prove that.

They stay very close to the spawning site, which is their Achilles heel, really. All spawning that takes place is external. Eggs float and they hatch out, the larvae somehow they get into seagrasses or estuarine environment. They settle out and they spend – in our area they spend about the first five months in seagrass and then they move out to the shallow reefs.

They're about anywhere from eight inches to a foot long when they move out of the grass beds. It is always coincident with the first cold snap in October, when the water temperature is reduced to, say, 28 degrees or 20 degrees Celsius, 68 degrees Fahrenheit. Not all of them, but about 95 percent of them leave and go out to those shallow reefs, and they show up in the shallow reefs.

Then it takes them three to five years to mature, and they hang out on these mid-shelf reefs and shallow reefs, and there'll be some really big ones inshore. Historically some big ones were in Tampa Bay. A lot of the fishermen who fished Tampa Bay said they'd get 20 or 30 pounders in the Bay. But none of them were males, they were females.

All right, so I tagged with these pingers along Madison Ridge, and these are the dates I did the tagging. Again, I did some recent tagging, but I'm not presenting that. It shows basically the same thing, 26 months, a little over a year here. A lot of the fish were lost. Again, poaching was going on during this period of time spot; you know, the pinger would just disappear. Well, one red grouper I had tagged, I had tagged him with a pinger and they didn't get at depth, and it was a very short interval there, like every 10 seconds. I saw on the receiver that I had near that fish that I tagged, the pinger go right to the surface and disappear. It was clear what happened to that fish.

These are the cases. Basically that fish didn't move at all in 26 months. This one moved a little bit, moved to an adjacent station, which was about a half a mile away. This one moved to one

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about a mile away. Typically when they move, they would move back, because I had receivers on every one of those sites in there.

This will give you an idea the kind of data that I got. The one that didn't move, when I say it didn't move, I don't mean it just stayed in one position. What I mean was he hung around that site. Okay, here is where I first tagged him. Now these pingers in the daytime, what I did was like plotted the total amount of pings I heard during the day, because the pinger obviously is individually coded, so I know that individual fish.

What he did was he hung around for a while and didn't move, because the natural number of pings, I think it's every five minute they gave out pings, it was 280 or something like that, 260, so he hung around. That fish wasn't moving at all. Then he started moving. He started moving around; like he would go away and come back.

Like this dot right here with very few pings, that fish was gone most of the day and then he came back. Obviously, they are out feeding or something, but that's the pattern. Here is the other kind of pattern that we observed. The fish was apparently convalescing here after I pulled it up from the bottom and tagged it. Then it moved to an adjacent site, probably moved the 13, 14 to 13 in here, and then he moved back to his original place and the receiver at this site never picked him up again. But the point is they stay there, the males do.

Okay, so this is the Gulf history, and again the South Atlantic history is pretty similar for the blue bars. There may be a little variation in here, maybe up to 5 percent or something, I don't know, but statistically it's not very different. Historically, what I did was I took all the fish larger than 75 centimeters. The reason I did that was because I was sure that they were all mature. I picked them at 66 centimeters, which was the 50 percent size at maturity.

If I had a lot of fish between 50 percent and 100 percent, half of those would be immature, obviously, right? I wanted to make sure they were all mature, because all the juveniles are female, so I didn't want to bias the ratio by including a bunch of females; do you see what I'm saying? During the late seventies, this was done by Peter Hurt and his colleague Rod Linder.

Again, a very similar pattern was shown in the Atlantic by Mark Collins and his colleagues. Then when we started doing our work in the early nineties, this is what we showed, and then NMFS did it and they showed the same thing. Then in the late 2000's when they were working in Madison-Swanson, they were doing it a little lower.

Then the percentage of males in the reserve jumped up, not as high as this, but again there was poaching going on constantly, which I'll show you. The mechanism that we came up with and taking all the data into consideration is not what people always thought. People always thought that, okay, the gag on an aggregation were dominant and had a higher propensity to go after the bait and eat the bait, so they were easily caught.

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That idea was an initial idea, because we didn't know what we were talking about, we didn't have the data. After we got these data – and I accumulated a lot of data, and I'm putting a paper together right now – we found that the male is – like I said, the male is in spawning sites year round. Sex change occurs during the spawning season when the males and females are together.

We know that they have to be together to do this so they can perceive the paucity of males in the population. What happens then is that right after the spawning season you see an increase in transitional. Those are the fish that are halfway between male and female. You saw in the Atlantic data and you saw in the Gulf data it increases and drops off by August.

In other words, those females induced to change sex were becoming transitional and then males. The fishermen, they continue to target these sites all year round. What's the reason? Red snapper, red snapper is spawning out there in the summer, so they target them in the summer, and other species as well, as well as the remaining gag out there.

It is a multi-species fishery so there is no reason why they wouldn't target all these sites year round. But remember a lot of the females move in, not all of them but a vast majority of them move in out of the reserves. What happens is there is a higher proportion of males then. You can see this in the data, and I'm not presenting all this.

Then the proportion of males in the reserve increases over what it was during the spawning time, right, because the females aren't there – do you follow what I'm saying – so a higher percentage of males. The fishermen then start catching the males after the spawning season, not during it but after it. The two data sets I got were in a logbook. This commercial fisherman fished from about the mid-seventies to I think the late nineties.

He gave his logbook to NMFS and I got the data. He logged every one of them copper bellies that he caught. This is the pattern that I plotted out. Here is the spawning season, February and March, right, very few males caught, but it increases dramatically. Again there are new males being put into the population along the reef. This I think is that pre-spawning aggregation pulse of transitional to males that occurs during that period of time.

It is very different. I haven't figured it out yet. Okay, what we did, Helen Collins and I, who worked at the NMFS lab in Panama City, we told the fish houses to keep all the copper bellies that they got, and they did. We went down and sampled and then we published on that. What we found again was this point was relatively low and then it jumped up and then back down.

It was that same December pulse. Those are the only two data sets I know of on copper bellies in the Gulf, but they show very similar things, that the males are not caught during the spawning season, they are caught after the spawning season. If you close the spawning season, you don't protect the males. You have to close the area; you have to protect them all year round.

We still have a low percentage of male gag in the Gulf, and the reason is because they keep closing the spawning season and they won't hear it, so I'm getting this together to publish this,

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this is how it works. Okay, now this is a spillover. This is the part I'm sure you're interested in. It is difficult. As I mentioned this earlier; I relied on the evidence from multiple sources to see if spillover was actually happening. I used the anecdotal long-time fishermen data. I used VMS. I used NOAA flyovers, and I used commercial catches going from the reserve, Madison-Swanson.

Now to get your concept of spillover, there are several sources of spillover; one is this. Consider these ellipses as home ranges of the fish, whatever species it happens to be, it could be red snapper, could be scamp, could be whatever. Red grouper would be at dot because they don't move. Okay, those are their home ranges, but their home ranges – and this square represents the Madison-Swanson Reserve.

When we overlap to the outside of the reserve, then they are available to be caught, whatever species this is. Now there are always new recruits coming into this population, too. Gag are gaining maturity, red snapper that are gaining maturity moving out, so that's filling in and increasing the density inside the reserve.

But the other thing that we see in the spawning migrations both of gag and somewhat of red snapper, but mostly gag moving in and out; we also see fish that are moving onto these reefs, and I'll show you - I don't know what attracts them, but they are. The first set of data is the VMS data. VMS in the Gulf was put into place in 2007 for commercial reef fish fishermen.

What I did was I got 2008 there. It took me two years to get it, but I got it. I plotted it for this region between Madison-Swanson and Steamboat Bluffs. Now each dot represents an hour. Every hour that boat's position is recorded. Okay, I don't know what this is all – I don't know positions, I don't know anything. They just gave me these dots, and I plotted them out.

Then these radii from the reserve are five nautical mile intervals. What you can see is this intense fishing around Madison-Swanson, which is what the fishermen told me that they did. Then you see some fishing down in here. But the trouble is when it turns blank you don't know how sensitive – there is going to be a lot of sponge there, so I plotted it out.

What you've got is, okay, these are a number of recordings per square kilometer. It could be for anything, it is just per unit area. What we saw was within the five-mile point it was fairly high. Ten miles it was even higher. That means those commercial boats are staying in that area close to the reserve, and then it drops off after you get out to the 15 miles and down here.

Then it builds back up. This is at about 35 or 40 miles. What you're seeing is data from around in here out to that 35 miles, out to here, and then you start picking up these areas in here. That's why it is going back up. Now this is basically, -- there's Sikes Cut in the Apalachicola, fishermen come out of here, so a lot of this is juvenile fishing area.

A lot of commercial guys come out here, so it's dark in there; not because they're fish in there, but because they go back in and then they go back out from any port through the same openings,

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so it's picking up that. But the point is within 35 to 40 miles away from the reserve, there is definitely a decline in the occurrence of these boats.

Okay, here is the NOAA data. I don't know if you can see this or not; I can't see it at all. Can you see any dots in here other than the yellow and the green? It's totally gone to me, because I'm color blind and I can't see it. If you're not color blind, you're lucky. Anyway, Madison-Swanson and Steamboat Lumps; these are 49 flyovers, okay. They've got the dates here, and then I've got – this was recreational on this side and that's the commercial on that side, but you can see a similar pattern.

Now the commercial again will spend more time down here or a lot of time down here in the edges, which are all rough, rocky habitats, but they also spend a considerable amount of time around Madison-Swanson. That's the second set of data. Now, we went out on commercial trips. I actually had to pay the fuel of the commercial boats. These were all good fishermen, mainly one fisherman who had fished in the area for 37 years.

We had to go down there because he was running the commercial trips and he knew there wasn't anything to catch, but he said you're going to have to pay me to go down here and catch nothing. I said, well, if I don't have zeros I can't compare. Anyway, so that's what we did and these are the numbers of gag per site.

Now when you plot them out on a regression, this is the mean number note. I should preface this, because you commercial guys know when you fish a spot, and they do the same thing in the Gulf, they fish until the bite stops, whatever the hell that means. If the bite stops it's gone. That's what this represents in this. Recreational guys fish very differently. They know they are going to be out there the next day, so they don't want to deplete their sites.

They'll catch a few fish here and they catch a few fish there, so I couldn't use those data. I had to use the commercial data, because I wanted to see sites that were fished commercially, depleted down; and then he goes to the next site, depletes it down and go to the next site. That's what these represent. These are mean number of gag per site that were caught using that commercial strategy.

All right, this is the distance from Madison-Swanson. Now this is a highly significant. P refers to the probability that this happens by chance. It's 2 out of 1,000, okay, so it's a very, very good relationship showing that the gag were caught much closer to Madison-Swanson than they were distant from Madison-Swanson on those radii that I showed.

Red snapper wasn't so tight, and it is like 1 out of 20, something like that would be the probability of this occurring by chance, and these are confidence intervals, these bars over here. Basically it is red snapper that was caught, again showing that red snapper were common around the reserve as well.

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Now this is the size of the gag inside the reserve relative to outside the reserve relative to the historical 1970's data. This is what a relatively natural population looks like. These are the triangles like this. It goes over here and drops off like that. Another way of saying that is there's a lot of big fish. These are centimeters, a meter is right here, so there were a lot of fish over a meter in length. A meter is, what is it, 39 inches or something like that? That was the historical, the triangle.

Now the inside are these ones that are kind of in circles that have a little bit of blue cast around them. That's this crew here. That's the inside. All right, again think of 75 centimeters as being 100 percent mature, and 60 fish in here as being 50 percent mature, so we're fairly close to the immature line over here. Okay so that's the inside, and then outside you see there were smaller fish, a lot smaller fish. It turns out that 66 percent of the ones outside were less than 75 centimeters, and the inside it turns out that almost 33 percent were less than 75 centimeters.

There are a lot of juveniles that were showing up in that outside catch, which means that they were not necessarily going to the spawning sites. They were moving from their shallow water habitat as they matured and then going to those outer reefs around the reserve. I don't know why, but that's what it certainly looks like. This is just a maturity phase that I got from Barry Fitzhugh's data.

He works with the NMFS lab in Panama City. This shows where 75 centimeters is right here, so here it is close to 100 percent mature here, and then the 50 percent mark would be like to there. That's from 60, I don't know 65; about two feet – there are 31 centimeters in a foot, so, yes. That's why I selected this instead of 50. I didn't want to include the females that were in that 50 percent thing. All right, we could stop here, because I'm going into a different section.

MR. DeMARIA: Do you have a few more questions and then we'll take a lunch break, I guess?

MR. CARDIN: Yes, what is your 75 centimeter fish; was that like a 3 to 5 year old?

DR. KOENIG: Oh no, they're older than that.

MR. CARDIN: But they were all reproductively mature?

DR. KOENIG: Well, what I said before, when you look at the stock assessment, the size and age, God, it's crazy. A four-year-old fish can be anything from 15 inches to 36 inches. Your going what the hell happened, why did this one grow so fast? I think it has to do with where they land, what reef they land on, the food resources and everything. I don't think it's genetic. It's not an age thing; it's a size thing.

MR. CARDIN: But the 75 centimeters, that was only at 50 percent sexually reproductively mature?

DR. KOENIG: Yes, they are fully mature; every fish larger than 75 are mature.

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MR. CARDIN: A hundred percent.

DR. KOENIG: Yes.

MR. JOHNSON: I just wanted to make a quick point. The 140 to 180 foot depth that the spawning occurs, I would personally agree with that. One thing I didn't really agree with was that the male gags stay put, because we do catch them in 21 fathoms of water. I've caught them in the shallows of 105 foot, on a place that obviously was not a spawning staging area. I think the males do move during the year and then probably move back at least in my area to the deeper water.

DR. KOENIG: Well, those pinger data showed that they moved, but they come right back, so it's possible that you're right. They're moving in for food resources, but then they go back to their site. Yes, if you saw it then –

MR. HARRIS: I've just got a quick question. Since the area that you were doing your study in was in a multi-species fishery, because we keep going back to where we're talking about all the red snapper and the other interactions, that combined with the low level of current for the area, I'm sure that's got to play out as far as that range, as far as the downstream effect for the thinning out; did you have any observations as far as predation between species on the spawning larvae?

I know that down in the Keys we see a lot of stuff with the AJs spawning at the same time as the muttons. It almost seems to me, without being a scientist, that the muttons are eating all the spawn or the roe coming off the AJs when it's presented, but almost it seems like it would be a defensive species mechanism to reduce the amount of predators in the water. Does that figure in somehow?

DR. KOENIG: Well, the species that feed in the water column are very different from the ones that feed on the bottom, as you know. I mean, their mouths are small, they are for picking things like this. Like scad are well-known egg eaters, and that's what you're talking about eating the spawn, right? Around the Goliath grouper sometimes the scad are so thick in the spawning time that – this is Goliath grouper – that you can't see the fish.

They follow them up when they go to make a spawning run. There are two people that have seen actual spawning runs, and both of them described the same thing. The Goliaths try to shake them off, so I wouldn't be surprised if that same pattern happens out there. But, keep in mind that a Goliath grouper is a crab eater and a gag is a fish eater, and they are very adept at catching scad. I don't know that scad would hang around them like they do Goliath grouper.

I've never seen it. Again, it depends on which species you're talking about as to whether that has happened. But to have a bottom feeder like – not a bottom feeder but a benthic feeder, I should say, that's taking on a bad connotation, he's a bottom feeder. A benthic feeder like

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mutton snapper I would doubt very seriously would ever eat the spawn of another species. They don't have a mouth to do it. They can't feed on eggs.

The egg feeders are just like do, do, do, do, do, they can catch thousands of them in a short period of time, very, very quick; unless you're a big thing like a whale shark and you can just scoop them all up, which happens actually over the cubera snapper spawns. Will Hayman described those spawning aggregations of cubera snapper off of Belize. The whale sharks show up for that event and they benefit from it by filtering those eggs, but that is not en masse.

MR. MARHEFKA: How critical is water temperature for the larval to survive?

DR. KOENIG: I would think it would be considering other species. I think it would be very important. But again most of the eggs float; I mean the species I've looked at float, so that whatever the temperature is right at the surface would be the issue. For a winter spawner it's probably colder temperature and for summer spawners – like Goliath grouper, I don't think eggs could survive at the same temperature that gag eggs would survive at.

Goliath grouper themselves can't tolerate temperatures very much below 60 degrees Fahrenheit. In 2010, January, that January cold snap killed out 93 percent of the Goliath grouper in the everglades, just boom, gone. But a gag, which is more of a temperate species, can tolerate that. Even red drum can tolerate it where snook can't. It just depends on what species it is and what they're adapted to.

MR. MARHEFKA: Also, were any of the commercial fishermen allowed to go and fish in the Madison-Swanson Reserve who are in the IFQ program, the snapper program?

DR. KOENIG: Nobody was allowed to fish in there. The one problem I have is that the recreational fishery lobbied very hard to do trolling in there along that ridge, because they said that was a good spot to catch wahoo.

MR. MARHEFKA: We just want to take note –

DR. KOENIG: I fought against that real hard, because NMFS has demonstrated that you can use down riggers and get down to that bottom if you troll at about four knots. They actually caught a Warsaw trolling with a ten-pound lead down there. I wish they hadn't done that, because I've gone out there and I've seen trollers going along at 2 knots. You can't tell what they're doing, but trolling at that speed is illegal, but nobody can catch them. It's another potential source of poaching.

MR. CARDIN: I would say you wouldn't be the right person to ask this, but then you've told me you've worked with law enforcement and what have you over this area. With IFQ fishermen, they still have to abide by the closed areas and the spawning season closure and all that? The IFQ didn't change that?

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DR. KOENIG: Yes, it's completely no take and should be.

MR. JOHNSON: Just one more; you mentioned that these guys were talking about the red snapper are so abundant around this MPA; do they consider maybe current management in the Gulf and all the restrictions that the whole fishery has gone through may attribute to the abundance of red snapper?

I know in the South Atlantic red snapper are abundant everywhere. I could make that claim, more red snapper than I've ever seen in my lifetime, as could probably most people here. I'm not sure if the MPA was solely responsible for that. I'm not against MPAs; I'm just making that statement.

DR. KOENIG: You're absolutely right; I don't have any question with that. The reason I don't is the basis of any experimental study is replication and randomization, and neither one of those are here, so I can't make a probabilistic statement about that. Yes, you may be absolutely right. All I'm saying is what we saw. Because reserves are such a political thing, I was lucky to get it, no less to say. It was a war to get it. There were really people shouting right in my face.

It was a war, and now they want it. Sometimes you've got to be taken kicking and screaming into a better place. But you are absolutely right; it could be that would have happened, anyway. It could be. If I don't have replicate reserves down in the coast and I don't see the same pattern even outside of that northern part of the reserve, yes, to make any kind of an inference for an entire area, you have to replicate. I'm going to talk about that here, too, exactly that.

MR. JOHNSON: My point was we have so many management decisions that have gone into place in the last three years, so many restrictive ACLs, and as a fisherman I know that all these things are benefiting the fishery, there are more fish. When you protect fish, there are going to be more of them. That is just common sense. I just would like to see some time given maybe to see what all these things are doing instead of just keep heaping on more and more and more. We didn't get to this problem –

DR. KOENIG: But the difference here is that I'm not saying close areas that you fish. I'm saying close areas that add to your fishery. These are called source areas because they produce eggs. It's like an egg generator, boom, boom, boom. Right now you're killing off the egg producers. I'm saying keep that aside. That is not taking away from your fishery, and it will eventually add to your fishery.

Obviously, if you continue to kill off – as I said in the beginning, if you start spending the principal off an investment, it is not going to last long. This is not just let's close all the hard bottom out there. That's bull! The problem with that approach is that it forces fishermen into these source areas. Let's call the other one sink areas where you catch fish on this hard bottom and the shelf-edge is source areas.

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If you put an MPA on a source area, you keep that source protected because the source is the spawn. If you close off sink areas, you cause a decline in the fishery even faster because the spawners are being caught. That is the concept that needs to be gotten here. That's exactly how I want to present this.

MR. DeMARIA: It's just 12:30. Do you all want to take a break for lunch and be back here at like 1:45?

(Whereupon, the meeting was recessed at 12:30 o'clock p.m., April 18, 2012.)

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WEDNESDAY AFTERNOON SESSION

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The Snapper Grouper Advisory Panel of the South Atlantic Fishery Management Council reconvened in the Hilton Garden Inn, Charleston Airport, North Charleston, South Carolina, Wednesday afternoon, April 18, 2012, and was called to order at 1:45 o'clock p.m. by Chairman Don DeMaria.

MR. DeMARIA: Are there anymore questions of Chris before he starts in again?

MR. MARHEFKA: Chris, I've got a question for you. How long was it before you actually started seeing a turnaround with the stock starting to go and flourish and stay there at this Madison-Swanson Reserve?

DR. KOENIG: Well, for the work we do it takes a long time, but for the fishermen's perspective it was pretty quick. It was three years. That's when they said they wanted to keep it for ten. I mean, I always said I wanted to keep it for ten, but it was their writing in and wanting to keep it. If they had written in and said the other way around, you know, get rid of this thing it's screwing up our fishery, I'm sure it would have been gone after four years. I'm saying that most likely it was showing positive effects after three years.

MR. MARHEFKA: With you saying you are seeing positive effects after three years, what kind of percentage of fish did you – and I know I'm sort of putting you on the spot here. I'm trying to go and figure out what kind of percentage of fish did you go and sort of see become more abundant on that particular ledge.

DR. KOENIG: Well, gag started increasing in abundance right away. As I said, those sites were depleted. They didn't even stop to fish there right away. It was some sort of a collective memory that those fish have that they know the spawning sites. If there are still some remaining fish, presumably there always are – and it's the same thing with the Warsaw.

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You saw that picture of the Warsaw grouper, with them all on the dock. There were no Warsaws in there, there were no gag in there when I first started – I mean, when the thing was first closed. The way I knew that was from all those trips I went on out there. The fishermen stop if there is something to fish for. They go right past it if there isn't.

They went down to the edges, which were much more productive, which now is more depleted than Madison-Swanson. I can't give you an actual progression because what I have to do to do the work I do is get funding, obviously. That takes a while; there is a definite lag time, so I started in 2003 and the Reserve was closed in June of 2000.

MR. MARHEFKA: Were there other fish or are we just talking gags and snapper and Warsaws? What other fish are actually on that bump?

DR. KOENIG: Red grouper, but they are in a different habitat. They are not on the Madison Ridge. There is speckled hind, Warsaw, snowy grouper, gag grouper, scamp; a little bit in from the ridge there are Creole fish, which is kind of like a pelagic grouper, really red, you know what I'm talking about. I got again a little in from the ridge blueline tilefish. There are some red porgy's out there, big red porgies, vermilion snapper; a different porgy, I can't remember the name of it, but it's out there.

Then there is gold-faced tilefish, I caught some of those, too; even got some big - I got some hake; I catch hake out there. Usually when I caught those smaller species and the gag got into the traps, they'd eat them. I know that they were just eaten, because I'd run the traps overnight and they'd puke them up as we brought them up and they'd be very fresh. They ate stuff - they even ate scamp in the traps.

MR. MARHEFKA: Basically the whole complex was enhanced by doing it and not just one fish but the whole complex.

DR. KOENIG: Well, my focus – yes, I think so and the fishermen that I worked with thought so, too. I'm using their perspective. I'll read this letter from Danny, and he's fished that area, as I've said, from 1975 and still fishes the area outside the reserve. He can give you that perspective on the recovery in there. He was absolutely surprised, but I'll read that letter at the end of this talk and you can see. As I said earlier, I wanted to see him here but he's got work.

MR. CARDIN: You're talking about you've seen that area enhanced, but you keep talking now the areas next to it are depleted again.

DR. KOENIG: Are what?

MR. CARDIN: You were talking about the ridge next to it is depleted, so where is your overflow effect? I mean, are you seeing any positive overflow? It doesn't sound like it.

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DR. KOENIG: Well, spillover is just the general term. It's just a term for it, but it involves a number of different things. It involves the actual movement of big fish out of the reserve for feeding purposes. For example, when I was looking at the red grouper habitat in Steamboat Lumps, which is like 80 to 90 miles to the southeast of Madison-Swanson, 100 square miles, too, I was working in there and I was videotaping one of these red grouper holes.

They dig these big pits that are like five meters across and two meters deep. They're big. I saw a male gag, a big one, come in – there are a lot of little fish associated with these because red grouper expose their habitat – come in and hammer some of these little fish. I mean it was like lightning, but I got it on video. I was just looking at the red grouper.

Now the nearest gag spawning site has got to be miles away from there, because the bottom is all flat. There is virtually no structure out there except what exists in the sand that the red grouper expose by digging. You do see movement of big fish out of the reserve. You also have those spawning migrations of the females in and out of the reserve.

I think there is also an attraction. Who knows, the groupers make a lot of noise and there might be something that's based on the noise. I don't know, that is a guess, I have no idea. But the fish population is built up outside for basically those two reasons, spawning migrations and movement in and out of the reserve, which we actually observed from tagged fish, from what I think is attraction of certain fish to the reserve.

MR. CARDIN: I've fished the Gulf and Atlantic off Florida. In the Gulf you've got plenty of these little 20, 24, 28-inch groupers. On the Atlantic in South Florida we don't really have those fish. We see the little fish in the river. We see the little fish on the reef. It seems like they disappear from about five to nine pounds. I've always associated that with maybe the fish make their first travel north.

DR. KOENIG: What fish is that?

MR. CARDIN: Like five, six, seven, eight, nine-pound fish; we really don't have those fish down where I'm at. Gag, yes, that's what I'm talking about. You've been studying both parts of the ocean. Do you think these little fish migrate up on the Atlantic coast? There's a missing link in our fish off of South Florida, the five to nine pounds. Do you think there is a point that they actually gather with the spawning, traveling fish?

DR. KOENIG: I don't know; I have no idea. Nobody has really done the comprehensive tagging study in the Gulf that the South Carolina DNR people here in Charleston did off South Carolina. They saw a movement over there. There could very easily be a movement in the other direction. I don't know, the data aren't there.

MR. CARDIN: There are like 90 percent of my fish would be these smaller five to ten-pound fish in the Gulf. But it seems like – from that aspect it seems like two very different bodies of

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fish. We're comparing fruit, or apples and oranges, what have you. I was wondering if there were any other differences you've seen from looking at the Gulf and Atlantic.

DR. KOENIG: I haven't looked at the South Atlantic that hard. This was a lot of work in the Gulf. Without a protected area, it is hard to really come to any of these data, because the one thing I ran into was your fish were all constantly being removed while you are trying to study them. Every research project that I started in the Oculina Bank was confounded by loss by fishing. It's hard to draw any valid conclusions when that's happening.

I do know one thing; that they prefer certain areas for spawning, and that Northeastern Gulf is one of the ones where you've seen more spawning aggregations of gag than you see anywhere else in the South Atlantic. One of the reasons is that the juvenile habitat is inshore. That's the Big Ben Seagrass. There is 3,000 square kilometers of near pristine seagrass habitat there.

Those juveniles, they are not totally dependent on seagrass, but it is definitely their preferred habitat. Here in South Carolina you don't have any seagrass and they are in the estuaries here, they are up in the higher oyster reef creeks, and they hang around estuaries. They like structure as a juvenile. I'm talking about the little guys.

Seagrass is not absolutely necessary, but it certainly looks like it is a preferred habitat. What you see over there is high concentrations of aggregations offshore of this Big Ben area. There are modelers that show – I'm kind of dancing around your question, because it is a very difficult one to answer.

MR. CARDIN: Well, excuse me; I've seen your name on a lot of papers in the Atlantic associated with Oculina Bank. I've seen your port petroleum and fueling up on maybe different cruises you were doing. But, anyway, thank you for trying to give me an answer to that question.

MR. DeMARIA: Anyone else or can Chris get on with his presentation?

DR. KOENIG: Okay, I mentioned this several times this morning, but one of the problems is these marine reserves are put in place and there is no verification that they're actually doing what they are purported to do. What we want in terms of speckled hind and Warsaw grouper is protection of these populations.

And we want to go one step further; we want to be able to tag them and learn about their biology. When I say tag them, I'm talking about tagging with pingers with ten-year battery life; so long term we could tag juveniles, where do they go? Anybody fishing out there could scan by dragging a hydrophone for a receiver behind the boat and listen for them. Are they there or are they not there, and where did they go, and then see where they go during the spawning season if you get some bigger ones.

Those are technological advances that allow us to get a lot of inroads into the biology of these animals. Okay, the important thing here though is I think that there is a prime opportunity, if you

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decide to go ahead with these shelf-edge reserves, to set up what's called a BACI experiment, which is Before/After Control Impact.

Usually these experiments are set up around pollution-related things. In other words, does this outfall affect this part of the estuary? You monitor control areas and you monitor impact areas, but just flip it around and say, okay, the impact area and the impact will be no fishing, so what you'll see is the opposite, presumably, is an increase in the population of fish.

Then we do it in a way that you've got really solid verification of a spillover, which Robert brought up a little while ago is how do you know? You only have one reserve, how do you know it works that way here, or there, and there? Well, that's called statistical inference, and you have to have replication for that.

But because these things are so political, these reserves, I've only got one Madison-Swanson. I can't develop statistical inference from that. All I can tell you is what I experienced and what the fishermen experienced around it. Okay, this is how I see – this is just one of a number of different experimental approaches.

Let's say we've got six designated reserves or say potential – let's call them potential reserves; we act as if they're all going to be closed. Yet after the monitoring each one of them, we only closed three; three randomly selected. I don't mean just eeny, meeny, miny, mo. I mean actually using a table of random numbers and picking and verify them. These were randomly closed.

Okay, so what we'll know is we'll know what the population is like on the outside and on the inside. We can use ROVs, we can use all kinds of stuff, just evaluate that question. But the techniques we use to monitor them should be the same that we use throughout. Okay so we monitor fish abundance, whatever species you want, or the community as a whole, or the habitat, or all of them.

I usually go for as much as I can get, because the biggest cost to me is ship time, getting out there and getting people who know what they're doing to do these surveys. Okay, then we randomly select three and close it to all fishing, but we treat them all as if, in other words, three act as controls. Again, we're sampling outside and inside.

These are the only parts that we closed; and that should be because of the spillover effect and because you want to keep populations healthy inside, you keep those three, you just act like they were closed, half of them. But the other ones – and you fish, people fish in them as if they weren't there, but you go and monitor them. Those are your controls.

For a vast of the experiment, you need multiple controls. Then you continue monitoring over time. What this will tell you is it will tell you to the buildup of fish outside. It will tell you the buildup of fish inside. Another thing you could do is kind of monitor the intensity of fishing. I know you don't have VMS over here.

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If you did, that's another technique of monitoring how intense the fishing is around those areas. It is very difficult to monitor fishing in an area like this outside of these things. This way we've got replication, we've got controls, and we've got randomization. We'll have inference for the entire Atlantic from North Carolina to the Keys. That's the kind of experiments I'm talking about.

But it requires somebody that can do this or people who can do this. NMFS would be a natural for it. They've got field people that could handle this. Todd Kellison is particularly good at this sort of thing, so is Mike Burton, so this could be done and I think it should be done; because if you read about the problems with marine reserves all around the world, this is rarely done, rarely done.

People just put them in place then they forget them; okay, we got that done. Because, most of them are political, they are not scientific. I think if you go ahead with this you should insist on something like this. Because, number one, we want to see if they're protecting those two threatened species; and number two, you want to know if you're gaining benefits from these reserves for your shallow water species, gag, red grouper and all those.

Anyway, that's one design. There are a number of designs. Now that doesn't mean you have to monitor it three years before you close them. You can monitor areas around and use that as a control. Nature is like this. If you're looking at abundance, nature goes like this. If you're going from one season or one year to the next, it goes up one year, down and up, even without fishing.

It goes bub, bub, bub, and you guys have all experienced that. One year it's good; there are tails everywhere; next year you can't find them. Its variable, nature is variable. The reason for doing multiple years is to see what kind of variability you've got, because if you want to see – what if your variability is like this and you sample at the peak?

Then after it's closed, several years later you sample at a valley of the same kind of a pattern, say nothing happened. Well, then you say, my God, the fish population declined when in fact you didn't get a feel for the variability, if you follow what I'm saying, that's occurring in nature naturally. That's how these things have to be set up.

Now what you can do is you can do intensive sampling for one year on all of these, and so you get kind of a feel – because there is a spatial difference between them, you get a kind of a feel for the variability; not a temporal variability but spatial. That will give you kind of a proxy with the kind of variability that you'd expect to see in the after situation, if you follow me.

Okay, the next thing I want to get into – and this will be done soon – is this is critical to these reserves. If it's not done, you might as well not even bother with this. I'm serious; it's critical, because if you don't do – if surveillance and enforcement isn't on top of this, what you end up with is something like the Oculina Banks, where between 1980 and – John Reid and I and Andy Sheppherd published a paper on this – you had annihilation of most of the reefs.

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Even as late as 2002 we saw right across the intact habitat on Chapman's Reef a trawler track just pulverized the Oculina. Oculina is habitat. It used to create these big bushes and you can still see some on Jeff's Reef. Jeff's Reef isn't very big; it's only about 10 acres. It's very small. For a 92 square mile area, that's pretty tiny. That's just about the only one that's truly intact now. Without their enforcement, this is just a waste of time. I'm really serious about that. The reason I'm saying that is because the crooks get rich and the honest fishermen go broke and go out of business when these things are supposed to do stuff for you guys, for the conservation-minded fishermen.

All right, these are the various surveillance enforcement measures that the Coast Guard uses in the Gulf again; VMS, that's in place for commercial reef fish fishing vessels since 2007. Then there is aerial surveillance, but the pilots themselves have told me it is very hard to make a case. One pilot said that he – he called me up specifically – he said, "You know, I got the captain of the boat that was poaching down there. He gave me his coordinates. He was well within the reserve; he was along Madison Ridge. He admitted doing it. I've got a photograph of him with his gear out and everything, and it was thrown out once it got to the regional office," because one of the lawyers there, whose name I won't repeat said, "How do you know you were talking to the captain?"

It's very difficult to make a case from the air, extremely difficult. Not only does surveillance and enforcements have to come up to the 21st Century, so does the legal system because it's pretty antiquated in my opinion. Satellite phones on cooperating fishing vessels, you know anybody can hear you on the radio, but nobody can hear your satellite phone, so you call the Coast Guard and somebody is in there.

I've done that before and they were out there in 20 minutes. They already had a cutter out there, but they were off site. Also one trick they use that puts enforcement personnel on fishing vessels for days and especially night surveillance. Then a method I use that nobody else used as far as I know, but I recommend – I gave a talk to the Coast Guard last week – I recommended using these VSG acoustic receivers and monitoring boat traffic.

The technology is such that you can actually put a receiver down there and you can identify a boat, any particular boat by the sounds it makes. You can block the data within a half a mile around the spawning site so that you know how long that boat was there; and it records the date, the time, and when it left.

Now poachers – and I'll get into that a little bit more in detail in a minute – what I saw out there was the poachers would survey the sites during the day. They'd go around, look in them, see what the fish population was like, not stop to fish, had their gear stowed, just tool around and check out the different sites and then apparently write it down.

There were some well-known poachers. I knew who they were. They knew who they were. The Coast Guard knew who they were. But I used to give these talks to the Coast Guard on how

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to catch these guys and they showed me the rap sheet of this one guy and he was as much of a crook on land as he was on the sea. They wanted to get him badly and they did.

Commercial vessels may turn off their VMS. Now we came upon a commercial fishing vessel in Steamboat Lumps. I was going to work on this big ship, Nassau Boat, actually, and at 6:00 a.m. we came upon this main red grouper site and there he was. They were all sleeping down below, stern anchored right on the fishing habitat.

I found out from the friend of mine I had in the Coast Guard that his VMS had been turned off for five days and nobody tagged him. He was popped for that definitely. His explanation was that he drifted in; but if you looked at the data buoy records there was no wind and no current that night so that didn't hold up for him. Then the recreational vessels, they are not required to have VMS.

They'll run in; mainly in the northeast corner they'll run in and run back out. The other thing that they do – and they've been caught – is going in at night. Two of the three vessels that were caught at night from the data that I gave the Coast Guard were recreational vessels, very fast. What the guy at the Coast Guard told me was they didn't even have to go in there.

They were rich guys, they had these big, very fast recreational boats, and they were apparently selling their catch either to restaurants or transferring them to commercial guys. Unlicensed commercial vessels poaching; what these guys would do is they'd take a commercial boat that's outfitted for reef fish with the bandit rigs and all the stuff and a cooler and everything.

Of course, they're invisible to the Coast Guard because they go in; they have no VMS; they don't need a VMS, they don't have a license. They go in at night and they come back out and they transfer their catch onto a licensed boat. It takes them 15 minutes to put a thousand pounds onto the boat, just flip it over there. One of those guys was caught doing that with the data that I gave the Coast Guard.

Then it's the quick runs in and out. Most of the commercial boats aren't quick, so they can't do that. Then there is the way that poachers are monitoring – this is during the day, and this was occurring during 2000-2004. If there was a Coast Guard boat that came from Mobile or from the Northern Gulf there, they'd know they were on their way by radio. Before they ever got there, they'd say, the man is coming. I heard it on the radio myself. Everybody moved out of the reserves.

I told the Coast Guard if you're going to bring a big cutter out there and you're going to approach the reserve, approach it from the deepwater areas where they think it's a longliner or somebody like that, and that worked really well, because they told me because nobody expected them to be out there.

These were the areas that the poaching was taking place, obviously, where these aggregations were. That was the most intense poaching – and most of this was for red grouper, and that was

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not by commercial boats. That was mostly by recreational, although the recreational boats that were fishing at night were fishing right in here.

Now this is that VSG recorder I'm talking about. The electronics is confined to just the upper – most of this is battery, so it will run for six months and monitor all sounds, a full spectrum of sounds. It logs the presence of these boats. The way it should be – I set it up a little differently, but the way it should be set up if the Coast Guard uses it, use some expendable weight like a cement block or whatever.

Here is the acoustic release. It is triggered by an acoustic signal that is specific for that release. Your receiver is right here. As the thing is on the bottom, nobody knows it's there. When the boat releases the signal, what happens is the bar is closed and the little wire burns through here. You work by electrolysis, and it opens that and basically drops the weight and you get the receiver back at the top.

You download it, you put another weight on it, and you put it back down. It's not real time; it's after the effect, and that's what I did, because I was doing – I was trying to get natural mortality measures in the reserve. If there was no fishing in there, than I could get a good – the idea was to get a good natural mortality measure telemetrically with those pingers. That is what I was after.

So I ensured – the Coast Guard said, "Oh, no, everything is quiet out there, there is no fishing. You've got nothing to worry about." I put the receivers on these two sites, I put it on Number 5, kind of in the middle of this thing, at this end where a lot of Warsaw and speckled hind – I'll just give you the data from Number 5 just to show you the kind of data that we would get. This was done in late 2008, from August through November 2008.

These were the timeframes people were in there, it is 2:50 in the morning to 4:35, 1:15 to 5:10, 2100 to 22, 3:00 to 4:00. Again, when everybody else – when all the commercial boats are sleeping, and apparently the Coast Guard is, too. Then here in 2009; this is all on that Station 5 through May.

Now when you look at April here, there are ten infractions there where people were in there. Now remember they are going from site to site. This just picks them up when they're on that site with the receivers, and it's blocked to within a half a nautical mile. Remember the average distance to the edge of that reserve is about four miles. It's two and a half on one side of the slope. They were definitely well in the reserve.

In fact, some of the data actually had the bottom pings on it when they had their sounding machine on so they were right over it. When I put this together – when I did the duration, you see the duration, a half a mile of that site, so it's about 40 minutes average. Then there are some that stayed quite a few minutes on that site. But this is nighttime activity.

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I also did daytime activity, but I couldn't separate it from the NMFS boats, the Coast Guard boats, my boat, and the trolling fishermen, which operate from May through October, which was a very bad idea to let trolling boats in there because they do this downrigger stuff.

Every time I go out there I see - I go out in a fishing boat so they don't know I'm out there, and I see at least two or three of them trolling very slowly. I can't tell by what's in the water whether they're deep or not, but it's a good likelihood. You don't troll normally at two knots. The only way the Coast Guard can pop these people is to stop them and see if they've got reef fish on the boat. That's the only way, and that is exceedingly inefficient.

It is so much better to just close it and say nobody fishes. That way it is very easy to enforce; I mean easy relatively. This is the last slide. I wanted to give you some background on all the stuff I experienced and all the stuff that is involved in setting up one of these things. This is all personal experience, because I was out there a lot on a number of different vessels.

Without surveillance and enforcement – and it has got to be verified. One of the big problems is when I'd go to the Coast Guard and I said, "How many times did you go out there and look at this area," they'd say, "I'm sorry, we can't tell you, that's classified." Well, BS! I say, "Well wait, wait, wait, wait, you're getting paid by NOAA to do fishery enforcement."

I said, "How many times have you been out there and what are the times? I'm not asking about the future, I'm asking about what you did in the past." They wouldn't tell me. It was the same thing in the Oculina Banks. I asked one of these – I won't mention his name, but he was one of the – this was back in the late nineties – one of the Coast Guard people. The Oculina Banks was closed to trawling in 1984; tremendous amount of destruction we saw in 1995.

I said, "Well, do you guys enforce this area?" "Oh, yes," he said. I said, "Well, how many times, what is the frequency you go out there?" He said, "That's classified." I had a friend in the Coast Guard I did a bunch of fishery lectures for. I said, "Would you find out how many times the Coast Guard sent a cutter out there." Two days later he called me back, he said zip, not at all. That's why it was classified; they didn't do anything.

These things have got to be – there has got to be some accountability. Everybody has accountability. You can't just slough it off and say that's classified, that doesn't get it. What they plan to do in the future, I understand that because they don't want to let the information out, but that has to be corrected, and the legal system has to be corrected. If these are going to be management approaches, these shelf-edge reserves, it has to be done. If it's not, it ain't going to work.

MR. CARDIN: Isn't a lot of the law enforcement perspective more of a dockside law enforcement through the VMS and that kind of systems; isn't that what they're really trying for?

DR. KOENIG: Well, dockside is relatively easy, but you don't know where somebody caught the fish from, so in that sense it's hard. Of course, if you caught a poacher in a recreational boat

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and he had a thousand pounds of fish on board, yes. But every fisherman I fish with out there said the density of fish in that reserve is so great they could easily catch a thousand pounds in a night, easily. That's why I'm using that –

MR. DeMARIA: Chris, this might be a good time to read Danny's letter.

DR. KOENIG: Yes, Myra has it. This fisherman, he is a top-end fisherman. He's got a 56-foot, very fast charterboat. He's booked all year long; he always has been. As I said earlier, I wanted him to come to this meeting to talk with you. He would have done it, but he had a bunch of charters that were set up for this timeframe so I couldn't get him. Anyway, if you can read that; can everybody read it? Want me to read it?

MR. DeMARIA: Myra is going to read it.

MS. BROUWER: I'll go ahead and read it into the record.

DR. KOENIG: Just so it's on a record.

MS. BROUWER: "Dr. Chris Koenig: I opposed the Madison-Swanson when it was first closed; however, I am now one of the strongest supporters of the Madison-Swanson Marine Reserve. I get a chance to tag fish inside the reserve with Dr. Koenig and it is like going back in time. It is a natural breeding ground for all reef fish. If the area is chosen right, it could be one of the most beneficial managements of reef fishing. Fishermen need to be involved in choosing this area to make sure that there is still enough outside grounds for them to make a living.

"Hopefully, one day the present council will recognize the fishery can be sustained and increased by using these management areas in lieu of cutting seasons to where fishermen cannot make a living due to flawed science. In my 37 years of fishing, the red snapper fishery right now is the best I have ever seen or even imagined. If you need to talk to me personally, please contact me, and he sites his telephone number. Sincerely, Captain Danny Tankersley."

DR. KOENIG: Well, that's a powerful statement. Something in here you should pay attention to about setting up these reserves; he said enough outside grounds for them to make a living. What he's talking about is the spillover effect. These are reef fish so they require reef hard bottom.

What he is saying is we need to make sure there is enough hard bottom around in the outside area so that you benefit from that spillover that he has experienced, and that has kept his fishery going. That's a key element in that statement. That's a pretty powerful statement; and as I said, he's one of the best fishermen over there.

He was one of the ones yelling at me in 1999. Again, what I'm trying to do – and I said it once and I'll say it again – is I'm trying to give you a full perspective. This is not taking away from you. That is not how I ever intended this to be. It's more giving to you. It is more of something that I perceive, based upon a limited amount of data and a limited amount of study, as being a

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benefit to the fishery and a protection for the spawners and the stock. This man is suffering because they keep cutting his season and the snapper are everywhere out there.

I've got video on my computer showing snapper on – they built these homemade sites. There are a couple of chicken coops out there and you can't see the chicken coops for all the snapper, and these are just a couple things thrown out in the sand, and other sites that he's taken me to and wanted video of, that I dove down and took the video. It's astounding. He knows what he's talking about and he can run his entire fishery and his clientele on what has happened on the outside of Madison-Swanson. Any questions?

MR. JOHNSON: I'm not trying to sound doom and gloom here; but the compliance issues I don't understand how we are going to address that with funding cuts and the Coast Guard being overtaxed already with the responsibility of being part of homeland security.

DR. KOENIG: Well, they get funded to do fisheries enforcement. If they want to give up that funding, which I'm sure they don't, then it's a different issue.

MR. JOHNSON: This is more of a political issue here than it is a fisheries management issue as far as compliance and enforcement. Really, it's going to have to come from somewhere other than the council. There is going to have to be pressure brought to bear through the court system to make the punishment severe enough these guys don't be tempted to go in there. Also, you're going to have to have somebody directing the enforcement agencies to actually do their job. If we don't have those things happen, according to what I'm hearing you say it is not going to be beneficial at all.

DR. KOENIG: All the ducks have to be in a row. Don't jump into this blindly. That's why I gave you a full perspective, and I did that because this is my experience. It's got to be all in place, you're absolutely right; there is no question about it. If the Coast Guard says, no, we can't – I don't mind if they tell us their stealth effects and all that. Those guys that were poaching in there that I got the recordings from, I gave that information to the Coast Guard. In two weeks they caught three guys and it stopped. There were two recreational boats, big, fast recreational boats, and one commercial boat without a license doing it. It just stopped them.

MR. ATACK: If we do these MPAs and you do your little study like that; is there money already there for that if we set up the MPAs?

DR. KOENIG: It's not set up like that. I have to apply for the money, and I'm retiring the end of this month. It has to be somebody else taking the reins. I'd be happy to be involved, but I can't do what I did in Madison-Swanson. I'd be happy to conceptually help it out.

MR. ATACK: Yes, that's what I was wondering. If we do this, then who's going to do the work and where does the money come from?

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DR. KOENIG: There are plenty of good biologists out there. Don knows some of them, some of them with NMFS.

MS. BROUWER: Right, the responsibility for doing that sort of work would fall to the National Marine Fishery Service. I should say that for the current eight deepwater MPAs that are currently in place, the Southeast Fisheries Science Center, as I mentioned before, have been conducting monitoring, a before-and-after type of study, like Dr. Koenig suggested.

Unfortunately, it has not been long enough and for some species it has showed an increased abundance, but not for others. Unfortunately, speckled hind and Warsaw are two of the species where they really haven't been able to get a whole lot of information on.

MR. FEX: Are you aware of all the MPAs we have presently on the South Atlantic? The only reason I'm saying is because that MPA or protected area is a small percentage, where we have got several MPAs that affect a lot of our fisheries. I can see manipulating them a little bit, but right at the present time we have a lot of MPAs I consider for the area that we are able to fish. I didn't know if you knew of the ones we had and could say, well, dang, that's a big amount of MPAs compared to your area to fish.

That seems to be something that a lot of people don't recognize. We start fishing commercially at 80 feet, I mean I do, and then we go out to 350 feet or something like that. When you've got those MPAs that cover a vast area and you only have such a thin slice to do it, I almost think we've got plenty of MPAs. It's just are we doing enough studies to really realize the effects of it; like I said, quantifying how much effect it is helping right at the present time?

DR. KOENIG: Well, I think the first step is to see what kind of habitat is in those MPAs. I was told that a lot of that habitat is over sand bottom. I was told; I don't know if that is true or not, because I've worked in the Gulf. I don't know much about over here.

MR. FEX: I'll reiterate on that one. Right now off of North Carolina, the one I know they call the Snowy Wreck; it has a lot of other spots. People talk about the Battery Hole, The Rose, The Seabird, several other spots that are inside that MPA that they're like, well, they're in there and trying to save the snowies, but look what they did; they closed these areas and these areas.

The one off of South Carolina, from the last council meeting you could see how much sampling was done in that MPA area, and you could tell there was a lot of bottom coverage that they took into that MPA. Sometimes I think they put an MPA to protect one spot, but in fact they're protecting several spots. It's hard, like I said again, to quantify it and say, wow, look what we've really done, when they think they are only protecting the Snowy Wreck, which is only one wreck compared to all the other bottom.

DR. KOENIG: Yes, there is other fish and other bottom. There is nobody monitoring that?

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MR. DeMARIA: Why don't we take one more question and then we've got to move onto Roger's presentation.

MR. ATACK: Well, the only comment I was going to make is the MPAs that we have, are they really MPAs? You did a lot of personal work to make sure your MPA that went up and went back down got back up through enforcement and talking to the Coast Guard; the MPAs that we have in the South Atlantic, how many of them are really not getting fished?

DR. KOENIG: That's a good point; that's an excellent point. It's got to be all of this. You can't just set aside a piece of bottom; otherwise, you end up with what happened in the Oculina Banks, annihilation of most of the habitat. Here it wouldn't be annihilation of most of most of the habitat; it would be annihilation of the fish if you don't have the followup with all of these issues.

MR. CARDIN: The MPAs that are in place, about the only way to manage them, enforce them, and law enforcement says is that they want VMS. Now you talk about is there money there? There is supposedly money there for the South Atlantic Snapper Grouper Fleet that we could get VMS. But then the question goes to the recreational fast boats that can jump in there real quick and jump out real quickly. As far as enforcing them, it seems a little one-sided on the methods and the availability of enforcement.

MR. DeMARIA: I think we need to move on to Roger. Chris is going to be here the rest of the day and tonight and tomorrow; so if you have any questions, you want to get together with him at any time, just get hold of him.

MR. CARDIN: A lot of the commercial vessels, I would love a VMS. I wish council would require me to have one and then I could get funded. I would use it to help me. There's \$11 million dollars there, let's get it. Gulf VMS is working. They caught a boat in the Atlantic going across the Oculina Bank, so it works. There was a commercial boat with one red snapper in the Oculina Bank 15 years ago that got an \$18,000 fine.

AP MEMBER: The recreational guy said he didn't know.

MR. CARDIN: And he gets a \$50 fine.

AP MEMBER: That's right, and that has to change. I'm not arguing with you Bobby; I'm just saying that's where the problem lies.

MR. PUGLIESE: Okay, let me jump in here and hopefully get a chance to see some hands-on capabilities that we're trying to build to address this issue and really maybe any of these spatial management activities. First I just wanted to touch on a couple slides that kind of orient where we are with information that's going into this capability and tool and to address speckled hind and Warsaw.

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First of all, I wanted to highlight the fact that this started from Amendment 11. The data that was used in that is something we focused and then expanded in terms of our review. One of the more recent discussions came up at our Habitat Advisory Panel meeting that we held in November.

To begin to address this, one of the first things we looked at were the existing MPAs, began to look at its relevance to what we knew about the distribution of speckled hind from some of the data sources such as the existing MARMAP, SEAMAP and other fishery-independent surveys. The first view is we looked at some of our online systems and some of the data sets that were already existing, as well as the other side of this, the habitat distribution relative to these species; and following up on what Chris was saying the importance of habitat and connecting the habitat to the species.

Again, we've been building these information capabilities and trying to align both our knowledge of the species distribution and the knowledge of the hard bottom structural habitat that we have in the South Atlantic Region. These were combined, and what we did is we pulled together, as I mentioned, some of the data sets that were originally used but expanded them.

The distribution of the speckled hind and Warsaw from MARMAP, essentially through the entire time series; we updated it all the way through what was collected in 2011. As a matter of fact, some of the more recent points actually were from the more recent years. The speckled hind numbers actually went up in the actual MPAs themselves. In addition, the Reef fish Observer Program between 2006-2010, and we had been talking about some of the ongoing surveys that are going in the MPAs now that NOAA MPA surveys between 2004-2010, so any of the occurrences that came through some of those surveys.

We also do actually have some of the more recent mapping information as background information as we go forward; multi-beam et cetera, that we can begin to look further. The focus we were doing is the most regional information on habitat mapping is the SEAMAP hard bottom distribution.

What you see here is the combination of the different occurrences that I have identified, as well as the SEAMAP hard bottom distribution as focused on really what is kind of a core habitat distribution for the adult between 40 and 100 meters in our region. The zoom-in kind of gives you a little more orientation about – and, say for example, looking at North and South Carolina, the blue are the speckled hind occurrences, green circles are Warsaw, which you do not see a whole lot. The Warsaw numbers are fairly low in this data set.

The red areas are the hard bottom distribution from the SEAMAP surveys. Then the yellow are actually sampled. It's one thing you've got to remember, there are sampled components and non-sampled. The yellow are non-hard bottom areas. There had been the comment about maybe not having habitat or only being sand or mud.

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Some of these were specifically created - if you all remember, you've been involved many of you directly from the beginning of some of these things - to include tilefish grounds in some deeper habitats that are not hard structure habitats. They are an integral part of what we are seeing with this.

This just leads you to the online system or the spatial tool that we are addressing. Really, all this is doing is I'm going to jump directly into an ARC GIS Editor that provides the capability of being able to look at areas. What we've done is we've combined that information I showed. What you see here are the distribution points of speckled hind and Warsaw relative to the Edisto MPA.

I was just going to do literally a hands-on and walk through a test of something like this. What you see is the present distribution. In this case there is fairly significant numbers of speckled hind in the designated MPA area now. What we have the ability to do is to quickly create something that provides a different type of an orientation.

This is just to begin to address the possible reorientation that we've been discussing to include more of the species of concern, speckled hind and Warsaw. What I'm doing is just creating that image that I had. I am going to create a new SHAPE File for this. Once I have that created, actually what I can do now is then find out what actually is occurring within that area that we've looked at, so focus on speckled hind distribution on the new area that we've just selected.

What this does is does basically simply a clip of the information. Now you'll see the area that is focused has highlighted components and it is showing the actual occurrences now that exist in this entire area. What I can do then is literally go in – identifying now the point numbers in this table from MARMAP and other sources are now 97 points have been identified within the system.

Then if we look at what is occurring within the entire existing area, this table right here is a simple Excel table that just shows the amount of occurrences within the existing MPA areas. Then it provides percentages that exist within that of the total numbers of speckled hind and Warsaw, focused again specifically on the speckled hind since that was the clip we did.

Looking at the Edisto MPA area, this area right here; I had indicated before that the numbers of this area for speckled hind under the table had gone to 97 occurrences. What we can do is place that into the system. In the original compilation of existing points within the MPA areas, there were approximately 14.6 percent of all the occurrences that we've compiled from all these different areas in the MPAs as they exist now.

In that reorientation, the Edisto MPA originally had like 7.5 percent, a little over 7.5 percent. Increasing it to that area that we looked at actually increased the numbers and percentages up to 16.7 percent and overall moving the total of the MPA areas – occurrences within those MPA areas from 14.6 percent up to 23.8 percent. That gives you at least an idea of how you can look

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at this information, look at the species distribution, and begin to adjust and modify based on this. Now this is based on our information.

As you understand we are moving forward with workshops to begin to maybe bring other fishermen information into this process and try to adjust or orient either individual areas outside of this or as I did here is specifically tailor it to an existing MPA area. The other aspect of this is also to take this same – now you can see the area.

The other effort is also then to look at potentially, as I mentioned before, the habitat. If you look at the SEAMAP habitat distribution relative to this area, it provides the distribution in this area. Again, what we can do is quickly do a clip of the information we know on the habitat distribution relative to the new area that we've selected.

What this will do is it is again going to parse down and separate out the areas. As you see now it is identifying what areas are within here. You walk through and you can – there are 25 within this area. Now, that didn't pick up as much in terms of the overall area and habitats, but again you have that same type of a situation where you can look at the habitat distribution.

Right now there is about 6.6 percent of the known distribution of habitat within that depth contour between 40 and 100 meters. Edisto accounted for about 2.62 percent. This would increase that up to about 2.7 percent so it's not as great. The one thing that you've got to remember when you look at these habitat distributions, we have not actually had a chance to update the SEAMAP based on the newest MARMAP and SEAMAP data.

A lot of these point distributions of those species actually would fill in a number of those other areas in terms of more habitat in that same bound and depth contour. That gives you at least an idea of how you would look at an area in terms of what occurrences exist in a potential new area, as well as what habitats potentially could increase or decrease within those areas.

MR. MARHEFKA: Roger, is there any way that you could go and sort of put that – I love your software; it's amazing. If NMFS had what you have, they'd have something. Is there any way you can put that on a NOAA chart with depth contours and everything like that, so we can actually sort of – because that's what we visualize here, because I see your lines and breaks and stuff like that. It would help us out to help you guys out as far as wanting to draw any lines if we want to draw any lines.

MR. PUGLIESE: Right, yes, and the main thing I tried to do is try to keep it as clean as possible to see just the capability and the tool here. Of course, yes, there are background layers right within what I'm looking at that have the original NOAA charts. I'm going to take it a step further in a second. Actually what we're trying to do is actually get this functionally online.

You can go online and individually look at some of these areas, look at the distribution of the species, look at the distribution of habitats, create some polygons and send them to us and just say this may be an area. It has NOAA layers and all types of different things within the system.

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We're trying to really engage individual fishermen on how we would hands-on be able to work with this information.

That's what I was going to jump to literally now, go ahead and show this. Some of these capabilities are continually evolving. Actually at the June council meeting we're going to have a Habitat Workshop where the council members are going to have a hands-on look at a lot of these newer evolving capabilities. Here, to show how this tool that I talked about there, how some of the information and some of the capability is being loaded so individuals can see it online and use this kind of information; going to the council website, under our quick links you would go to the mapping GIS area.

What we have is on the right side a new applications. This is a managed area application, and this aligns really well with the discussion we just had about looking at other managed areas, because this is exactly what this does is provides access to literally all the spatial management that the council has.

You have a front jump page; you can actually go back into some of the other systems like the MARMAP program and SEAMAP program and some of the other capabilities. What you're given is the front page, its one step ahead. You're given the front page of access to this system. This is a managed-area viewer. What you have is the capability of looking at it.

It actually has a radar component directly involved and integrated into the system. What I'd like to do is immediately zoom down in and give you an idea of what we're looking at. With doing this, what we're going to do – and you've got both managed areas as well as marine habitat – what I'll do is I'll turn off the species distribution so you can see the MPAs.

You are going to see the state boundaries inshore; the special management zones are the nearshore boxed areas. Those are the special management zones under snapper grouper. The marine protected areas are the brown areas there. The largest area offshore is the Stetson-Miami Terrace Coral Habitat Area of Particular Concern.

Let me get specific to the speckled hind and Warsaw information here. I'll zoom further in and identify the different layers. What we have is the MPAs. I want to get to kind of that core distribution. What we're ultimately getting to is at least showing two of the MPAs, the North and South Carolina and the Edisto MPA.

What you have is the speckled hind distribution from those different data sets all aggregated to retain some of the confidentiality issues on this. The other layer that we have integrated here is the SEAMAP bottom mapping habitat within the area. One layer is that kind of captures what that core distribution of habitat for these species between 40 and 100 meters so you can kind of look at that overlay here.

What you can do with this is a new widget, literally is what it's called, was just added to have the capability of creating. What you've got is the ability to look at an area, create an alternative

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area. You can alter the information so you can look at what the area totals are. In this case the area now is 524 square miles.

You have the ability to go in and vertices here are totally operational where you can move them around and come up with different type of areas. You can pan over the individual points and identify what those corner coordinates are so you could provide those. What it does is give you the capability to look at that. Then you actually can go in and under the same other aspect of the tool and put in other points you know or other areas relative to that and actually insert it.

It has the capability of also then saving this as a text file. But that at least provides some initial capabilities online of being able to address this and have more hands-on. As I was mentioning before, there is a lot of other types of information in the background. It has everything from the logbook catch grids that you could put in as layered to be able to see these relative to those.

You have other council regulations, bathymetries and you do have some of the other types of NOAA charts that are other layers within here; so getting all the way back to Mark's original question, if they don't exist down here, we have them in about three or four different services that are running. The idea is to have these all talk so that then you could have access to be able to create and see this information.

MR. MARHEFKA: Yes, because I think for the reason of getting people to come on board, you don't want to go and take – if you're really going to go and be looking at trying to take care of the speckled hind and Warsaw, but you also want to go and look at some spillover effect. We'd want to go and sit there and sort of look at it if we're going to go and tweak these to go and sort of get what we're trying to look for to protect these species.

But we don't want to go and take up everything that we have in that whole area to where we can't go and fish it. We want to see some spillover of the areas that are being closed down. That's why having it set up on a NOAA chart it would be good to go and sort of take a closer look, because most fishermen are still working off the TDs and being able to understand that a little bit more.

DR. KOENIG: On your website, the one you just identified there, you have files there that should supposedly open in Google Earth. I couldn't get that to work, KMZ.

(Question answered off the record.)

DR. KOENIG: Yes, it said that the snapper grouper file was empty, that KMZ file. The other thing is I couldn't get the other ones to work either. I don't know what was wrong; maybe it was me. The other thing was you said you had multi-beam bathymetry. Is that high resolution bathymetry or is that just fairly low resolution?

MR. PUGLIESE: Well, some of the newest ones that we got from NOAA are high-resolution bathymetry that was created when they did the work in these areas specifically.

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DR. KOENIG: What I showed you is like 1 to 2 meter resolution, so it was very high. Of course, I made a JPEG out of it so I lost a lot of that. But some of those really high resolutions, and that's pretty much what we need to – what you need to look at these areas that have high relief and that are on the edge of breaks, and there needs to be some kind of interpretation of the bottom type. Is it rocky?

Like when I showed that picture of the overall view of the shelf-edge there with Madison-Swanson as a little square on it, you can see that there was a delta area to the south of that. It looks very much like Madison-Swanson but there is no rock at the top of that drop-off. There are very few spawning sites there.

Those are the kind of things we need to know, what kind of rocky ridges occur there at the breaks. At least in the Gulf it's this way, and I presume that it's that way in the Atlantic for these Warsaw and speckled hind habitats.

MR. PUGLIESE: One of the services that is not online is a detailed habitat service. A lot of the data that went into the Deepwater HAPCs, we've got the real high resolution one. The first really good multi-beam work was done on Miami Terrace when we were doing that work and it was sub-meter resolution, the same type of level with the Eagle Ray and partners on that process.

That gave us really fine resolution and beginnings of the interpretation and classification system that is still evolving on that side. I think that's where we are going, because I think that's what you really need to have. Like you said, the map is great, but if you don't begin to connect what is the mud and the multi-layered habitats that are kind of connected in here, you're really not getting the information.

DR. KOENIG: That was a nice thing about the side-scan data. You got that because of the reflectivity of the hard substrates and the absorbance of the soft substrates. You can get a pretty darned good guess that this was rock and not mud or sand or something like that. That was pretty clear in the side scan. I know there was a Gloria side scan that was done through here, but that is pretty low resolution stuff, I think; I really think so.

MR. PUGLIESE: Yes, that is real low, some of it, and actually that probably causes some problems with some of the maps that have been created. We continue to play that game of using background maps, and then they don't align with the line bathymetries. What we've gone to is to try to get as fine bathymetric maps as you can or the layers that give you like the ten meter contours; because if you don't get to that layer, you end up with these ones that really don't align, and that's discontinued.

But ultimately directing high resolution multi-beam work is really what we need to do. One thing I think I'd like to note on this, and it really ties to a lot of what we've been discussing. I serve on the Southeast Coastal Ocean Observing Regional Association, on their board, and one of the things that they are involved in right now is a ten-year build-out plan.

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One of the first things we wanted to make sure that we built into there was the ability to integrate better observing capabilities and getting directly to some of the things you are talking about, acoustic capabilities on existing buoy systems, expanding that to cover the managed areas, the MPAs and the C-HAPCs, and looking at even things such as a glider array that integrates acoustics into that, too.

You begin to build that effort as well as a comprehensive mapping of major depth contours in the system. There are wheels turning at other levels. The idea is to see how far we can get that funded through multiple mechanisms. But for enforcement, for the multi-beam mapping we need, the newer technologies like acoustic monitoring and even things in the future such as the high frequency radar use – I mean right now most of that they use for wave information.

You can monitor vessels; you can do all types of things with that capability. The technology is evolving that can take and enhance what we have and go a lot further beyond that. This at least scratches the surface to give you a little bit of the capability online that we have.

MR. MARHEFKA: Getting back to the meat of the subject here about speckled hind and the Warsaw; if you were to go and take a line and draw it in the 240-line up there across in the South Atlantic and showed what that was, that area, and you considered that 100 percent of what you are wanting to go and sort of cover, you are wanting to take that 100 percent of what we have right now, 240 and out; what would be the percentage that is going to go and satisfy the envirogroups so they don't go and sue NMFS to get to where we need to be? That is the bottom line, what do we need to go and do here to satisfy them so we don't have this issue?

MR. PUGLIESE: Truthfully, in terms to a response to that, the council is having that discussion about what we need for percentages. In lieu of the 240 area, how much bottom – and given the limitation of information we have, how much bottom or species distribution do we have to address. That's kind of some of the guidance to look at multiple layers.

MR. MARHEFKA: Exactly, that's where I'm going here. If you take up to the South Atlantic Region what we have, and you've got 240 out seaward, which is what we have now, which is in place that we're supposed to not be able to fish in, and that's considered 100 percent coverage right there for the protection of the speckled hind and Warsaw; if we're going to go and remove that, what would be the percentage that we're going to go and be able to do in an MPA that would satisfy to get where we need to go?

MR. DeMARIA: Mark, since we've got one of the main environmental people here, why don't we let Sera answer it.

MR. PUGLIESE: While Sera is coming up, let me make one comment is that we did specifically ask the SSC to provide us that guidance and we did not get the number.

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MS. DREVENAK: I think that from my perspective there are a lot of things that would -I hate to think of it as satisfying the enviro-groups, but more as providing the protections that are going to be necessary for these species. I don't think that it has to be a one for one for the 240 closure. That 240 closure I think was a very blunt instrument for taking care of a problem.

I think if the right areas are protected, they don't need to be anything like the size of the 240 closure. I mean that's what seems right to me. You're not looking to close off parts of the ocean; you're looking to find the places that are important to these fish for spawning and make sure that the bycatch is reduced in those areas.

MR. DeMARIA: Mark, can I say something here, too? I think a lot of the stock assessment modelers are kind of trying to look at this like it's a field of tomatoes or something; how much production can we get out of this acre of tomatoes? It's nothing like that in the ocean. As you know, the fish are not evenly distributed. Closing down like 50 percent of sand bottom might not be as productive as closing down 1 percent of really high quality bottom. It's difficult to really come up with a percentage. Do you follow what I'm saying?

MR. MARHEFKA: I clearly understand that, Don, but in between hard bottom there is sand bottom. You're talking about little its and bits that you're going to do or you are going to talk about a big chunk of area, and you're still going to go and be closing sand bottom down. Well, it doesn't matter, because you have to have these points that you have to work from.

Back to what I was saying, we've already started rebuilding these fish. We have zero retention, no sale. What's all the other stuff that we've got going on with these? The hundred pound snowy fishing that we're not allowed to go out and fish past 240 foot of water; that hundred pound snowy, we're not even out there interacting with them anymore. No longline inside of 50 fathoms. The four-month closure for our grouper; all these things are cumulative to go and protect these species. What is it that we need to go and do to satisfy – because do you know what it is? The council and NMFS are scared you guys are going to sue them, because they are not going by the mandate. Now we're going to this whole ESA. Help us out here.

MS. DREVENAK: I can't promise anything about lawsuits, but I will say that all of the science that has been done says that the bycatch has to be reduced, and in order to do that there have to be some additional protections other than the retention limits. Until the stock is off the overfishing list, that is what the agency is required to do. The pressure that we put on is not directed at fishermen; it is directed at the agency to make them do what they need to do.

MR. MARHEFKA: Indirectly it comes back to the people who are harvesting the fish. What we need to go and do, number one, if you don't know what we're catching, because we're not monitoring everything that we catch, is maybe go and sort of ask for some of those things; some on-time, real on-time logbook data, electronic logbook; we had a whole series that we went through that.

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Discards; we had a whole series of good stuff happening there. What do we do; we just wash our hands; that didn't work. There is a lot of good stuff we've already done and we started to go and do but we're sort of pushed away from it because it didn't seem like it was going to go and work. If we're not even interacting with this fish, we're not going to really where they are because we don't want to go and catch them and throw them back. because it doesn't do us any good to go and sit there and watch a fish float away. We are all responsible people here around the dock and around the table. We're wanting to go and sort of see the right thing happen, too. I'm lost here.

MR. DeMARIA: Mark, maybe you ought to take this up on a break or something so Roger can get through with his thing; but sit down with Sera at some point.

MR. PUGLIESE: I guess I pretty well showed you the tool capability, the online capability and I guess the last final point is I think the one thing that is very positive is the fact that in those – especially a couple of main areas, there is a fairly significant of those observations, and those are real. Those are fish that you've seen; they are not some extrapolation to other habitats or whatever. Those are actually there and they correspond with some of the habitat distribution.

I think the fact that there is about 15 percent already of the occurrences within the MPAs. Two of those really significant ones having very significant amounts is a positive thing stepping into this. Your question I think is what we were trying to get some guidance on where do we go from here? We have the tool now that kind of will be able to figure out something that would do it, but where do we need to go?

MR. MARHEFKA: Well, my fear is that we're going to go and sit down here; you are going to ask us to go and draw lines again; and then we're going to go and still not be where we're supposed to be. I don't know how in the world you are going to go and ask me or any other fishermen to come up here and go and say, hey, how about drawing some lines for us about where you think we might want to put something. Then it's not going to go and amount to a hill of beans, but you're going to go put it there, and then we're going to still not go and get where we need to be.

MR. DeMARIA: Are you pretty much finished with your presentation? I guess we ought to open this up to discussion and recommendations.

MR. JOHNSON: Well, I am sure Sera is listening. I think the point Mark is trying to make we all know, but this closure we have right now, you are closing a lot of non-critical bottom. You are just closing sand and everything else. Really, you are not really protecting what needs to be protected, anyway, speckled hind and Warsaw.

They are not out there in 5 and 600 foot in any great abundance. I think his point is a good one. We need to figure out how much is going to satisfy; what percentage of critical habitat do we need to protect? Is there a percentage? Is there a number? If there is not a number, then it is hard for us to do anything. We don't have anything to shoot for.

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MR. ATACK: I think it's really not so much area we've got to protect as we're trying to protect the speckled hind. Like right now there is a certain amount of bycatch mortality with speckled hind with the 240-foot closure. If we open up the 240-foot closure and we do MPAs and the bycatch mortality hasn't changed, then we haven't gone in the wrong direction, right?

That's the reason for the closure was for zero take. It's really not square acreage. If we set up these areas and if we know what the bycatch mortality is now, and if we can estimate what it would be with these areas closed and we're as good as we were with the 240, then there is no net change in the wrong direction.

MR. DeMARIA: It seems to me that it is not so much a question of what do we need to do to satisfy the NGOs so they don't sue NMFS and the council; it is more of a question of what do we need to do to satisfy the stock assessment and the modeling people, because that seems to be what drives everything.

MR. MARHEFKA: When is the next stock assessment?

MR. DeMARIA: I have no idea.

MR. CARDIN: I'm a little behind on what happened a few weeks ago at the SSC or whatever, but at what point has like the Oculina Bank ECA and that closure; has there been any fish credited back to the fishery because there is no fishing in these areas? I say this because there was a study of the Oculina Bank, talking to fishermen that fished it 25, 20, 30 years ago.

On some interviews you heard guys say they were catching 2 to 300 pounds of Kitty Mitchells a day that now since 1994 they haven't been in there fishing. That's got to be contributing to the rebuild a lot. Does anyone on staff know that this has been figured in or been accounted for in any way?

MS. BROUWER: For the closed area there is an evaluation plan that went into place back in 2003, I believe, with 13A. In that plan there are a number of required analyses in order to evaluate how that MPA is performing. The next time the Oculina Evaluation Team gives a report to the council will be in 2014. This coming year we are going to get that group of folks together and figure out what all needs to be done to present to the council something along the lines of this is how the MPA has performed since its inception.

MR. FEX: I've been to a lot of these meetings and I've talked with MARMAP. One of the problems I do see, if we do come up with an idea, because I've talked to fishermen in North Carolina, there are places up above our MPA in North Carolina that could probably help the Kitty Mitchells, but what happens in a MARMAP census, they've never sampled there.

Then me saying you might want to check closing this area, it's going to take time for them to go sample it because my opinion is ad hoc. I know that when you guys have that sampling and you

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turn the Edisto thing and you've got a better percentage; well, I could say up here in North Carolina you could turn it this way and go here with it.

But then until MARMAP checks it, he doesn't have any verification, so that percentage won't be able to be shown to be sustaining what we're trying to accomplish. I think sometimes with not enough MARMAP sampling in this ideal area it is kind of hard to justify it or verify it with this percentage.

MR. AMICK: It just struck me on the presentation of Madison-Swanson, started out in 1973, the black and white picture of all the Warsaw grouper that were caught; and then in 2003, 30 years later, you have this MPA. Now nine years later you did your studies and you mentioned that there were still no spawning aggregations of Warsaw.

It struck me that, okay, the effort is going forward with these MPAs but the bottom line is we haven't seen much progress on the protection of Warsaw, for example, in Madison-Swanson. That habitat, I'm not familiar with the habitat; but for some of the habitat we have here I don't think is as rich in biomass protection as that area. I'm just kind of curious how much protection is actually going to - I'm not so sure about speckled hind, but to the Warsaw on that stage; just a comment.

DR. KOENIG: Keep in mind; don't forget about the poaching issues that we all went through. That is significant; it is not a minor issue. If that had been closed from 2000 on, I think we would see something very different. As far as the spawning of Warsaws, we know so little about those fish, I don't know where the hell they spawn, and a lot of people don't.

Nobody does, and the same thing with speckled hind. One of the reasons that I think it is a wise idea to go with shelf-edge reserves is so we can find out. That deepwater closure, there weren't any fish there, you don't know where to go to find them. It's hard to do any kind of directed studies there, and it's hard to find out anything from such a broad scale type of closure.

I think it is going to have to be a step-wise effect. We lack information about these species. We lack information about population size. We lack information about their basic biology, their ecology, and we lack information about the intensity of the incidental catch; although we have enough information that says it's probably pretty bad.

What I would suggest is some kind of a step-wise approach where a number of reserves are set aside. If you want to sunset them, that is up to you guys. Then the research is done; we don't just set it aside; and the research to find out about where they spawn, where the nursery habitat is and things like that, things that are critical to production of those species, things that we found out with Goliath grouper.

Then the step after that is then to figure out how much of a reduction in the incidental catch has occurred from that activity and how many more have to go. You can talk forever and you're not

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going to add any information to what we already have. It's just not there, period. We do know one thing; we do know the kinds of habitat they like on the shelf-edge.

We know they like those drop-offs that gag likes, too, and so does scamp, and so does red snapper. They like those breaks. I don't know why, but they do. That's how I would approach this. I would get fishermen involved in deciding where these things should be placed, again on high quality habitat.

I would get people that are involved in mapping, and this is already kind of set up, and then get the best spots set aside; set up an experimental framework. It could be the way I laid it out or it could be – I don't care how you lay it out, but it has to have replication and randomization associated with it with some kind of a before so that we can compare it with the after closure. That's how I would go with it, because that to me is the only logical way to proceed.

MS. BROUWER: I sort of wanted to get everybody sort of a little bit back on track and to respond to what Kenny had said. One of the main reasons that the council wants to pursue this workshop approach and one of the reasons we want really to get good attendance at these workshops is to get information that is lacking from the fishery-independent surveys.

You are correct that it's going to be difficult to verify that information, but at this point this is the approach that the council would like to take is to go to the fishermen and get the information directly from them and use that information for management as opposed to, like you said, waiting around for the MARMAP program to reconfigure its sampling scheme.

I guess what we are here to do now – and I wanted to remind you that the workshop this evening starts at six, but right now of course, as the AP I would suggest that you hash out some recommendations or some important things that you feel the council should consider as far as their approach and things like that. Tomorrow I have a feeling we'll probably end up talking more about 18B and some of the other things we have to do.

MR. CARDIN: Let me get back on my track. Earlier we were talking about the Oculina Bank. Now getting the workgroup together in 2014, I was part of that workgroup, so I'll tell you as part of that workgroup and as a fisherman near the Oculina Bank, there has been a big reduction in the take or post mortality bycatch or whatever of the Kitty Mitchells and the Warsaws.

However, the Warsaws must be out there somewhere, because several times a year when we have these upwelling events off Fort Pierce area, you'll go out and there will be one, two, three Warsaws on every reef. There will be fish from 8 pounds to 80 pounds. Now with that in mind, I think that the council needs to go ahead with some sort of experimental fishery.

Now you can do two things. You can go where MARMAP has records of catching Kitty Mitchells or Warsaws, get you a little experimental fishery, get some take, get some samples, and do some sort of little experimental fishery to see, if you go there and directly fish for an hour, or drop ten hooks, ten drops. I'd like to make a motion that council consider some sort of

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small-scale experimental fishery for the Kitty Mitchell and the Warsaw fishery; and all fish be sampled by NMFS or SC DNR.

MR. JOHNSON: Myra, I'm not sure that Bobby raised a point earlier that Warsaw grouper are still legal to take in Florida state waters. That would be one suggestion that I would like the council to pursue through the state of Florida and maybe to do away with that. I don't know how many Warsaws are encountered in state waters, but it seems sort of odd that we are talking about an endangered species listing of the fish and we're still killing them in state waters.

MR. DeMARIA: I agree, but state waters only go out three miles on our Atlantic coast and there is only a small area down in West Palm. I do agree; it's stupid.

MR. JOHNSON: It leaves the door open for that guy that actually caught that fish in federal waters to take it and bring it in there and say, "Well, I caught him in state waters." That's all it really does.

MR. DeMARIA: Yes, I know it does. Did we ever get a second on Bobby's motion? You wanted to say something? Why don't we take care of that motion first; I'm sorry I skipped over you. Bobby made a motion, so let's take care of it. Now you've got a second on the motion. We're open for discussion now. You wanted to say something?

MR. CARDIN: The motion isn't quite right.

MR. DeMARIA: Go ahead and get it right.

MR. CARDIN: This would be conducted by fishermen, the harvest would be, by a group of fishermen picked by letter of authorization as to harvest and then the sampling of the harvested fish would be by SC DNR or NMFS. This is not just for the biological specimens. It's also to go back to the data stream of where these fish had been harvested before and see if there is any kind of abundance; you know, the MARMAP past records of where they've caught them before, how many samples they've taken.

MR. DeMARIA: Does anybody want to discuss this?

MR. JOHNSON: Aren't we already doing that through MARMAP and some of these other programs? Aren't we already sampling these fish? If the stocks are that depleted, do we really need to kill a few more just to see that they're depleted if we're already sampling them.

MR. DeMARIA: Let's let Chris say something here.

DR. KOENIG: In my opinion it's not the kind of data that we need. What we need is ecological data. This is life history data. Age, growth, you wouldn't get much information for stock assessment because there would be, oh, God, maybe a couple hundred individuals from a

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restricted area. Again, you would add to the overfishing thing, which is basically against the law. I don't see how it would be productive to do this.

I think what would be more productive is if you sampled these fish the way that I sampled in Madison-Swanson, by venting them before they got to the surface and then implanting pingers or doing some more ecological study; look at their movements, their movement patterns, things like that. I can't see how this can add anything to what we already know.

MR. GOULD: All right, I'm going to go off in left base here just a little bit. The way I see it the MPAs, unless you have the enforcement or more intrusive VMS systems such as your boat tracking, is not going to work. Everybody knows it's not the overfishing; it is the overcatching that is putting us in this scrape. Why are we overcatching? It's because of the repeatability.

The GPS started out with LORAN, went to LORAN C, now its GPS 8-foot repeatability. Now GPS being a computer can easily be reprogrammed. Once they get offshore of a certain amount, say three miles or within an area of danger, the accuracy comes back. It could be dumped down to three miles accuracy, something like that.

You do away with the accurate repeatability each time. I think it would be something that the council should look at and sort of explore to defeat the repeatability, which really kills your fishing, being able to go back to the same place time and time and time again. I've done quite a bit of thinking about this. I'm comfortable with it.

A lot of the people with the little boats wouldn't be quite so comfortable with it. But it's within the realm of possibility, and it would put the burden from the fisheries side, reduction of catch from the fisheries managers to like the individual, because they would have to hunt. They can't punch in a number and go back to the exact same spot every time. Each time they've got two or three miles that they'd have to look. But that's just an idea while I was listening here and I wanted to voice it.

MR. DeMARIA: We've still got a motion on the floor. Bobby had his hand up. It has to do with this, we need to take care of that.

MR. CARDIN: Keep in mind what we're talking about is MPA and where to close. What I'm saying is take the samples after you've killed the fish. Maybe it could be some use in the stock assessment. What I'm talking about here, I'm not talking about a year-after-year program. I'm talking about let's go out there and drop some hooks, find these areas, see if there is a concentration. That's what we're looking for, areas to close. Are the fish there?

It could be very small scale. I've been to some of these meetings and some of the charterboat captains off of South Carolina here say, well, they just don't know where to go. I went somewhere the other day and in ten drops caught eight Kitty Mitchells. That's the kind of thing that we need to see. That might be the kind of area that needs to be closed, not the whole 240 and deeper.

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DR. KOENIG: Those things can be done without catching a fish. Those things can be done with an ROV. If you have a place that you know that you've caught those fish before, it is very easy to drop an ROV down and take a look and see if they're there. I think it might even be better, because you could do some kind of a measure of how many are there without catching them all.

MR. SMITH: Okay, leave it to me, left field; I doubt we should discuss this right now, but we're so antiquated here in this council in what we're – well, overall. It is those fishermen out there. I've made this complaint before. It doesn't tell you what is a fisherman; a woman, a man, a commercial. There are recreational anglers and there are people that fish commercially. I know it's out in left field and doesn't have anything to do with the thing that we'll continue to discuss, fishing, but one day we're going to have to start facing that, that we're not all fishermen. I know it's out in left field but it just disturbs me.

MR. DeMARIA: Bobby, we've got to vote on your motion at some point.

MR. CARDIN: I'd like to call for discussion of my motion on the table. Once again, I'm not talking about fishermen, fisherwomen. I'm not talking about SC DNR doing it randomization and deliberately not going to a good spot or missing a good spot. I'm talking about directly going out, whether it's three trips or what have you, and directly drop some hooks on where some fish are and get some hard information to the council at this point.

The problem if we go with your study style is the scientists are going to say, well, if we pick the good spots, that's biased science. I'm not really fishing for science. I'm fishing for location of the fish.

MS. BROUWER: I just wanted to mention – this follows up on what Bobby is just saying – North Carolina, when Regulatory Amendment 11 or I should say 17B went into place and the 240-foot closure went into place, they requested an experimental fishing permit from NMFS to harvest blueline tilefish and to see if there was going to be a lot of catch of golden tilefish in addition to that – right, exactly, speckled hind and Warsaw groupers.

And so an experimental fishing permit sounds like what you may be talking about, Bobby, and it is something that requires a letter of authorization from the regional administrator. Michelle Duval is here, if you all are interested, if you think it would help your discussion to brief you on what they have so far found under that permit up in North Carolina.

MR. DeMARIA: Are you ready to vote on it? Do you want to discuss it more? We seconded it a while ago, didn't we? Kenny seconded it quite a while ago.

DR. DUVAL: Michelle Duvall, council member from North Carolina. Just really briefly, at the last council meeting I presented our preliminary information from our experimental fishing permit. We received this in August of last year, which was very close to the time when the guys

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actually had stopped fishing. It was for a limited number of vessels, about ten vessels north of Hatteras.

We were required to obtain 20 percent observer coverage. We're actually getting to the very end of that permit. There were a number of conditions which would cause the expiration of the permit, and there was a total landings limit of 350,000 blueline tilefish, total number of 100 trips. It is that 100 trips that we're actually coming up on now.

We have seen no speckled hind and no Warsaw grouper in that area on any of our observed trips, and only one snowy grouper. We pursued this. Brian Cheuvront who held this position before I did pursued this experimental fishing permit to try to corroborate what the fishermen were saying. They were right; they don't see these fish. They're fishing in muddy bottom. All that information will be given over to NMFS. We'll have to produce a final report, but we haven't seen any of these fish up there. We're pretty confident in our data and the ability of an experimental fishing permit to assist in making decisions like this. Thank you.

MR. CARDIN: I'd like to table my motion for a moment. Could I have a discussion with Ms. Duval? I think right here in this AP last year we started this. We made a motion to let gray tile fishermen – asked the council to let the gray tile fishermen do some fishing in there that led to this study.

Okay, so we did a study. The fishermen said the fish weren't there. Your observation says they are not. All I'm asking now is the flip side of that. Let's go where fishermen say these fish are. We've closed an area where they're not. Let a few fishermen go find out where they are and let's talk about closing those areas. I'd like to bring my motion.

MR. DeMARIA: Do you want to read the motion and then we'll vote on it.

MS. BROUWER: Sure, the motion reads the council should consider a small-scale experimental fishery for speckled hind and Warsaw grouper and request that harvest be conducted by fishermen and sampling be done by NMFS or DNR agencies.

MR. DeMARIA: All those in favor; those opposed. **The motion failed.** Go ahead.

MR. CARDIN: I'd like to make a motion that – what do we do is just keep 240 and deeper closed and keep the NGOs happy, keep NMFS happy?

AP MEMBER: Is that your motion?

MR. CARDIN: No, I'd like to make a motion.

MR. MARHEFKA: We've been there; I'm ready to second that one.

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MR. CARDIN: The regulatory amendment has been there for five months, it ain't been signed. I'm sitting there ready to go try to catch some snowies. Let's get something happening, let's go ahead and shut the fishery down. I won't buy no more bait, I'll park the boat and be done with it. There is no sense in going fishing where we don't know where the fish are. Anyway, I'll withdraw my motion.

MR. DeMARIA: I don't think anybody is happy with this 240 foot and beyond closure. Do you want to go, Mark and then Robert?

MR. MARHEFKA: I was just wondering is there a slot depth we might be able to go and work there, somewhere between 240 and 3 or 240 and 340 or something like that and just go and make it on up the coast and then we can go and sort of go offshore of that?

MR. JOHNSON: The reason I didn't support your motion, Bobby, is I just don't think it's necessary to kill the fish to know they're there. I think with the video capabilities they have, underwater cameras; and working with the State of Florida, I know they get great pictures on my trips. We can go out there and identify where those fish are by other means than killing them. If they are that scarce, we darned sure don't need to kill any of them. I'm all for the 240 and deeper being reopened for the fishermen. I'm totally for that, but I'm not in favor of just killing the fish just to see they're there.

MR. DeMARIA: We've got Kenny next, but just to answer your question, Bobby, my thoughts are the alternative to that 240 and beyond closure may very well be a series of well thought out and strategically located MPAs that probably would satisfy the NGOs. I'm going on a limb now and not really representing NGOs, but I think that may satisfy that. Let's have Kenny next.

MR. FEX: To answer Mark's question, because Otha, the enforcement officer, says that slot depth contour won't work. They would like a square box to enforce. I've heard that several times at the council meeting. But I was also curious with Chris is what size vessel would you need to have an ROV on it?

I'd be fine to take you out to the spots that I've heard that the fish are at, so that way we're not killing the fish, but that way it ain't going to take a MARMAP big vessel to go out there. If a 40-foot vessel could go out there and throw an ROV over there and video sample down there, would that be sufficient?

DR. KOENIG: Yes, they make ROVs now that are easily handled on a boat that would get out there where you're talking about, 30 foot, 35 foot, anything like that. It would be easy, easy. There are some really high-end ROVs that will do that. With great video – and the cables aren't as big as they used to be. They used to be like three-quarters of an inch in diameter, huge, and now they are more like drop cords, about like that cord there.

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You can get very deep with them and do it off the back of a small boat. The other point I wanted to make beyond your question is that remember Madison-Swanson had no Warsaw or speckled hind in it when I first started back then.

It's the habitat that's the question, not where they are now, although that's an issue. But the habitat is the key. Regardless if they're there now or not, if you can find that habitat – again I'll repeat rocky ridges on breaks – you are most likely going to find them and they're going to come back in a very short period of time.

MR. DeMARIA: While I've got Sera up here, let me ask her one question. If we could come up with a series of well thought out and strategically located smaller MPAs along the shelf-edge, would that satisfy Pew's concern with the 240 foot and beyond closure and protecting of Warsaw and speckled hinds, if we did this properly?

MS. DREVENAK: Yes, I think that if they were properly designed that would probably allay a lot of concerns. I think the council is just looking for your expert opinion as experts. My advice would be to not worry about me, to give the council your opinion and whatever that opinion is. If your opinion is that nothing else needs to be done, then that is what I would tell the council.

MR. DeMARIA: Well, I just think there is just so much concern about what the NGOs are going to do, are they going to sue or whatever, it's good to hear from someone like you that maybe this might work.

MS. DREVENAK: Yes, unfortunately, right now I can't speak for Pew as a whole, but my opinion is that some well-directed closures would be extremely beneficial, probably more so than the 240 closure.

MR. SMITH: I'd like to make a motion, but maybe get some design help here from the AP – well, from Dr. Koenig, of doing just what you were talking about, Don, closing smaller areas, more specific areas; what do you call the tables edge or the breaks edge?

MR. CARDIN: We're talking about killing the fish. If you look at some of the old MARMAP, you are going to find out we are killing the fish below the 240. They are more abundant below the 240, in the 200 and 180. Is that what we're talking about doing; maybe bringing the closure further inshore and opening up the offshore? If we're talking specific areas to have these closures, are we talking about 240 and deeper little boxes or are we going to come on in where the fish are?

MR. DeMARIA: Well, we're talking about getting rid of the 240 and beyond closure completely and getting specific areas on what Chris describes as a shelf-edge, like 180 to 400, something like that?

DR. KOENIG: Yes, 150 to 400.

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MR. DeMARIA: 50 to 400, smaller box, much smaller.

MR. CARDIN: The box is much shallower, also.

MR. JOHNSON: Yes, Bobby, I think that's a valid point, and I think it's very defensible by the council if they design these MPAs correctly. We as fishermen know that speckled hind occur really from 180 feet to about 230 feet, really. That's where they live. The 240 and deeper closure is really not doing it.

It is helping snowy groupers, but I'm not so sure it's helping speckled hind and Warsaws that much. I don't see where the council would be scared to death to design these MPAs to do what they're supposed to be doing. Then they can defend it. They shouldn't be so scared of NGOs that they are scared to death they are going to get sued.

MR. ATACK: I was just going to say let's just make the motion that the council do what we just talked about, these MPAs in the right areas, the right size, and then do some follow-up work with the pingers and catching the fish and learning where they're moving to in and out, like the doctor said.

MR. DeMARIA: Could you put it in the form of a motion so that somebody can second it if they want?

MS. BROUWER: I'm sorry to interrupt, but this is what the council is considering. This is why we're here. They are already wanting to do this, and we need your help to figure out where to put these places. That is the information we need to be talking about.

MR. JOHNSON: And not worrying so much about if it's going to be enough to satisfy them. We just need to get it done and then let the council – the council has already voted to rescind the closure. They've already done that. They don't want to keep you from fishing deeper than 240 feet either; correct, Ben?

MR. DeMARIA: Jim, if you feel like you want to kind of reaffirm the position already, we can go through with the motion, but if not.

MR. CARDIN: The Magnuson-Stevens was updated. The council reacted; they had to put something in place in time. That's where this 240 closure came. Now the council, through maybe North Carolina's studies or what have you, has voted to rescind it. Now it's been sitting on the Secretary of Commerce's desk for five months, and it has not been signed for a reason. Whether he's afraid of NGOs or what, I don't know, but I'd like to offer something that we can do quick. We're in the mandate of the Magnuson-Stevens, and we need to come up with some kind of idea that will give fast results and make this council happy.

MR. JOHNSON: Question for Myra; are we going to go through these decisions and all the alternatives as a group that I'm looking at here? Are we going to area closure versus temporary

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area closure? We've already got some MPAs; we could say any additional ones could have a sunset clause. It talks about temporary until an assessment is done for speckled hind and Warsaw. There is a lot of wording in here. I don't know if you guys have read all this, but it's exactly sort of what we're talking about.

MS. BROUWER: I guess it would be up to the AP if you want to go through the motions as they exist and the options paper for CE-BA 3 at the moment. Those are preliminary, I should say, because the document has been changed according to the council's guidance from the March meeting, but they have not yet given us any further guidance. We can certainly go ahead and do that or we can list your recommendations as far as the approach, the areas or anything else you care to comment on; transit provisions, sunset clause, all that stuff.

MR. HARTIG: I was against this 240 closure and I spent three weeks on a paper writing against it. We didn't close the 240; and we're getting away from this. We didn't close it. Yes, it's closed to the deepwater species, none of which are the most common species that are caught in association with Warsaw and speckled hind based on the data that NMFS did.

We have a 240 foot closure for the deepwater species, but we still allow amberjack fishing, black sea bass fishing, red porgy fishing, and vermilion fishing in those depths. You are still having significant interactions with speckled hind, maybe not so much Warsaw based on my experience of what that kind of gear, and how many they caught in time.

Now the jack fishery, that's another fishery that does have interaction, it uses big baits. Warsaws, you catch a lot more Warsaw with that gear. Having said that, what I'd like to see you all do is – and Mark hit on it earlier. You started talking about what have we already done?

List what has already been accomplished by the management measures by the reductions in harvest; by the snowy grouper closure; the reductions in the number of people that actually go in the deepwater anymore that interact with those animals. I'd like to see you have that list first; and then once you have that, then you could say this is what we think we've already done and then from there move to the next part, what additional steps do we have to do to get some additional protection.

If we do that, we address some of the SSC's concerns that they couldn't do what we asked them to do. We asked them what if we set 1 percent SPR, of the bottom equals 1 percent SPR, you know, spawning potential ratio in a particular species. The thought behind that was if you close 30 percent of the bottom, you would get 30 percent SPR in those closed areas over time.

And like Dr. Koenig says they would have to be in the right places. That alternative led me to believe that if you did that, then you could harvest these animals outside of those closed areas. Then you could start getting data again on those species because we're not getting anything now, so some way to provide protection and then have some kind of data still coming in on those I think would help tremendously.

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One of the points about how do we get credit for these in the assessments, which is an excellent question, how in the science do we actually get credited for all these regulations that we've already passed? The only real way you do that is by increases in abundance in your stocks. You get older fish; if you have closures, you are more likely to get your age structure back to some semblance of what it once was. That's the only way that those get done.

Now the fishery-independent data would help tremendously in that regard in those closed areas, because you are not going to have any other data. You'd have to have some kind of ROV study and maybe some take in those areas to see what changes you've had over time. To address this problem – 240 is not closed now – some way to have these structured reserves; and then based on the information that you know that we've already done, because the SSC did this before. It is going to be tough, and it's a process and I think we're ahead of a little bit. We haven't had that scientific group get together, and I think that's a problem in our discussions now.

MR. ATACK: Robert was making a comment earlier about the Warsaw grouper in the Florida waters. I would like to make a motion that the council approaches the state of Florida requesting them to make Warsaw grouper illegal to possess in Florida.

MR. DeMARIA: Is there any discussion on this or can we just go ahead and vote on it?

MR. HARRIS: I'm going to vote against this only because of one reason; because the South Atlantic Council cannot get the Gulf Council where they are allowed to be taken in the Gulf to close them there, and we've got an entire fishery closed down because of Warsaw grouper, and you want to ask the state of Florida to cut it off for that four-mile range or ten-mile range.

It is very hard for me to support that. I would be more likely to say, hey, South Atlantic, can you get with the Gulf Council and get them to close the Warsaws off as well as opposed to asking just half of Florida to do it.

MR. DeMARIA: Ready to vote on this? All those in favor – do you want to have a discussion first? Go ahead.

MR. JOHNSON: Can we do that; can we ask the maker of the motion to amend it to include the state waters in the Gulf, also? That's what you're asking, right, Rob?

MR. HARRIS: No, not just in the Gulf state waters in the Gulf of Mexico, because in the Gulf of Mexico fishery you are allowed to keep Warsaws If you are going to shut them off the entire east coast, you've got Chris over here telling us that he's not seeing them on any of the spots that he's at that, they are rare.

I pulled up his guy's website that did the stuff with them and they referenced the rare brown grouper, which is actually a Warsaw. Apparently it's a problem on both sides. Asking one half of Florida – because for me where I live, you do this stuff like that, it is very confusing for my

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guys, because then it comes out in the regulations and it says excludes or includes Monroe County, Gulf Side, Atlantic Side.

It is a whole lot easier. If we're talking about a fish that has been put up on the Endangered Species Act, if we're going to ask the State of Florida to cut it off on one side of the coast, we might as well be asking the entire Gulf, too. Just because they are endangered on one side doesn't mean they're endangered worldwide or does it?

MR. ATACK: The way this is worded then is for the whole state, right, which is what you want, right?

MR. HARRIS: Well, no, because I can still go out in the Gulf and catch them and bring them through state waters. That doesn't do anything for me in Monroe County. It offers no level of protection, because the 240 and beyond already excludes me from an entire fishery, not just the Warsaw, but all my snowies and everything.

Closing them down in the state waters; and then once we come up with the MPAs, unless you close it in the Gulf, it still doesn't stop my fishery, because I can still run in the Gulf and go catch Warsaws and bring them right back home to Key West.

MR. DeMARIA: Maybe I can answer that. I don't believe you could close it off in Florida Gulf waters, the possession of them, and still have it legal in the Gulf federal waters. You've got to be able to transit those waters, and it's the same argument with the fish traps years ago and the State of Florida trying to prohibit the possession of them. They couldn't do it because they were allowed in federal waters. You may want to just address South Atlantic, the Atlantic side of Florida.

MR. SMITH: The ironic thing is that you only have three miles there. Even though the majority of these fish are caught in deepwater when there is no releasing – you are going to be releasing a fish that is going to die, anyway. I'm not against Jim here, but we really need to get to the meat of the matter.

MR. DeMARIA: This would certainly prevent divers from targeting them, and there is a small area off of West Palm Beach where they do target them. Is there anymore discussion or can we go ahead and vote on this? Do you want to read the motion and we'll vote?

MS. BROUWER: The motion reads the council should approach the State of Florida and request that harvest of Warsaw grouper in Florida State (Atlantic) Waters be prohibited.

MR. DeMARIA: All those in favor; is anybody opposed; those abstaining. One opposed; the **motion passes.**

MR. SMITH: It's about where they're spawning and we don't have that much information, correct? We're not close to getting that information, but we could do it the way we've been

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doing things, we could just guess, right, because that's worked so far, right? Why don't we guess where they're spawning? It's worked so far, right?

Remember, I talked about that hallucination and you just do the best you can through it? Why don't we guess here and make a suggestion to the council that we close spawning areas for the Warsaw and the speckled hind grouper, Kitty Mitchell, whatever you want to call it. That's what I would do.

I'm sure that there is someone here that could make that motion better than me, but I do have the big picture of it. I think we should close the areas to bottom fishing where they are spawning, and we can guess where they are spawning. Well, I wouldn't close it to trolling fishing, but I haven't made a motion either, Jim.

Maybe Captain Johnson over there could add to that. No, no, come on, I want you to come in on this. But that's how I feel; I believe we need to close it to the spawning waters. I think we should guess where they're spawning, we know it's where the habitats best, because what does habitat provide?

Three things, only three things, what are they; food, water and shelter, so I guess they got all the water they need. They've got all the water they need wherever they want, but they still have to have that food and shelter, right, Kenny, so there you go, and they're smart, they want to go where it's the best and it fits their needs. Well, Chris, over here could help us with that, too.

MR. DeMARIA: You need to put that kind of in the form of a motion to get someone to second it, but let me say one more thing before you go on. It would be more than just a guess; it would be an educated guess. There are places where these fish have been caught historically and there is an area southwest of Cosgrove that the old conchs called the Warsaw Hole and they swear they spawned there. It would be an educated guess where these things are. We've got a pretty good idea. It wouldn't be just like throwing darts.

MR. SMITH: Like I said, I'm not the mentor here, but I look towards the mentors here and the ones that know the bottom best out there and have a good idea. Ben, I would think that you could probably give us a little bit of direction on where those areas would be. Let's get it done, come on.

MR. HARTIG: Well, I wish I could. I don't think I've ever caught one – and I've caught hundreds of Warsaws – I don't think I've ever caught one in spawning condition. Because the way my portfolio works, I probably don't fish in the deepwater area at the times when they are actually spawning.

MR. DeMARIA: We've still got to get the motion worded. Does somebody want to help him with it? I think he wants to make a motion.

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MR. SMITH: I make a motion that the council should close the spawning areas for Warsaw and speckled hind grouper.

MR. WAUGH: They've got to find them first.

MR. SMITH: Well, yes; should proceed to identify those areas, too, but I don't know how you're going to put that in there because it's just unrealistic, but so much of this is.

MR. DeMARIA: Ben, if you want to help him with the motion.

MR. SMITH: Rob, you're laughing over there; how about you, Rob, come on, help me out.

MR. HARRIS: No, I was just going to say maybe we should just close all known spawning areas.

MR. CARDIN: Ben, perhaps you might recall where there has been a lot of interaction in the MARMAP stuff. I remember when we were looking at there were some areas. Should we go by the MARMAP landings?

MR. HARTIG: Yes; through any means available, through any data available we should identify any spawning. The council I think is already on this track. It's one of the things we've asked the fishermen to do; can you identify any of the spawning areas for these species? Sure, MARMAP has some samples of fish with hydrated eggs. I don't think they're very extensive, but at least in that small area they will.

One thing that is interesting about speckled hind is it seems at least on our coast to have an area where it lives in that is very similar to red snapper. In the area where I live, I've only seen juveniles since the seventies, speckled hind. I've never seen an adult. It's the same thing with red snappers.

It's interesting that all areas aren't created equal in the South Atlantic as far as speckled hind goes. Obviously, with no Warsaw up to the north in North Carolina, maybe that's the same way, at least northern North Carolina. Some way hopefully in this discussion we have with the scientists we can delineate the areas where they actually occur and then the center of abundances like we did for red snapper, and then radiate out from there with some sensible closures. You want to protect them in the heart of the area first, it would seem to me and then have some ancillary areas of that as you move north and south. Closing areas for one particular species where they don't occur is not going to do you much good.

MR. SMITH: I completely agree with you; that's the idea. That's why we're here, right? It would be maybe take the information, the data that we have – and I'm not sure how you would word this, but take the data we have and take a core sample of where most of the catches are and don't go far away from that. I don't know you would say that, but stay on the core of the catch and go from there; where we get our most samples of these fish caught.

MR. DeMARIA: Do you want to reword that?

MR. SMITH: I would add at the end in the areas where the majority of the catch data has been recorded.

MR. JOHNSON: Rodney, can I help you? If you read Alternative 1 under Decision 2, use the known distribution sites of occurrence of speckled hind and Warsaw grouper to reflect the data from analysis of Regulatory Amendment 11 – this was also used for the scoping document – in addition known sights of occurrence provided by fishermen. All the stuff we're talking about, guys, has already been talked about. What we need to do is give them direction on how to make it happen. I'm not throwing ice on your motion, just saying.

MR. CARDIN: Don, I don't know if maybe John Carmichael could point us in the direction. John, where are they caught at?

MR. SMITH: Wait, wait, I agree with what Captain Johnson just said over here; and I think you're right, it's there. How do you put it into my motion and we'll work on this together?

MR. DeMARIA: I think Gretchen had something to say.

DR. MARTIN: It's Gretchen Martin. Can we make a motion to support the council's effort to further identify and expand the Essential Fish Habitat and the Habitat Areas of Particular Concern for speckled hind and Warsaw Grouper as the basis for potential MPA sites as the first step; and then go on to spawning.

MR. DeMARIA: Does that sound all right, Rodney?

MR. SMITH: Well, let me see if I can clarify; you used the word "expand", and we might be talking about consolidating, because before what I saw now was that we had a very large area, and now they're trying to open that area, am I right? Will it expand that area, Kenny?

DS. MARTIN: I'm not speaking about the 240 closure necessarily, but just identifying known Habitat Areas of Particular Concern for these two species, as well as the Essential Fish Habitat, so independent of the 240 closure.

MR. DeMARIA: What do you want to do with your motion, Rodney? Do you want to reword it to incorporate what she said?

MR. SMITH: Yes, Myra, do that.

MR. DeMARIA: Are you satisfied with the way she worded it?

MR. SMITH: Yes, I was.

MR. DeMARIA: Well, Gretchen, this would be a substitute motion, I guess.

MS. MARTIN: I make a motion to support the council's effort to further identify and expand EFH and HAPC for speckled hind and Warsaw grouper as a basis for a potential MPA design or development.

MR. DeMARIA: Is there anyone that wants to second that?

MR. SMITH: Well, since I started it, yes I will second that.

MR. DeMARIA: We could have some discussion now. Bobby, you had something you wanted to say, I think.

MR. CARDIN: It's nice that we are supporting something the council has approved and are working on. Maker of the motion and seconder it and other people; how can we help give ideas to facilitate this happening faster; not by an experimental fishery but what can we recommend to the council to help them get this information quicker? Should we ask them to incorporate the Oculina Bank, some findings of there? I'm asking for some suggestions; I don't know.

MR. DeMARIA: Well, we've got a motion on the floor now and maybe we should vote on that. Do you want to read the motion and we'll vote on it?

MS. BROUWER: The motion reads the AP supports the council's effort to further identify and expand EFH and HAPCs for speckled hind and Warsaw grouper as a basis for potential MPA design and development.

MR. DeMARIA: All those in favor; is anyone opposed? I guess one is opposed, two? You're opposed?

MR. HARTIG: No, but I want to make a comment.

MR. HARTIG: I do think this goes farther than what the council has asked you to do already. You're getting specific about what you think you should look at for speckled hind and Warsaw, and I think that will help in how we go to ask the fishermen and how we direct the scientific group to get at this problem. I think this does help.

MR. DeMARIA: We have this meeting at six o'clock tonight, so do you all want to try to get out of here by 4:30? Okay, go ahead.

MR. JOHNSON: Okay, I think what the people at this table want to know is when can they expect to be able to go back into 240 foot deeper and harvest Warsaw grouper, especially the commercial members of this group. I think that's the question. I think what we need to look at

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as a group is how can we make that happen faster? I'm just leaving that thought. Maybe somebody on the council staff could tell us what we could do to make that happen.

MR. CARDIN: Yes, to the maker of the motion, this is, of course, in lieu of the 240 and not expand on the 240 but getting rid of the 240 and go with these boxes.

MS. BROUWER: I guess to answer to Robert; that is the intent of the workshops that the council's conducting is to get that information directly from the fishermen to help them pinpoint areas that are Essential Fish Habitat and that need extra protection. Anything that you can provide, if you believe that the Oculina Bank should be specifically designated as EFH for speckled hind and Warsaw grouper, then you can make that recommendation. It's just a question of gathering the input from everybody who is on this AP that has information on these two species.

MR. ATACK: Yes, my only question was what kind of timeline do you think they're looking at to open these MPAs and actually getting it in effect to then remove the 240 closure; what kind of timeline are we looking at?

MS. BROUWER: The timeline is the council will revisit this in June; and by then we were hoping to have some alternatives fleshed out that we could present to the council so they would then tell us which of those they would want us to take out to public hearings in August so that by September or December, this Amendment can be approved for submission to the Secretary of Commerce.

MR. MARHEFKA: But don't you have to have an analysis for all of this before you can even get it approved?

MS. BROUWER: Yes.

MR. MARHEFKA: From the science community?

MS. BROUWER: Yes.

MR. MARHEFKA: It's going to be a lot slower than we think.

MR. HARTIG: That's what some of us on the council have thought; that it probably should be going at a slower pace than what we're trying to get accomplished now. If we maintain the 240 closure, there is no hurry.

MR. JOHNSON: Looking again on the document here, it says that staff wants the AP and the public to modify existing MPAs first. If some of these MPAs that we have can be tweaked a little bit to give more protection to Warsaw grouper and speckled hind, that is the first step. Then identifying new MPAs would be a second step.

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We need to think about that first step first and look at the MPAs that he showed us earlier. He moved his box around a little bit. I know the one off of Jacksonville goes out to protect golden tile, which don't need protecting anymore. There is some tweaking that can be done on the existing MPAs. We need to address that first and then look at establishing new ones second.

MR. DeMARIA: Anything else or do you want to take off for the day?

MR. CARDIN: On this motion here we are talking about identifying and expanding and we're talking about what fishermen say. Do we want council to go when fishermen say the fish are here and react on that or how are we going to identify this, through what CPR? How are we going to identify these?

MS. BROUWER: Okay, I think I see the confusion. The expansion there refers to areas that have already been identified as EFH or HAPC for snapper grouper as a whole. We do have designations for EFH for snapper grouper under the FMP. Should any of those be tweaked, expanded, deleted, anything that you feel would be necessary to tailor them specifically to protect speckled hind and Warsaw. In addition to that, are there any other areas that need to be added to that list?

MR. ATACK: I would suggest that back in the eighties there were some fishermen catching 300 pound Warsaw off of North Carolina and you can get the information from those fishermen. There were probably 30 or 40 of them that were caught. That was probably a spawning area.

MR. FEX: I was at the last council meeting when I seen NOAA's presentation. They turned the MPA at Edisto, and they turned it parallel with the coast, and it covered a good vast area. They could have probably extended it a little bit farther north and covered a little bit more area. The MPA up in North Carolina, like I said earlier, you're protecting the snowy grouper on a wreck.

There are other spots on that wreck. The snowy grouper are not in any trouble anymore. I don't know if the stock assessment is way down the road or whatever, but we're not fishing for them anymore. Nobody longlines out there anymore. I think that MPA could probably be shifted a little bit farther north, because that is where I hear the Kitty Mitchell's are being seen at the present time. That's what the council wants.

We all know as fishermen. Mark has been fishing out of here forever. He ought to know exactly where they are. I kind of know, but I don't fish past 180 feet of water so I can't verify that, but I've heard of where they kind of are. I think the one in North Carolina should be shifted a little bit farther north.

The one in South Carolina should be angled parallel with the coast like they showed in the last council meeting and that would satisfy at least my idea of where they are mainly at. That's what the council actually wants us to do. We have a lot of knowledge here. Bringing up this, that's just what they've told us to do. For us to say there is a motion, it's been in there.

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I think their idea is going good by shifting it, but MARMAP – like I said earlier, MARMAP is going to have to study it, because again it is always ad hoc when we say something sometimes. I think we as fishermen, because we had the knowledge, and hopefully later on when these people come at six o'clock, they will bring some knowledge. Thank you.

MR. HARTIG: Kenny, this situation is different. You call this information that you're bringing ad hoc. The science isn't there. We're asking the fishermen what are the best areas that you can possibly think of to close for Warsaw and speckled hind. That is what we're asking you to do. The data doesn't exist.

MR. MARHEFKA: Well, once again, the people who are pushing us into this box that we don't want to be in, if they had some extra money that they could go and sort of throw our way to go and help us put some of these ROVs on some individual fishing vessels, we could go out there to the areas where we feel that these particular fish are spawning – the Warsaw Chris was saying August and September and the speckled hind April through May – and actually go and hit some of these spots with these ROVs and be able to go and sort of maybe get a viewpoint of what it is in the expansion of these areas that we want to go and do, so we can sort of justify the reasoning why we'd want to go and say expand them, with some other people on board who they can go and sort of validate the data, so to speak.

We could go out there a lot cheaper then we could if you were going to go out there on the Harbor Branch or something like that or MARMAP sea cruises and things like that; and get out there and go ahead and hit the spots that we're talking about really quickly, and be able to go and do what needs to be done – maybe dig into the Foundation's Trust Fund or something, find some help.

MR. DeMARIA: Bobby, unless Mark wants to make a motion on that.

MR. CARDIN: Let me ask Mark a question. Are you talking about experimental fishing them, catching a few?

MR. MARHEFKA: No, ROV.

MR. CARDIN: Okay, now the question is to identify it. The maker of the motion we talked about identify and expand. I think the council is probably wanting us to tell them how we think it should be identified. Now are we talking about one fisherman says he used to catch them there? Are we talking about well in the eighties there were Warsaw here?. Is the habitat still there for the Warsaws to even be there? What does the maker of the motion want this identifier to be? I think that is what council would like to know.

MR. HARTIG: Basically let's talk about the habitat. We're looking at what Chris presented us for the Gulf. You've got Madison-Swanson, you've got that big area of ledge system, okay. Well, what do we have in that depth? Basically, if you look where I live where the compression of the Continental Shelf – right at Juno the shelf starts offshore.

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You've got that first 240 to 360 pops out of the bottom; south of that you don't have it until you get back to the Keys. Okay, so then it goes and dives back down, comes back up where the sea bass rocks are closed now, dives back down in the sand, comes back up at Push Button Hill, dives back down into the sand, it comes back up in the Oculina Experimental Closed Area.

This is the kind of things we know. Now, in my fishing on those areas, Warsaws are very specific to the exact peak they want to be on. Now these are these pinnacle systems I'm talking about, and some of them look really good and have nothing on them to speak of. Others of them don't look quite so good but then have a lot of biomass of fish.

This one peak in particular in that Juno area that holds a tremendous number of Warsaws. I caught a dozen there several times. I fished the entire area. Every rock in that system I've fished for either vermilions, red porgy, gray tile, snowies, but wherever the jacks are, wherever all that biomass concentrates in that reef system is where usually the Warsaws set up.

Everywhere I've caught jacks in any number, including wrecks inshore, I've caught some Warsaws, but there are specific pinnacles where I've had multiple interactions year after year after year. In Warsaws I think you could get real specific and close some sufficiently small areas and get a really big bang for your buck by doing that.

There is some movement on these animals in the cold water. There is a place at 180 feet directly inside of this pinnacle system where I catch most of my Warsaws. On that particular spot on the cold water, you can go in and you can catch 10 animals in 180 feet when the water gets real cold, but the thing about that is they are not all the biggest animals. The only ones that move are usually fish 100 pounds and smaller.

The biggest fish, the 200, 300 pound fish, don't move in that cold water on average. For the most part, they stay in the deep. If you can protect those areas where those biggest fish stay, you will get the biggest bank for your buck. Sure, you are going to have some mortality outside that area, but I think if you close those specific spots that fishermen can identify, some of those, I think you'll get a bigger bang for your buck over time.

MR. DeMARIA: You can provide exact GPS coordinates for that site, right?

MR. HARTIG: Yes, that's no problem.

MR. DeMARIA: I think that's what we're looking for all up and down the coast and see how it correlates with what Roger has and maybe USGS data and all that. Our charge is just to identify these areas that we think would be good for Warsaws.

MR. CARMICHAEL: Just a quick comment; the SSC, when they reviewed the data that are available, one of their concerns was that if you compiled 30 or 40 years of observations from all

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the different sources that have ever encountered one of these fish, their big concern was that it may show you where the fish were and not where the fish are.

They said to be effective you've got to protect where the fish are, which is kind of what Kenny had said and what Ben has mentioned, and, Bobby, you've asked that. That is what the SSC basically said needs to be done. Somebody needs to go in there and put their finger on the map and say, well, this is where they are now and this is the area that should be protected.

They were at a loss as to how much, so the council is going to have to grapple with that. The SSC felt that there were people much better qualified than them to tell where the fish are today. They didn't have the information to be able to tease it out that separate where they were 30 years ago from where they are today. If you guys can do that at the end of this meeting and have that an output, I think that will greatly help the council.

MR. JOHNSON: When are we going to find out what percentage?

MR. DeMARIA: We're not going to find the percentage.

MR. JOHNSON: No, I'm talking about goal; what's our goal? We're talking about establishing MPAs, providing where the fish we know they are; how much do we need to provide? You say here establish a goal 20 percent or 30 percent or 40 percent. The SSC I think I heard earlier did not say so when are we going to get the answer to that question?

MR. CARMICHAEL: You're asking a question many of the SSC members asked. The goal overall is to end overfishing. That is the ultimate goal that we're dealing with. We don't know at this point. There is no scientific answer that tells us how much area or how many occurrences you need to cordon off to achieve that goal. That's one of the reasons the SSC made a lot of requests about the type of analysis that is needed to actually do that. They really struggled with coming out and giving any sort of scientific answer that said this would probably be a good percentage that would get you in the right direction. They acknowledged that closing some areas would probably hedge you in the right direction, but they were totally unable to come up with the amount.

All we can say is the goal is to end overfishing. The council is looking at 10 percent, 20 percent, and 30 percent. We're probably somewhere in that ballpark, but we can't really say at this time. As Ben mentioned, you can't say that if you closed 30 percent of the bottom, you are going to achieve 30 percent SPR. There are just too many unknowns. The SSC kind of nixed that idea right off the bat.

MR. DeMARIA: This is not something that we have to come up with GPS coordinates right now. We could think about it tonight and then spend a little bit of time in the morning doing it. Let's take a few more questions and comments and then we're going to take off.

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MR. HARRIS: I've got a question. We're talking about these spots and these areas that we're talking about. Ben is going to give us all his numbers that he has so that we can make sure that they stay okay, but we're looking at things from a law enforcement standpoint. How big do these boxes have to be; because obviously taking a little bitty box, if we give them a little tenmile circle, law enforcement guys are going to say I can never enforce that. How big does a box have to be in order to qualify to be an MPA?

MR. HARTIG: That's a great question. If you go to the Keys, they've got little teeny SPAs and things like that of that nature that are relatively small.

MR. DeMARIA: They enforce Looe Key and that is only a few acres.

MR. HARRIS: Yes, but Looe Key is a dive spot that sits right there off the beach. We're talking about spots that are 20, 30, 60 miles offshore, and they can't be 100 by 100 foot square; because there is no way to even look at that on radar. I used to be in the navy running an AJA ship. You can't pick out a ship 30 miles away on radar and say it is sitting in that square. It's got to be a much larger area.

MR. DeMARIA: I don't think they're talking about 100 by 100 foot.

MR. ATACK: I'd just like to comment. I hope we don't ignore some of the historical areas where they were spawning. If you are just looking at where they are now, the data comes in and they say this is where they used to be, I hope you are not ignoring that data, because that could be a very good spot also for your MPAs.

MR. DeMARIA: That's a real good point, because where the muttons used to be on Riley's before it was closed is where they are at now; once we closed it and they came back. Are there anymore comments or can we take off? See you back here at six.

(Whereupon, the meeting was recessed at 5:00 o'clock p.m., April 18, 2012.)

APRIL 19, 2012

THURSDAY MORNING SESSION

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The Snapper Grouper Advisory Panel of the South Atlantic Fishery Management Council reconvened in the Hilton Garden Inn, Charleston Airport, North Charleston, South Carolina, Thursday morning, April 19, 2012, and was called to order at 8:30 o'clock a.m. by Chairman Don DeMaria.

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**MR. DeMARIA: I think the first thing we'll do is get the election of the Chair and the Vice-Chair out of the way. I think the best way to do this is just to have whoever you want to nominate as the chair. We could take several nominations. Is there anyone that wants to nominate someone? Jim.

MR. ATACK: I'd like to make a motion to nominate Robert Johnson as Chair.

MR. DeMARIA: You're seconding it? Do you nominate someone or were you seconding that? Okay, I guess it's you. That was pretty easy. Do you want us to actually vote on it?

MS. BROUWER: Well, I just need you to say on the record that the motion was approved.

MR. DeMARIA: Okay, motion to nominate Robert Johnson for Chair is approved. What about for Vice-Chair? Robert?

MR. JOHNSON: I'll nominate Jim Atack.

MR. DeMARIA: Does anyone want to second? We wouldn't really have to second that. Are there any other nominations? Well, then it's you. A while ago I sent out an e-mail about having some kind of term limits on the chair and vice-chair. Otherwise, it just kind of drags on and on, and I think we get caught in a rut if the same person stays on for too long. It is good to have a fresh face and fresh ideas. What do you all think about that?

MR. ATACK: I guess I could make a motion to limit the term to two years and then reelect.

MR. DeMARIA: Do you want to have it years or actually number of meetings?

MR. ATACK: Well, we do in two years is probably going to be four meetings, because we normally do two meetings a year.

MR. DeMARIA: Does that sound all right to everybody; at the end of every fourth meeting we elect a new chair and vice-chair? Go ahead.

MR. CARDIN: I think we ought to have some stipulations. We just went through three years with a vice-chair that only made one meeting out of four. I just think we need to have a discussion on that.

MR. DeMARIA: Yes, usually the council has the vice-chair move up to the chair, but that is obviously not going to work with us. I understand Zack's situation that the council gets paid to come to these meetings and we don't. He had to find another job. It's a little different with us. I think we have to elect a chair and a vice-chair each time. Does every fourth meeting sound okay with everybody? I guess that's what it is.

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MR. FEX: I would like to make a comment. If you are going to use Jim Atack as the vice-chair and you are going to send him to a council meeting, I would make sure that if he cannot make the council meeting to represent the AP that he gets somebody to do it. Don, I was at the Key West meeting and you were assigned to be there – don't take offense to this by any means – I have total respect for you, but you were there to represent the AP. I sat in the audience. They were wanting questions.

You weren't there. You had come in there for 20 minutes or whatever, and nobody was able to reiterate. If he can't make it for whatever reason, he needs to send somebody because the council looks for us for advice. If we can't be there to give that advice, it's a shame, because they give us that opportunity.

They are listening to us a lot more now, because I go to every meeting. If you can't make it, Jim, you better get somebody to do it, because it really offended me that we weren't able to be totally represented and at that table because it is an honor to be doing that. They used to never do that. They'd take our motions and they'd go up on the screen and they never saw us again. I would make that that would be noted so that never happens again, please.

MR. DeMARIA: That's good; I'm glad you brought that up. I think they are listening to us more and this is a really good panel with a lot of experience. That particular meeting I had a skin cancer surgery scheduled, so I had to run and get to that. I barely even made that, but that was an odd thing. I wanted to stay for it, but, yes, we should have somebody at every meeting.

MR. CARDIN: Kenny, which meeting are you talking about, the last one?

MR. FEX: The Key West meeting; me and Rob sat in the audience. If you had to leave for whatever reason, at least let an AP member get back up there, because it is an honor that they're listening to us so much more now.

MR. DeMARIA: I thought that would just be understood that one of you all would be able to take questions, but I guess it wasn't.

MR. MARHEFKA: I'd like to make a recommendation that the council – if we are only going to go and be sending one person from the AP, that the council does go and pay that person to go and be there at the time. I've been chair for a long time. We were supposed to go and be there, and come on, we've got lives. I'm sorry, I've got a family I've got to go and support. I can't go and be at every council meeting and AP meeting through the year, being an honor or not.

MR. DeMARIA: No, I think that's a great idea if they could pay someone. I don't know if they can. But it's hard to go to these meetings. The council us paid and we're not and to take off time, it's money, I agree. If you want to make a motion, that's fine.

MR. CARDIN: I believe the council is now wanting one representative and will pay for one representative. I'm not going to make this a motion; but when I go to the meeting I always get a

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double bunk, two beds. Could we make it where, Robert, when you go you have to get double, so some of the other AP members can share if they make the trip. You can't bring your wife, Robert; you've got to have a spare bed.

MR. DeMARIA: Mark, did you mean paid expenses or actually salary?

MR. MARHEFKA: I think some reimbursement of some sort, some sort of compensation or whatever possible for them being there. If that is what the council is wanting to go and do is have AP to go and be there to represent and be able to go and answer questions and be around the table, they should be sitting with the council also at the same time. Whether it can be done or not, I don't know, but we've talked about this for years and years. It seems like now we're needing more and more advisory panel people.

MS. BROUWER: I think the council is definitely open to this, and it's a question of getting approval to do this. I believe Bob would need to approve for an AP member to attend the council meeting. It wouldn't be necessary for that person to be there for the entire week. The Snapper Grouper Committee typically only meets for a day and a half, a maximum two days. I'll let David address that.

MR. CUPKA: Yes, we changed it a couple years back where we have asked the chairman of the committees like the Snapper Grouper Committee, whenever the AP meets for the committee chair to attend the AP meeting, and also to do the opposite. Whenever a committee meets, we try and get the chair of the AP to be there also. We have been trying to follow that.

I'm not sure whether we've been paying, but that is certainly something we can bring up, because we have been trying to get more interchange between the committees and the APs. We'll certainly look into that and if we aren't doing that we'll see what we can do. We do want to encourage chairmen of the APs to attend committee meetings and vice versa.

MR. DeMARIA: Is that good enough or do you actually want to make a motion?

MR. CARDIN: What are you representing, the charter or commercial?

MR. JOHNSON: I'm representing everybody, Bobby. I'm a charter headboat, I have a commercial boat, and I have strong ties to the recreational industry. I'm not going to throw anybody under the bus. That's how I am; that's who I am. Anybody that knows me can tell you that.

MR. CARDIN: I'm sorry; I didn't mean to put it that way. In the registry you were appointed onto the AP as a charter headboat. We're going into all these IFQ talks, all these endorsements, all the different ways the fishery is going.

We don't really do minority reports, and I'm kind of wondering - I'd like to make a motion as the AP, since we have a recreational and a charter headboat representative possibly representing

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us at council meetings, if there could be a commercial appointee or liaison or whatever also go advise the council at the council meetings.

MR. DeMARIA: I think Robert is kind of in a unique situation where he kind of does both things. I know he's on the register as charter just because they have to pigeonhole you somewhere. Just like me, I'm on as commercial, but I'm really not. I do other things.

MR. CARDIN: Well, when people in the general public look at us and maybe they look at the membership directory, I hear comments like why is a charter boat doing this for – other commercial fishermen talk to me and what have you. Last night around the table or not around this table, but here at the hotel there were comments that it is time we had recreational representatives be appointed and what have you. I am seeing a lot more people choosing sides or feeling they want to be represented by a representative of their sector. I withdraw my motion.

MR. DeMARIA: I would rather see all the designations on our AP list just removed, whether you're recreational or commercial. We're all just water people, fishermen of some sort, but whatever.

MR. CARDIN: But me, myself, if I see someone going to a kingfish meeting, I want to know where he's pigeonholed at. I want to know who I need to talk to and I want to know whether I need to expect him to represent my interests or someone else's interest. I kind of disagree with removing the labels. When it comes down to it, if you're labeled this or that, but when it comes down to a vote, maybe you should vote where you're pigeonholed, whether it's in your interest or not.

MR. DeMARIA: I guess I just don't like being labeled as anything; maybe that's it. Kim is going to address that.

MS. IVERSON: I just add to that point from the person that is on the other end of the phone when people call. It is helpful sometimes to have a representative list of advisory panel members so that the public can see that there is representation across the board. If I get someone that has a question dealing with a commercial issue or for-hire charter captain, I may send him to Terrell.

They may be in North Carolina working or it could be a reporter that is working on a story and he wants various inputs from different sectors; with the recognition that often the people that sit at this table multi-task and do a lot of different things and have a lot of different irons in the fire; and actually as Robert pointed out, may have a commercial permit and a for-hire permit and recreational fish every Saturday. I try to point that out, but it is helpful for me as a staff person to have that designation across the board and not to forget the NGO representation at the table, too.

MR. STIGLITZ: We definitely need to be marked as what we are because if you don't, this panel could all become just recreational or could all become commercial. We definitely need to stay the way it is.

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MR. DeMARIA: There has been some talk about people missing meetings and what we should do about that. Sometimes it just goes on and on and on. It would be helpful if we have someone that is recreational, commercial, whatever and they keep missing meetings; that sector is sort of shortchanged. Is there anything we want to do about that?

MR. CARDIN: Don, I feel strongly if we have a chairman or vice-chair and they don't meet to represent us at that moment, it's really important; but as far as individual members, I believe that is more of a council decision. As a group we could ask that we want active members on our AP, but I don't really think we should be in charge of booting each other off, per se.

MR. DeMARIA: I'm not saying booting each other off, but just maybe some kind of guidelines to go by. If somebody misses like three or four meetings right in a row, then obviously they're not serious. Maybe there can be something like that.

MR. CARDIN: I agree, but I hope the council would – can we urge council to move on that?

MS. IVERSON: We actually have a process in place whereas if someone misses two consecutive meetings, they get a letter from the council office and they have to explain to our chairman as to why they've missed those meetings. In some cases, it may be for a medical reason or it may be they have a legitimate reason, whatever. They are sent a letter and then it can be addressed through the AP Selection Committee if there is a chronic absence.

MR. CARDIN: Can I ask the chair that he direct staff to start informing other members. When we are talking and wondering where someone is at, could you keep the other AP members informed on these statuses? It might be personal reasons, but when a guy doesn't come to two or three meetings, instead of us sitting here and drawing our conclusions and having discussions; can we as a group be informed?

MS. IVERSON: Unless there is some objection to it, I don't see why not.

MS. BROUWER: I just wanted to clarify that at council meetings it is very useful for an AP representative to be there mainly to answer questions that the committee may have as to the position of the entire AP. It is not as critical that there be commercial and recreational representation. What the council needs is for somebody that has been to the meetings that can represent the position of the entire AP.

MR. CARDIN: I understand that, Myra. I totally understand that but we have guys in the hall that are fuming mad, that are upset. I feel a way to keep this under control is for that representative to be that representative for that person. You get ten commercial fishermen out in the hall mad – excuse me, but when Mr. Geiger went up to talk to them, it didn't do much good, because they knew Mr. Geiger wasn't their representative. At one point you need to represent what you have been appointed to the panel for.

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MS. BROUWER: I guess I would just add to that, Bobby, that council members make themselves very available at the meetings. Everybody who attends the council meeting is invited to hospitality events and social things. There is a lot of opportunity for fishermen to talk directly to the council members who are sitting at the table and who are discussing these issues. I'm not saying that I don't agree with your point; I think it's just not as critical.

MR. DeMARIA: I understand what you're saying, but I think the main thing is that the person that goes to the meeting represents the AP as a whole. There are a lot of us or a lot of people that don't particularly like the current president, but he is our representative when he goes overseas, you don't have another person, sort of like that. Whoever goes represents the AP. It's maybe not a good analogy, but you know what I'm getting at.

MR. CARDIN: I'm sorry; I'm not trying to make an argument, but I will say this. Here we are we're having the IFQ talks of the tile fishery or what have you. Quite frankly, a guy that has been out there fishing for 25 years isn't going to be too happy even with his very articulate and educated self, not going to be happy with –

MR. JOHNSON: 32 years, I started fishing in 1980. I used to commercial fish everywhere all winter long. I'll just explain a little bit about myself that some people may not know. I ran a headboat and I commercial fished in the wintertime. Back then you didn't even have to have a permit; this was before all this.

As my charter headboat business got better, Bobby, yes, I am predominantly a charterboat captain. It got to the point do I want to go out and take some people fishing and they pay me and I get to go home and spend the night with my wife and my kids or do I want to go run a two- or three-day commercial trip?

Now I've seen that come full circle where I'm commercial fishing again more than I have in the last ten years. I understand commercial fishing. I understand what it takes, how hard it is. I understand the for-hire sector and what Terrell faces and how hard it is. I have real strong ties to the recreational sector through Florida Sportsmen Magazine and some of the other people that I know. That's pretty well it.

MR. SMITH: This isn't about Robert or anyone else. This is about the way things are done. If it's the chairman of our AP, he should speak for everyone, Bobby. I mean that's just it. Now you may see it differently, and I understand from your position that you see it differently; but as the AP Chairman, he speaks for everybody or she speaks for everybody.

MR. DeMARIA: One thing in here; the last three chairmen that we had, including myself, were all labeled in the booklet as commercial. I didn't hear any outcry from the recreational side about not being represented at the meetings.

MR. CARDIN: My last comment; at the last council meeting I was appointed by you to go represent the AP. I represented AP as a whole. I actually said things that put me out of my

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commercial fishing, because I was speaking for the whole. I said words right there, things changed, I got knocked out of a fishery.

I represented everybody and I knocked myself out. I am very well aware that one person can represent everybody. My point is we are fixing to go into tilefish and do tilefish IFQ talks and all that. I am not going to be happy with Robert there representing my interests at that meeting. It is nothing personal, I'm just saying when we get into these detailed topics and detailed amendments that might be addressing one sector of the fishery, then as the AP maybe we need to have a person representing the AP from that sector of the fishery. I know we all could be fair, we could all talk for everybody, but on these detailed matters we might need to send certain people to the meetings. Okay, I withdraw my questions and everything.

MR. JOHNSON: Just one more comment. Bobby, whatever the AP decides as a whole is what gets represented and not what I personally feel. I think that's the point that everyone is making. I'm not going to go into a room and make up something or say something that wasn't the consensus of this group.

MR. CARDIN: That's not where I'm going with this at all. That's not what I'm talking about.

MR. HARRIS: I look around the room and as I see all the faces, I think I'm the only recreational person here. I understand what you're saying, trust me. Every time these things come up, I always feel that the recreational guys – and even though Don doesn't hear it, I get to hear it all the time about how unrepresented the recreational fishing community is specifically with this AP.

You can look around here; I'm one, you all are twelve. Obviously, anything that the recreational guys want probably is not going to happen especially when we start talking about this tilefish stuff. But as far as the representation that Don has given us in the past and what I feel Robert would give us in the future, I don't have any qualms in it.

Most of my problems and what I hear from the general public, they complain about what happens at these APs, because they also recognize that what the chairperson or the spokesperson at the council meeting is representing the viewpoint of the AP and not necessarily the individual. The general public's complaint is with this AP and not with the council and the representation there.

MS. WESTMEYER: I think Bobby has a really good point. In thinking about it from a perspective of sending a subject matter expert when there is a really contentious issue, say a meeting is going to focus on one topic, the person who usually goes, whether it is the chair or the vice-chair, doesn't have a lot of in-depth knowledge on that.

Maybe it's a different part of the South Atlantic; maybe it's a different fishery. But just having the AP open to sending a different designee, I don't think it has to be a motion. I just think it is

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just something that we can all be aware of that if there is a specific topic to be covered, we may want to consider sending someone who can off-the-cuff answer more in-depth questions.

MR. CONKLIN: There is literature in here about having an ITQ in this golden tile fishery. You've got basically two different user groups, and you've got two different types of user groups. When you get down to doing these ITQs and all this decision, I don't want to be the one who is making it for a longline fishery.

I think that what you should do is possibly see if you could line up a longliner from the two in South Carolina and maybe one from down in Central Florida for longliners to do the consensus along with some hook-and-line people. If you're going to have such a detailed thing go on for tilefish, everybody has to be there and everybody has to have their say in the fight. Thank you.

MS. BROUWER: Yes, I just want to clarify at the March meeting the council's guidance was to possibly reconvene the workgroup to discuss potential catch shares for golden tilefish, but currently the council is not considering that. I bring that up because when issues like that come up, there are other avenues that can be used. That's why the workgroup was convened in the first place when a few years back you all talked about catch shares. Evidently that's a situation in which you need the appropriate representatives to be at the table.

MR. CARDIN: I'll tell you give me a clock and I won't talk again until eleven, so let me go with this. Here's where we're at. In this AP, a motion started about a longline endorsement four or five years ago. When I say this AP, there are new members. This AP for four years supported a particular direction in the fishery.

Now at the last AP meeting we got a couple newer members to vote with a different way and now all of a sudden the AP has a different position on the same issue. Here where this idea was born, where it got passed by or whatever, we talked about it for four years, and now in the fifth year the AP switched positions.

I don't know if Robert has that knowledge. I'm sure he would work with me and talk about it, but we're fixing to talk about 18B. This amendment has been everything from 16 to 17 to A to B to C, whatever. It keeps getting pushed ahead. Quite frankly, when we're talking about this, I just think someone should go with more detailed knowledge.

Why do we need to reform a whole workgroup? Some of us have worked with these guys from day one on the LAPP workgroup, on IFQ Workgroup, on the Tilefish Workgroup, and we've been in this AP for a while. I didn't mean to start saying that you or you or you can't fairly represent this body. What I'm saying is in some cases where we need more detailed knowledge, I hope that the chairman is open-minded enough to perhaps invite a second person and you get a double bed. (Laughter) As an AP group I would hope that we would support sometimes having individual expertise invited along with —

MR. JOHNSON: I think that's a great idea, but not the double bed.

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MR. CARDIN: Okay, a suite; from now on a suite for AP.

MR. DeMARIA: Can we move on and maybe wrap up the Warsaw and speckled hind discussion if there is anything else that wants to be said on that and Chris is still here to ask any questions to.

MR. FEX: I'd like to make a motion towards something where the council visit these MPAs we have existing, whether we send an ROV down there, and see if we have Warsaw and speckled hind so we can get an idea of what effect they've had already or if there are any. If we're looking at more MPAs, I'd rather check out the existing ones. It seems like we've got a lot of MPAs on this side and they only had a small one in the Gulf and it's pretty effective over there from what I hear.

It seems like the MPAs over here, there are so many dots up and down the coast and now they're looking to expand them even more, and I think we've done some rebuilding of them fish or conserving of them fish in them existing MPAs that maybe can manipulate them a little bit to coincide a little bit more stuff, but instead of keep opening or making more. For enforcement, I know they're having issues with that.

MR. DeMARIA: What's your motion? MR. FEX: A motion that the council –

MS. BROUWER: Can you look at what I have up there.

MR. FEX: That looks fine.

MR. DeMARIA: Does anyone want to second that? It has been seconded; we can discuss it now. I think it's a good idea. As far as comparing it to the one in the Gulf, the one in the Gulf was really well thought out and located while these were not. I think we got quite a few of them and maybe if they're reconfigured or moved around a little bit, it might make sense.

MR. SMITH: Kenny I see where you're going with that and I don't know exactly how long that MPA or the 240 has been in existence; but from listening to Chris, it would seem like it would take some time and it would take some real enforcement of that area to get some results. I think that would be a huge undertaking right there, but I like where you're going with it.

MR. DeMARIA: Kenny, you're just talking about the MPAs and not the 240 and beyond closure, right?

MR. FEX: Yes, just the MPAs we have existing to analyze them a little bit, because we already have them there. We've had them there for years. They've been in the areas of concern.

MR. DeMARIA: All right, I just think there was some confusion.

MR. FEX: Yes, I apologize for the confusion.

MS. BROUWER: Yes, I just wanted to follow up. There is a program in place through the Southeast Fisheries Science Center Panama City Lab. They have been sending divers and ROVs to sites within the MPAs, before they were MPAs, and after they became MPAs. I think it would be easy enough to go to the Science Center and request that they focus perhaps more on documenting occurrences of speckled hind and Warsaw grouper. It's a fair request, in my opinion.

MR. ATACK: I guess I would maybe look at modifying a little bit. Rather than just look at speckled hind and Warsaw in these areas, can they give us a report on what kind of impact this has for the fisheries in these MPAs? Some of them might be red snapper, some might be gag, some might be – and that's what you're looking at in these MPAs. There is really more than one fish stock it is supposed to help.

MR. STIGLITZ: I would like to see added onto that a way of stepped-up enforcement on it. After listening to Chris yesterday, without enforcement on these MPAs they are not going to do nothing. It's just opening up places for the outlaws to have a free run of them. If they're not going to be – if people are not being kept out of them, they're not doing much.

MR. DeMARIA: Richard, why don't we make that in a separate motion, okay, and then we'll take care of this and then you can make a motion.

MR. HARTIG: Yes, Jim, like Myra said, there is research going on in the MPAs currently. They didn't do it last year because most of the research vessels were pulled to the Gulf for the oil spill. They weren't able to do it last year, but they've got three or four years of data, and they do all the species. It's a snapshot; they do it at a certain time.

Maybe the question to ask is are the MPAs that we have in place effective at protecting Warsaw and speckled hind? Do we have enough Warsaw and speckled hind in the existing MPAs to provide an insurance policy for those species or are they effective at protecting those two species. That may be the question and I hadn't even though of that until you asked the question.

MR. ATACK: It would be nice and maybe they can just do a report then to us that we could read and then focus a summary report, not a 400-page report, but a summary report on the different species that they see there, the valuable species and what kind of before and after or middle with the existing enforcement. Additional enforcement should make it better, but it would be nice to know how effective these MPAs are.

MR. DeMARIA: I think it's all available.

MR. HARTIG: Yes, we'll make sure you'll get them. I guess Andrew David and I can't remember the other guy who is doing the studies, but it is exactly what you want. It is a real

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short, concise paper. Each paper is relatively short, talking about what they saw and how it looks over the years. No, it's available.

MR. MARHEFKA: Don, you said something a minute ago that you don't feel that these MPAs were put in place and not in a good way; is that what you're saying?

MR. DeMARIA: They didn't choose the best areas, the high-relief bottom necessarily. I think it could have been a little bit better thought out.

MR. MARHEFKA: I was here and I was one of the ones that brought my charts in the beginning. When we first started this, we were supposed to be here to go and sort of protect the golden tile fishery at the time and the deepwater fish. We were supposed to put a series of MPAs in place for where larval will settle out and they'll be able to go and grow.

I thought we did a pretty good job at that point to go and handle that. The places we picked off the Georgia and South Carolina coast and that Snowy Wreck; hundreds and hundreds of thousands of dollars since those MPAs have been put in place have not been able to be harvested off of those areas. I know because it took a lot out of my back pocket. I'm sort of offended that you said that, that they are not put in the right areas because we did go and put them in the right areas.

Now because of other issues and because of the speckled hind and Warsaw and the lack of data that they had that's available on these fish; do we need to tweak them a little bit more? Okay, I'll buy into that. But for you to sit there and say that we didn't pick the spots where these particular fish were, I retract that.

MR. DeMARIA: Okay, well, we picked spots like the Islamorada Hump and things like that; but once it went to public hearing it all got changed. Enough people voiced concern, well, you know, don't put it in my back yard; it's going to impact me, so we picked lesser areas. The big hump off Islamorada, the main one that would have really been good, was moved to another place.

Some of the other areas we picked that I thought would have been a little better, like that red snapper sink and all that just got moved somewhere else. We picked a lot of spots in the beginning that were good, but they got deleted down once it went to public hearing. I guess that's what I'm saying.

MR. MARHEFKA: Well, the reason why was because of Florida not wanting to go in because of such a small coastline and small area that they have to go and fish. They were ready to go and sort of back off of that. Then we went and we served up, up here in the Carolinas, some pretty substantial areas to go and work with. I'm sort of at a loss here that we are going to go and keep on chasing this down. Once again, what needs to be done here?

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MR. DeMARIA: Well, they could be reconfigured or whatever. We picked the prime spot off the southern part of the Keys, Riley's Hump for a spawning thing. We did good down there, but the rest of the area up the Keys and Florida did not, I don't think. They were all second rate reserves in my opinion.

MR. MARHEFKA: You're going to go ahead and put that on the charts then, to go ahead and start putting those up down in that area. Is that what you're saying that you're going to serve those up for marine protected areas down in Florida?

MR. DeMARIA: No.

MR. MARHEFKA: Why not?

MR. DeMARIA: The Islamorada Hump, I don't think that's a Warsaw area.

MR. MARHEFKA: Well, is it a speckled hind area?

MR. DeMARIA: The red snapper sink wasn't either, that was for red snapper as a spawning area, but it didn't get chosen. We're looking for Warsaw and speckled hind areas.

MR. MARHEFKA: I understand that, but why did you even go and bring up the Islamorada Hump and all that?

MR. DeMARIA: Because that was the original part of the reserve when we did the whole thing up the coast. It was for red snappers and everything, different reserves.

MR. MARHEFKA: It was for deepwater species is what we were supposed to be working with.

MR. DeMARIA: We argued about the shallow water ones, too, because the red snapper sink was in there and a lot of other places, Sea Bass Rocks and all that. It wasn't just golden tiles we were talking about originally.

MR. MARHEFKA: Well, the areas that we chose up here off the Carolinas do go and hold those other species, all of them, the whole suite of the complex. For us to go and say that we didn't go and put these in a good place, but now we're needing to go and do more, maybe we can just tweak what we have that is available.

MR. DeMARIA: That's fine, that's your opinion, but it will go to public hearings and it will go to an expert panel and everything else is going to be all hashed out.

MR. MARHEFKA: The expert panel of SSC is telling us to go and sit here and tell us what to go and do, because they couldn't come up with it. We can be the dog chasing the tail or we can go and nip this in the bud.

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MR. DeMARIA: Well, what do you want to do, Mark, do you want to make a motion? I don't understand your argument.

MS. BROUWER: You have a motion on the floor.

MR. DeMARIA: Okay, we'll deal with this one first. Let's go ahead and vote on this one if Myra wants to read it.

MS. BROUWER: The motion reads request that research to determine the effective existing MPAs on speckled hind and Warsaw grouper be undertaken.

MR. DeMARIA: Okay, all those in favor; is there anyone that's opposed? **Then the motion passes**. Let's move on to the next issue.

MR. JOHNSON: I wasn't at the SSC, but my understanding is Luiz Barbieri said he thought that the existing MPAs were providing enough protection for speckled hind and Warsaw. The SSC wasn't able to tell us what percentage of critical habitat they felt needed to be closed. There are a lot of ifs, ands, we don't know.

I think it's not fair to ask the fishermen to establish new MPAs. Like Mark said, I don't have a problem with maybe tweaking the existing ones and going with that until they can come back with maybe a little bit more evidence that we need to do more or a little bit more or something other than I don't know.

MR. DeMARIA: I've heard all kinds of words attributed to Luiz. I'd like to see exactly what he said. I'm not sure: I think it has been kind of distorted.

MR. JOHNSON: Was anybody in the room at the SSC? Do we have anybody that was here?

DR. ERRIGO: Okay, I'll give you a brief recap of what I can remember, but I will say that Luiz' feelings are not the consensus of the SSC. He was speaking for his own opinion. He said in his own opinion he thinks that speckled hind and Warsaw grouper have enough protection with what's in place now and that in his opinion he doesn't think overfishing is still occurring. However, no one else on the SSC agreed – well, no one else on the SSC would say that on the record. I don't know if anyone else agrees with him or not. No one would say. Being scientists and academics, they wanted to see more data.

MR. CARDIN: To your knowledge, what do you have available to either prove that they still are being overfished or they're not being overfished? We're talking about statements. What can you get a hold of to prove it one way or the other?

DR. ERRIGO: There isn't any data available to prove one way or the other.

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MR. CARDIN: How could we get some data? We're talking about motions with five- and tenyear-old data streams. Actually we already have stuff in place to monitor some of these MPAs. What can we get out now to make this decision?

DR. ERRIGO: Well, the SSC actually put forward suggestions for what kind of information we need. We need more biological information. They would like to have some kind of age structure to see, are there any older individuals and size structures. There really isn't anything.

MR. SMITH: I just have a question. I think I'm going to ask everything in questions or say things is questions here so I won't show my ignorance in front of everyone. Weren't we talking about the 240 and then we started talking about the MPAs and aren't they two different things? Bobby, we were talking about the 240 because they were talking about taking away that 240, and that's where we got in trouble? No, I'm wrong on that? Thank you.

MS. WESTMEYER: We're talking about MPAs. The 240 Closure Regulation is already at NOAA fisheries for approval, so we're talking about MPAs at this meeting.

MR. SMITH: I understand, but wasn't there a motion or someone said that they were going to take that amendment off the table? No?

MS. BROUWER: The amendment is currently under review, and what that amendment would do was take away the 240-foot closure.

MR. SMITH: Okay, thank you, but we've had the MPAs in place for a while, right?

MR. DeMARIA: I've just got something to ask Mike. As far as the Warsaw grouper, it is correct to say they're not experiencing overfishing because they're closed, but they are still classified as overfished, right?

DR. ERRIGO: No, actually they don't know if they are overfished or not. All they know is that speckled hind and Warsaw grouper are experiencing overfishing, and that's just from incidental take. That analysis was done in the nineties, '99. That was the last time they had enough information to do a catch curve analysis.

MR. CARDIN: One more question. How do we get this biological and age structure? Is there any way to do it without killing a fish?

DR. ERRIGO: Myra actually has the recommendations from the SSC here that she might read. As far as I know to get an age structure; they are such deepwater fish I don't think you can do it without taking fish.

MR. DeMARIA: Why don't we have Chris answer that since he's right here?

MR. CARDIN: He wants to do it with a submarine.

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DR. KOENIG: Well, what I talked about yesterday I thought was pretty clear. You can catch fish and bring them to the surface without killing them if you dive down and vent them at a certain depth. You don't have to kill the fish, and you can get age structure from the fin rays, which is what I showed.

Size and those other things, reproductive condition, can be done with biopsy of the gonads, which I do routinely with Goliath grouper. All these things can be done without killing the fish, and the ROV actually is a better tool to estimate abundance on the bottom for Warsaw or speckled hind, because they really don't run from it as other species.

It is much more difficult to take a census of the population size of gag, because they are pretty timid when it comes to ROVs, but these other species are not. You could do that. You could get abundance; you could get life history data. You could all do it non-lethally. The other thing I'd like to comment on is these MPAs that you already have in place.

I don't pretend to know much about it, but I do know that if you don't select the right habitat you are not going to have the fish there. It has to be high-relief breaks like we were talking about the other day; or the ideal, not the absolute but the ideal kind of habitat. The last selection process, I don't know on what basis you selected those habitats as MPAs, but if that kind of habitat is there you might see these fish.

But, if there is no record of enforcement, and you can't get information on how recently these things were enforced or how frequently they were enforced, there is likely not to be those species there or at least in very low numbers. I just can't emphasize more how important enforcement is, because there are always people there that are willing to break the law.

MR. GOULD: I think we're beating a dead horse here. We don't have the data to correctly put any more MPAs in. The science is not there. It is overfished, but it is shut down so they don't know what the stock status really is. My advice is instead of just beating in dead water here would be to take and recommend to the council that they do an assessment on them, whatever it takes to do it, get us some good data so that we can take and expand the MPAs or stay with the MPAs that are already in existence or move them a little bit.

We need more data to do this correctly. Anything that we do with this right now is going to be wrong, so why beat a dead horse without good information to do it with? I would recommend that we recommend to the council that they put this on the back burner until they have the data to back up what they want to do.

MR. FEX: To answer Chris's question about it's in the right spot, the one MPA in North Carolina starts at 190 foot. It goes out to the snowy wreck, which is an 800 foot. That is high relief. It just steadily drops off. The one in South Carolina, the Edisto one, you could see on the chart, high relief. That runs all along the break, so that is steady staggering off on our break. Our break shelf starts at 160 in average and then drops out to Unga Bunga land in a sense.

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They're in high-relief area. Just like Mark says, they were well thought out. When they called it a snowy wreck, it encompasses a lot of other bottom that my fishermen in my area are offended by. As enforcement, several boats — well, I'd say three that I know of have been caught in the MPA by the cutters, but there are several Coast Guard planes that fly over our MPAs where I'm at

They are definitely enforced on the commercial sector, because we always know as a commercial fisherman when you have a radar reflector. They can pick us up out there. The recreational sector, it's hard to control, so I can't stand up for that. They do actually patrol our MPAs in North Carolina. They are doing a really good job of what they're supposed to do so far as I'm concerned.

MR. MARHEFKA: Yes, I'd just like to make a motion at this time. Anyone who commercial fishes or harvests any level of fish from the South Atlantic must have a VMS on board to fish in the South Atlantic.

MR. DeMARIA: That's a motion; is there a second?

MR. GOULD: Could I say this? We were planning on addressing –

MR. MARHEFKA: I've got a motion on the table.

MR. DeMARIA: He's got a motion.

MR. CARDIN: I second the motion.

MR. DeMARIA: Now we can discuss it.

MR. GOULD: Well, under other business we were going to be discussing that. That was coming up later on, but if you want to address it now, that's fine, too.

MR. MARHEFKA: I think we should address it now. I'm including whoever goes and harvests fish out of the South Atlantic.

MR. DeMARIA: You said commercially first, though, right?

MR. MARHEFKA: Commercial, that's exactly what I said, but I'm saying also including anyone who harvests fish from the South Atlantic. I'm throwing it out there and needing some help to go and word this.

MR. DeMARIA: Commercial or recreational or both?

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MR. MARHEFKA: All; it's a public resource and it needs to go and be monitored. It's not mine and it's not yours.

MR. CARDIN: Mark, we're talking about all vessels harvest fishing for snapper grouper species in the South Atlantic.

MR. MARHEFKA: Yes.

MR. JOHNSON: Well, according to Chris, a big problem that his MPA encountered over there was that people acted like they were trolling. If you're going to make a guy that fishes for reef fish, if you're going to do it, do it for everybody. You're going to have a huge kickback from the industry. The recreational industry is not going to like the idea that all these guys are going to have to have VMSs. I don't care, but I'm just saying you can't do it for just guys that bottom fish. You can't just do it for the commercial. If you want to do it, make it all-inclusive.

MR. SMITH: Now, I'm going to go back to this 240 and MPA.

MR. DeMARIA: We've got a motion up here; is this related to this?

MR. SMITH: Well, what was Robert just talking about, MPAs?

MR. DeMARIA: We've got a motion for a VMS right now. Why don't we go through this and vote on it.

MR. SMITH: Well, what happened here was when we were discussing and I had my light on and you were going to let me speak; before you let me speak, Mark threw a motion on the table so I didn't get to finish where I was going and I think it's very important. Mark, can I get this in real quick? Okay, thank you.

I'm a bit confused and I don't think anyone is directing me that way, but I want to see if I got this straight. We were directed by the SSC, I have this feeling, that the amendment for the 240 would be removed, and that is the reason that there were some talks about lawsuits, right? We were advised to – and the reason we had our workshop last night was to replace that 240 with more specific closures to protect the hind and the Warsaw grouper. Am I on the right track?

We know that it is the high relief and the breaks; I mean, we have a pretty good idea that's the habitat we want to protect. Where I got confused was when Mark mentioned tweaking the existing MPAs, but we were talking about perhaps even extending them to protect more of the area that these fish might spawn in. Am I on track? Okay, that's where I got confused, Mark, where you were talking about tweaking the existing MPAs.

Well, we were directed to look at areas, and I understand your problem here in North Carolina and South Carolina, that you all came to the table and gave up big areas. I think that we kind of got off base; and we weren't talking about tweaking the MPAs, we were talking about coming up

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with new areas and probably other federal waters off the coast of Florida to protect these fish in Georgia.

MR. DeMARIA: We've got a motion on the floor right now, and is this about this motion?

MR. CARDIN: When we're talking about we're Snapper Grouper AP, we can't be all in close to the trollers, what we're talking about – are we talking about the snapper grouper fishery and snapper grouper fishing? You're not talking about all-inclusive trollers or what have you; you are talking about snapper grouper.

MR. MARHEFKA: I'm talking about all fishing.

MR. CARDIN: We're not an AP group representing all fishing. We're a snapper grouper fishery.

MR. MARHEFKA: Yes, but I'm just saying if you harvest fish from the South Atlantic in any capacity.

MR. CARDIN: Tunas and everything or are we talking about snapper grouper?

MR. MARHEFKA: Yes, anything, anything, you need to go and have a VMS on board. If we're going to have these closed areas, you need to be able to have a VMS on board.

MR. DeMARIA: Let me say something here, Mark. I think you're on the right track with this. Most of the poaching I see in the Keys and I've heard about in the northern Gulf and these MPAs is recreational boat; big Contenders with twin engines and stuff, so it's just to single out commercial like they did in the Gulf for VMS is actually discriminatory, I think. I think this is pretty well – and if you want to address all fish, that's fine. It might make a little more sense with just snapper and grouper like the reef fish thing in the Gulf, but if this is what you want to do, all fish, that's fine, too.

MR. GOULD: Five years ago I brought up a motion - Don, you were here - about permitting everybody, the recreational, for-hire and commercial fishermen, plus putting the Vessel Identification Trackers on the boats; anybody that goes in the ocean has got to have a federal permit that's fishing. It was pretty well shot down pretty quick.

I think one of the council members came up - I forget who it was at the time - said that they did not have the resources to track these vessels and to implement a permitting system which you would have to have in order to put VIS on the boat to track their positions full time. You've got to permit them and then you have got to get them to make the investment, which is \$1,500 or better, I think, \$1,500 or \$3,000 dollars for a VIS system on the boat.

This was shot down five years ago. I brought it up again two and a half, three years ago, shot down once again. The stumbling block you're going to run into with this motion is they don't

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have the manpower and part of the VIS system would be overloaded with so much. I fully support it, but I just wanted to let you know that this has been tried before within the last six years and it's been shot down both times.

MR. DeMARIA: That's fine, but we could still bring it up again and say this is our intention. Do you want to vote on it or do we have to discuss it a little more?

MR. CONKLIN: I think what Mark suggested is a great starting point; you have to start somewhere. I've been in favor of a VMS on a commercial boat ever since they were introduced. The money is there in place for the VMS to be put on a commercial fleet. Let's do it; stop beating around the bush here. Then from there you could go to the charter headboat and then start on the recreational boat, but you've got to start somewhere. Thank you.

MR. MARHEFKA: We started this back during the last MPA rounds that we did and it got shot down then, and here we are all over again getting ready to go and put more protected places up that we're trying to go and do. The other sweet idea about this is if you harvest any level of fish in the South Atlantic and you're a recreational fisherman, you would then go and have a snapshot of actually who is harvesting some of these fish out of the South Atlantic.

I mean, come on, let's be a little smart here. There is a way of getting around to this so we can go and see who are actually the players and the people who are in this ocean. If you don't have a VMS on your boat and you're out there bringing in fish, you're not in compliance. You're out, you're out, enforcement.

MR. DeMARIA: I understand and I agree, but can we vote on this?

MR. GOULD: Mark, would you mind amending that to putting the word permitted or permit in there to sort of cover it; because if you don't have the permits, you don't know who's doing it unless they get caught red-handed.

MR. JOHNSON: The issue with compliance is not the for-hire sector or the commercial sector so much, from what I've heard, as the recreational sector. That's what you really need to think about. Do you want to put more burden on your charterboat fleet and your commercial fleet, they're already struggling, and let the problem still be there?

That's all I'm saying. I understand, Phil, you're saying a starting point, but I'm not a real technologically savvy guy, but I know an EPURB goes and sends off a signal. Maybe a way to address this is through GPS makers that when you into these areas, just program the GPS and it sends a signal to a monitoring base or something.

MR. STIGLITZ: Is this just you want the VMSs on all boats just because there are a handful of people going into MPAs fishing; is that the reason for it? I don't understand the reasoning why.

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MR. MARHEFKA: No, the understanding is that we're putting places out there in the ocean that we're not allowed to go and harvest in, and they're all over the place. We have the SMZs, we have – they are everywhere. We're going to see more and more as we go and continue down the road I think is the way I'm feeling. I want to go and make sure that nobody is going in these places; because if we're doing this to go and rebuild stocks, why go and even do it if it's not going to be enforced. If it's not really going to be enforced, why go there?

MR. STIGLITZ: I'm just making sure that you want VMSs on the boat to stop people from going into the MPA areas and all that kind of stuff. That's the object of going with what you're going for?.

MR. MARHEFKA: It would also be streaming data, too. The start of what we really need to go and have is real-time data. I am a commercial fisherman offering –

MR. STIGLITZ: Okay, I don't have a problem with it.

MR. DeMARIA: Let's let Myra say something, Richard.

MS. BROUWER: This is a followup to what you were just asking, Richard. The council had a presentation. They received a presentation at their March meeting last year from Pat O'Shaughnessy. He is the program manager for the VMS program in St. Petersburg. VMS can do a whole lot more than just track your position and tell you whether a vessel is in an MPA or not.

As Mark was saying, you can get all kinds of information that is very relevant, and it also promotes safety at sea, you have e-mail capabilities. There is a whole bunch of things that can be done. If the AP would like to get a similar presentation, perhaps we can arrange for that to happen at your next meeting. Just let me know.

MR. DeMARIA: Well, let's, since we got this motion up here, can we go ahead and vote on it?

MR. HARTIG: I understand your frustrations. I understand them completely, because I'm in your shoes. I'm on the water probably as much or more to most of you all, too, so I understand your frustrations. But, please, if you want to try and do this; keep it specific to what you're trying to do. We're trying to deal with a deepwater complex.

We may have a chance to do what you're asking to do from a recreational perspective. Here is what I'm looking at. If you're a recreational fisherman and you're going to fish in the deepwater complex, you should have a permit or an endorsement or something to be able to do that. If the council wants you to have VMS, that could be done, also. I think that is something we could do.

That is a possibility. What you've got up there now isn't. All the vessels in the South Atlantic aren't going to have VMSs on them. They are not going to; it's not going to happen. But I think if you address the problem in that way; get specific to what you're trying to do. We're trying to

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deal with Warsaw and speckled hind and the deepwater fishery. That's where they occur so that is where that is going to happen. If you kept it specific to recreational vessels that fished in the deepwater complex, that they would have to have a VMS and some kind of identifier – well, the VMS is going to identify them basically.

MR. MARHEFKA: Well, Ben, that's probably going to go and add to a different motion then, because you are now asking for recreational to have permits. We're going to go and just take them out right now or do away with this motion, ask that all recreational vessels that fish in the deepwater complex have a permit of some sort to go and do.

Then we'll come in and we'll go and add this motion to it and then say all permitted vessels in the South Atlantic – I mean, the point I'm trying to get at is the council – if they're listening, is this is where we are wanting to go. However way you guys want to go and tweak it out, that's what we're here for, but if we want to go and sit here and break down the logistics of it. If we're going to permit vessels of recreational who fish in deepwater species, let's go and do that. Then we'll go and vote on that and then we'll go and push to this one.

MR. DeMARIA: Mark, it's not just deepwater. The council is considering putting a reserve in the Keys in like 25 feet of water.

MR. MARHEFKA: That's why I put this up there.

MR. DeMARIA: I agree with you. Can we go ahead and vote on this and get it out of the way?

MR. CONKLIN: I would suggest removing recreational from this motion and keep it the same.

MR. DeMARIA: It really doesn't address our problems.

MR. MARHEFKA: Phil, I see where you're trying to go so we can get moving here on that, but it's not the commercial issue that we have with compliance here. It's the recreational end of things. Yes, do we have some commercial guys who are getting caught in places and stuff like that, but for the most part they are not because we know what we have to lose; a \$1,500 bill is no fun to give up.

MR. CONKLIN: If we start with VMS on all the commercial boats and chances are that on a nice day when a recreational fisherman can be offshore and there are enough boats offshore fishing, that we police our own areas. If you call on the Coast Guard or you can call whoever, and you tell them your position and they can pull it right up on the satellite and go, this guy is right there, and there are other boats in the area. All right, then you can go with some kind of enforcement, but you've got to have a starting point.

MR. DeMARIA: Let's take Gretchen and then we're going to vote on this.

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DR. MARTIN: I just wondered if we wanted to qualify this at all with saying either snapper grouper or federal waters. To me it is just so open.

MR. DeMARIA: I think it's meant to be open and the council can change it around from there, but this is probably the most restrictive measure right here that you can imagine. They could come back from that. I think that's the intent. Can we go ahead and vote on this? Do you want to read the motion, Myra, and we'll vote.

MS. BROUWER: The motion reads suggest to the council that VMS be mandatory for any vessel, commercial and recreational, harvesting fish in South Atlantic waters.

MR. DeMARIA: All those in favor, and those opposed. **The motion passes**. Anything else about speckled hind and Warsaw? Richard, you wanted to bring up something about enforcement. Richard, you wanted to make a motion about enforcement of the MPAs.

MR. STIGLITZ: I'd like to make a motion that the council finds a way to step up enforcement of the MPAs that we have in place.

MR. DeMARIA: Is there a second?

MR. SMITH: Rodney Smith; I'll second that.

MR. DeMARIA: Any discussion or can we just vote on this one?

MR. SMITH: Well, it seems as though the motion that we just passed would go in that direction in a big way.

MR. DeMARIA: I think it probably would. We have a motion that has been seconded. Any discussion?

MR. JOHNSON: I still think it's important that the council get to the public the existence of some of these MPAs, because some of these ones that are way offshore, like the one offshore Jacksonville, and probably Georgia, the recreational boaters – I know in North Florida, I'm sure there are a lot of guys going to be out there fishing this year that have no idea there is even an MPA there. That's really no fault of their own. There is nobody telling the recreational angler on the street. There are no signs, there are no posters, and there are no flyers. I made this recommendation before.

MR. FEX: I was just going to say just have when they apply for their saltwater license that, hey, there are existing MPAs offshore. Each state is when you get your paperwork, acknowledge that. There will be no ignorance, because if you got a saltwater license you've seen in the paperwork there is a protected area out there. That could be easily done, but good idea, thank you.

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DR KOENIG: I think that was a very good suggestion. In my experience with Madison-Swanson initially, I'd say for the first two years hardly any of the recreational fishermen knew where it was. Hell, the pilots of the Coast Guard didn't know where it was for the first year. Getting the locations of these MPAs in the South Atlantic Region out there on maps and at marinas and all these different things is very, very important, because there is a lot of ignorance out there, and it's not the people's fault.

The other thing that I'd like to make a comment about this motion is that what I experienced and what was very frustrating for me was that the Coast Guard had no accountability. What I mean by that is if you ask them what level of enforcement have you applied, they would say, well, that's classified. That happened all the time.

That happened with me with in terms of the Oculina Banks. In the terms of the Oculina Banks it was more of a cover-up that they didn't do anything, because I found out that they didn't. I would like to somehow, rather than just encourage them to step up their enforcement, is to have them verify that they have in some way. They don't have to give absolute detail, but the council members should know that they are actually doing that. If there is no accountability, then you can't verify it.

MS. BROUWER: I wanted to just update the AP on the council's efforts to let the public know about the MPAs. We do have a brochure that has all about our MPAs, including the coordinates of every single one, what you can and cannot fish for. This was in collaboration with Sea Grant and it's been out for a couple of years. It came out shortly after the MPAs went into place.

We're also working on a mobile phone application that is going to have all the regulations. Of course, that will have the positions of the MPAs, and hopefully – not that everybody has a Smartphone, but it will be something that will make that information more acceptable. We're also upgrading our website to make it more user-friendly, and we have been working with NOAA to include the positions of the MPAs on the charts.

We have been doing a lot in the way of outreach in the last few years. The council also supported a grant through the Coral Reef Conservation Program to have an evaluation of existing enforcement capabilities in our area for remote marine protected areas. That report was prepared and given to the council I believe in December, so that has been done as well. MR. DeMARIA: Does this have to do with the motion?

MR. FEX: It's just a suggestion, just like she says about putting the MPAs on the charts, the ones you buy at Boaters World, or whatever; that's a good idea, but also on your chart plotters. Anybody that recreational fishes now has pretty much got a chart plotter where it shows the bottom contours and stuff; and have, whoever, all your Garmin and all them guys, put those MPAs in their software.

That way when that boat goes out there, he sees here is a big spot that I really shouldn't be in. That way the ignorance will be kind of null and void. Hey, there's your MPA, you shouldn't be

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in that. It wouldn't be hard. Just like she said, they put it on the charts, trying to put it on charts now.

MS. BROUWER: One more thing I forgot to mention. I talked to Chairman Cupka this morning and he instructed me to contact NOAA Law Enforcement and the Coast Guard and request that they provide a briefing to the council at the June meeting on the enforcement efforts that have been done in the MPAs in recent years. We're going to go ahead and request that hopefully later today.

MR. SMITH: Just a quick suggestion on the NOAA National Weather Service Hourly Updates, you'll hear things about the right whales and the closure of the sea bass. That would be another place that you could also get the public to hear more about it. I know there are quite a few anglers out there that are listening to their NOAA weather channels.

MR. DeMARIA: Richard, is this okay with you as it is or do you want to add something about accountability in there?

MR. STIGLITZ: That's good; that's a start.

MR. DeMARIA: That's a starting, okay.

MR. ATACK: I was just seeing if you would go along with adding to the end of that stepped up and verified on your wording.

MR. STIGLITZ: Yes, that's fine; I don't have a problem adding that on there. You can add that on there, Myra.

MR. DeMARIA: Can we go ahead and vote on this or is there any other discussion?

MS. BROUWER: I'll go ahead and read the motion. The motion reads the council should request that enforcement of existing MPAs be stepped up and verified.

MR. DeMARIA: All those in favor; those opposed. All right, unanimous

MS. WESTMEYER: I sat down and thought about this last night. After listening to a lot of the discussions you all had yesterday, I think there are a couple things that we've talked about that haven't really come out in motions. I think that's important to get on the record to send to the council.

One of them is that we know we would like to see this 240 closure go away. That is up at NOAA for approval now, but they are probably not going to do it until there is some sort of decent movement on these MPAs. We're rushing to do it, and I think we all acknowledged that we don't have the data. We don't know enough to do this right, and that's usually really bad when you're setting up an MPA.

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They need to be well designed and well thought out when they are put in place, but right now we don't have the luxury of doing that if we want to see this 240 closure go away any time soon. I would like to suggest that the AP request that the council includes an action in CE-BA 3, this amendment, that requires an enforcement and evaluation plan for all MPAs that are implemented or modified by CE-BA 3.

Also, an acknowledgement of the fact that we don't have enough data to put together well-planned MPAs. These MPAs in CE-BA 3 should be developed with sunset provisions that will effectively require the scientists and policymakers to revisit the MPAs, review the results of the evaluations, and verify the effectiveness of the MPAs in order to keep the areas closed in the future. I can send that to you, Myra. I wanted to suggest that to discuss it a little more and see if you all thought that was a good enough idea to put into a motion.

MR. MARHEFKA: Second the motion.

MS. WESTMEYER: I guess it's a motion.

MR. DeMARIA: Is that the motion up there that you want?

MR. FEX: Yes, I'll support this motion; but if you think about it, it's actually probably just our two motions before that you just did and consolidated it into one; because I was talking about evaluating our existing MPAs. My knowledge is these MPAs are in high-relief bottom. They are in effective areas that are productive for the Warsaw and the Kitty Mitchells. Then, secondly we had just requested the council look at VMS. You are about consolidating the last three motions into one. I will stand for it, but you about did the same thing with one motion.

MS. WESTMEYER: I also wanted to make sure that it was positioned as a request to go into this amendment that's being discussed and not just something the council should look at, think about, talk about, but really go into this amendment.

MR. CARDIN: We've got some MPAs and we've already got some – there are already samples being taken in some of them. There is some evaluation stuff going on. We have the HAPC, the area of concern workgroups and all that. We've got these pieces coming together. But we've got this Regulatory Amendment 11 that has been sitting on the secretary's desk since I think October.

That puts it at seven months, and he's not going to open this up anytime soon unless there is some kind of science that shows you can. Now we've got to come up with some fast kind of way of getting some information. All the things we're describing here are in an amendment two years down the road. There's got to be four, five, six, seven years of data before they assume its good science. We've got to come up with some kind of identifier, something they can do. If we can get a submarine out there, let's ask the council to go ahead and do something. First off,

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where is the money going to come from to do what we're asking the council to do here? Can staff help us with that?

MR. DeMARIA: Is this like a motion or like a whole separate amendment?

MS. WESTMEYER: We've got to cover all our bases.

MR. DeMARIA: Are we ready to vote on this; can Myra read it?

MS. BROUWER: Okay, the motion is to request that the council include an action in CE-BA 3 that requires an evaluation and enforcement plan for all MPAs implemented and modified through CE-BA 3; and include acknowledgement of the fact that there is not enough data to put together well-planned MPAs. The MPAs in CE-BA 3 should be developed with sunset provisions which will effectively require scientists and policymakers to revisit the need for the MPAs, review the results of the evaluation, and verify the effectiveness of the MPAs in order to keep the areas closed in the future.

MR. DeMARIA: **All those in favor; those opposed.** Anything else on speckled hind and Warsaw or can we move on?

MR. ATACK: I was wondering if we should make a motion or something about the type of fishing allowed in the MPAs. I heard yesterday where I guess right now they are just eliminating bottom fishing. Some of the poaching and violations are through top-water trolling. If you do VMSs and they just say they're trolling, then you're really not protecting the MPA. I was wondering if we should make a motion to make the MPAs no fishing MPAs.

MR. SMITH: Would you say no take or no fishing MPAs?

MR. DeMARIA: I think he meant no fishing; is that what you meant?

MR. ATACK: Yes, I guess I'd make the motion to have the MPAs as no fishing.

MR. DeMARIA: Does anyone want to second that?

MS. WESTMEYER: I'll second it.

MR. JOHNSON: I see your intent, Jim, but the South Atlantic, the areas that we're looking at usually has a tremendous amount of tide. I heard Chris comment yesterday that the most current he ever saw was a half a knot. We'd all be happy if we fished in a half a knot of tide. I just don't know if this is necessary, because there are not many days that you could be in that MPA and drop a downrigger down there in 180 feet, 200 feet and catch a fish. Now the guy that pulls up there and actually stops and drops a line down to the bottom with his outriggers down like they do in the Oculina Bank, you may eliminate him, but just a thought.

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MR. DeMARIA: Robert, I think a lot of the problem that he was referring to is in the Oculina Bank. They had listening devices on the bottom and they actually found trolling weights wrapped around them, wire line and all that.

MS. WESTMEYER: I think this really simplifies the enforcement part of the equation if no one is allowed to fish in there.

MR. SMITH: Now, Jim, does that mean - I know you're going to say that's awfully deep water to dive in, but does that mean you could dive and take in those areas?

MR. GOULD: Let me say this now. With the restriction on no fishing, there is going to have to be some kind of provision of no transiting through the area, because you don't know if they're fishing or not when they're transiting these areas. With the VMS systems or VIS, whatever you want to call it, the tracking software gives a speed, course continuously.

It can be set at 15 seconds; it can be set at 30 seconds the whole time. If the vessel is in there and stopped in the water, well, he's bottom fishing or broke down, one of the other. In order for somebody to transit over these areas, there would have to be a provision put into this that all the fishing gear is stowed and out of sight to transit these areas.

Some people will do it and some people won't. The positioning of these MPAs from 190 feet, a lot of times there are wahoo, dolphins and tunas in there, and there is a lot of room for violations. Effectively what we're doing here with this is you're cutting out your trolling for the wahoo, dolphin and tunas to protect somebody that might on the off chance be slow trolling for a grouper.

It gets to the point after a while where you have to let your conscience be your guide. You're going to always have cheaters; no if, ands or buts about it. I'm not really too hot about designating them as all no fishing. I'd rather see the trolling go into it that benefits both the commercial boys and the recreational boys. But, it should be made such as if you get caught bottom fishing in these MPAs, the fines would be so great that you would never want to get on a boat and go fishing in the ocean again; I mean confiscation of the boat, massive fines, and the whole nine yards.

MR. DeMARIA: We're going to take a few more comments and vote on this and then take a break.

MR. FEX: I just want to make a suggestion to the maker of the motion to take the word "new" out of there because as you read it new MPAs – yes, that's a suggestion.

MR. HARRIS: Obviously with this you don't even know where or how large these MPAs are. You know nothing about them. You could be excluding literally 10,000 square miles of fishery space. I could understand not bottom fishing there, but you're not going out and dropping down for Warsaw and using a downrigger to do it in my area.

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If you figure out a way to do that, I want to go with you so I can learn. But to stop me from being able to go out and troll for fish through a large area, I think that's asking a little too much, because your other option would have to follow it up with a no transit area, which isn't going to do any good for some of the guys that are fishing outside of it either, especially the commercial guys.

MR. DeMARIA: Can we go ahead and vote on this then take a break? Myra, can you read the motion?

MS. BROUWER: The motion reads suggest to the council that MPAs be designated as no fishing.

MR. DeMARIA: All those in favor; those opposed. **The motion fails**. Let's take a 15-minute break.

(Whereupon, a recess was taken.)

(Recording starts here) MR. DeMARIA: Did you want to change it or is that okay with you right there?

MR. JOHNSON: Yes, my comment was I just don't want the council to reconfigure what's going on and say put vermilion snapper or red snapper or something else on the back burner to fast track this. I know that's an issue. We want all this stuff and they can only do so much so fast.

MR. CARDIN: Well, let's ask council as an AP do we agree that this is a priority in our fishery, the 240 closure compared to red snapper? Okay, are we going to get a 240 opening or a red snapper opening the quickest?

MR. DeMARIA: Well, we have a motion up here, can we go ahead and vote on that. Read it.

MS. BROUWER: The motion reads recommend to the council that they request that the Southeast Fishery Science Center conduct the analysis above, and this pertains to speckled hind and Warsaw grouper, as soon as possible.

MR. DeMARIA: **All those in favor; it passes**. Those opposed, no one. Now we can move on to tilefish.

MS. BROUWER: Okay, what I'm going to do is walk you through Amendment 18B. This is I believe Attachment 1 in your briefing book. If you want to follow along, it's going to be hard for me to display things on the screen so you can see it clearly. I've indicated the PDF page at the top and highlighted in blue.

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Action 1 is to limit participation in the tilefish component of the snapper grouper fishery, and that is on PDF Page 116 of your attachment. At the March meeting the council chose to no longer consider an endorsement program for the hook-and-line sector. Their current preferred is to limit golden tilefish effort through a longline endorsement program.

Distribute golden tilefish longline endorsements for snapper grouper permit holders that qualify under the eligibility requirements specified under Action 2. The intent of the council is that only those that qualify for the endorsement would be able to fish for golden tilefish using longline gear.

MR. DeMARIA: It goes further into the quotas; how much is going to be allotted to the longline sector and the bandit fishery and all that. Can we go into that now?

MS. BROUWER: I was going to go in order, action by action.

MR. DeMARIA: Okay, but it's kind of hard to vote for or against this one when you don't know what the separation is going to be.

MS. BROUWER: Okay. Action 2 covers the eligibility requirements. This is on PDF Page 123. There has been a lot of analysis done under this action. The council did add three new subalternatives that have not yet been analyzed because we are waiting for the Southeast Region to provide the data that we need through 2011. Currently the council's preferred is that in order to receive a longline endorsement, the individual must have an average of 10,000 pounds of golden tile caught with longline gear for the best three years within the period 2006-2010.

The other alternative they added is the same thing that I just read except with an average of 5,000 pounds. Then they wanted more analysis done again with 5,000 and 10,000 pounds, but increase the time period to cover through 2011. Okay, in June we're going to have the analyses for these new subalternatives for the council to consider. I guess what the council would like from the AP is to know do you support their preferred or not and the rationale as to why or why not.

MR. HARRIS: Just out of curiosity, the year groupings that were picked; can you give me any background why those year groupings were picked, because one of the things that I've noticed in the trend is that as other fisheries have closed and catch shares – I'm not really sure, I saw the table that provided the amount of longline boats in the fishery.

I'm more interested in why all of a sudden starting at about that 2005 period it seems that there was more activity in the longline fleet. I'm trying to figure out what boats moved into the area and what was the premise of them targeting those golden tiles, because that's when we started running into problems for the hook-and-line guys, and the guys in the north. It was like there was suddenly a rush to go in and capture all those fish. It seems to me it's more of an effort to drive those numbers up to help push some of the other people out and further secure their position. I'm just kind of wondering what the background there is.

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MS. BROUWER: Rob, I think I'm going to let Bobby address that question.

MR. CARDIN: You've got the picture; the dates are a little off. In '05 the fishery started picking up. What happened is in '09, '10, '11 is when there have been a lot of new entrants. What's happening in this fishery is back in I think '07 or '08 there was a workgroup formed saying the fishery is coming back and we need to do something before we get a derby fishery going.

Through all the different amendments, this has been put aside for all these years until now we're actually in a big derby. The whole longline endorsement thing started in this AP. It was a motion in '05 or '06 because we identified there is going to be a problem like this. Longline, you can argue for it or against it, but the fact of the matter is it is not a pretty fishery in the eyes of the public. I made a motion let's identify who the longliners are, endorse them, and don't allow new entrants.

We got the Gulf; we had the sea turtle problem in the Gulf. We've actually had a hundred and something longline boats disqualified in the Gulf that could now come to the Atlantic. The whole idea of this longline endorsement was just to stop the fishery from growing. But, with all these amendments going on and everything that's going on, the fishery has grown.

Now the council at the last meeting chose to use newer numbers to incorporate some of the newer fishermen. Well, at our last AP, this AP voted to include some of the new fishermen by Mr. Johnson's motion. I, of course, went to the council meeting and said that some AP members would like to include some of the newer members.

Well, now that council is using these newer numbers, it is actually knocking some traditional fishermen out of the fishery, because there are portfolio fishermen in the tile fishery. There are very few full-time tile fishermen. A tile fisherman either was different parts of the grouper fishery and tilefished or he was a shark fisherman several months of the year and a tile fisherman several months of the year.

That tilefish workgroup back in '08, they made a control data of '08. Usually with a control date, you don't allow any future management and you don't allow this new participation. Well, there have been a few people that have come to every meeting and asked to allow us newer people, and the council has gone that way.

I personally feel – and for four years or five years this AP supported traditional fishermen. At the last AP meeting with some of our newer members and newer motions, we've switched and started supporting the newer people. I as an AP member, of course, would ask that we use control dates.

The fact of the matter is we can't keep having new fishermen. We can't keep growing. I mean our population is increasing and our fish populations are decreasing. We've got to stop somewhere. I personally would like to support older numbers, because like you say people saw

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there was a problem. There was a control date and they went ahead and bought a boat and bought the gear and deliberately started trying to catch fish to deliberately catch landings.

In most IFQ endorsement programs you don't go from today. You go from the time you started talking about it to eliminate the people who deliberately moved to deliberately have landings. Now this AP can go however they want and the council can go however they want, but it's my observation that when you use these newer numbers and include these newer people, you're going to still have the ability to overcapitalize the fleet, because some big boats with big gear have bounced in here.

There is a boat that sat on the hill for 15 years and all of a sudden is a top producer. I guarantee you some of these boats are going to produce 100, 125,000 pounds a year, and you can't have 15 boats producing like that. What this council – I'm not putting blame on anybody or anything, but when you do these high numbers and these high qualifiers, people think he catches 50,000 pounds a year and he's a big time tile fisherman.

Well, he might be catching 200,000 pounds of sea mullet off of North Carolina. He might be catching 300 pounds of sharks. It might actually be a small part of his portfolio, but you don't view him as a portfolio fisherman. What this council – you know, we've had EDF in here, we've had Redstone, we've had all these analysis that had said that in any kind of IFQ or endorsement program the fishermen that are going to survive are the fishermen that are diversified and that are portfolio fishermen.

When you use these high qualifying numbers and eliminate what you think is a small-time fisherman, you've eliminated that ability to be a portfolio fisherman. I think that when you use these big numbers and new numbers, you're removing some of the fishermen that would be more likely to make it in this type of system.

That was a little off your question, but I personally think we need to go with older numbers. That tilefish workgroup said we said we want an emergency rule; we want emergency action. The fishery was overfished, we've cut back, we're not overfished and the fish are coming back; please put a cap on it. I don't want you to give me this much and you that much. I just want a cap on this fishery, give us an endorsement. Here we are five years later now trying to endorse the new people that came into the fishery and eliminating some of the people that were already in the fishery.

MR. DeMARIA: Bobby, why don't you put it in a motion?

MR. CARDIN: I want a motion to support the original tilefish workgroup preferred. It has been everything from 2-I to 2-T. What is it, the '06 through '08 or something; the one the AP supported for three years.

MS. BROUWER: I indicated that would be Subalternative 2A, which is to have at least 2,000 pounds gutted weight when landings from '06 through '08 are aggregated.

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MR. CARDIN: Is the explanation of that you had fishermen – you know, when you take a big picture, ten years of this fishery, there have been 80 or 90 different boats in and out of the fishery. When you take this big picture, you are qualifying people that haven't fished in eight or ten years; or if you take the other end of the spectrum, you are not qualifying the people who slowed down with lower landings or you are including the new big people.

When this workgroup – I wasn't part of the workgroup I went and observed – when they came up with their numbers, I sat there and I crunched my numbers, and it worked out there was an average of 16.5 boats in the tile fishery for a ten-year period. Using those numbers and those qualifiers, guess how many boats would be in the fishery, 16 boats.

You look at what they worked out for the bandit fishermen. Guess what would be in the fishery, about what the average is. Once again I'll say this about that workgroup. A lot of the councilmen, they actually picked these guys. At the time they were the fishermen in the fishery. A lot of people don't put much weight to what they said, but they were the experts in the fishery, and this is what they wanted at the time.

The fishery has changed. The face of the fishery has changed through management measures, but I really think we need to back up in time to the control date to when the workgroup got together and said this is what we want. Just because all the red snapper – I mean it really ate up a couple years. Just because all this stuff happened, I don't think the face of the fishery should change. I think we should support our control date. I think we should support what this AP supported for three or four years.

MR. DeMARIA: Is this what you wanted up there, Bobby?

MR. CARDIN: Yes, sir.

MR. DeMARIA: Did someone second it? All right, any discussion or can we go ahead and vote on it?

MR. ATACK: I've got a question. This quotas I guess been met the last – during those years the quotas were met and was it met really in the southern fishery? By doing this, are you cutting out some of the traditional ones that didn't get to fish because the fishery was closed?

MR. CARDIN: I know the answer. The last few years – traditionally it's around 75 percent is caught by Florida boats. The last few years it's been over 90. But since the last few years have been being caught by Florida boats, when you use the newer numbers that council started to use in their last meeting, now you are not including the northern boats that used to catch them and you're qualifying more Florida boats. You've changed the face of the fishery.

If you back up in time – even the last few years the Florida boats have been catching more than the traditional share. When you back up in time and use these numbers on this board, you are

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including the fishermen that used to catch 25 percent of the fish in the north. You are encompassing what the fishery was at the time when you used these numbers and not what the fishery has become.

MS. BROUWER: Bobby, just for the record I wanted you to clarify what you mean when you say the newer numbers. Are you talking about newer years?

MR. CARDIN: By newer numbers, council at the last meeting picked a new preferred bumped up in time, came this side of the control date by using the newer landings, the newer years, all being numbers. It has included newer fishermen, but it has not included the fishermen that have been disadvantaged the last few years by how fast the fish have are being caught in the south.

The same guys that are in South Carolina that weren't able to fish the last two or three years, using these newer numbers won't be allowed to fish in the future; but if we back up in time, the guys that have been disadvantaged will be back to being able to fish again. Kari might agree with that.

MR. FEX: I support their endorsements. I'm just throwing this out there. The trip limit is 3,000 pounds. You're looking at 2,000 pound requirement. That's one trip. But I support it, I'm not making an argument, you don't even have to rebuttal on that, but it is neat how 2,000 pounds is not even one trip; just a comment.

MR. HARRIS: As the lone recreational guy, I actually knew all that because I was here and I remember when we discussed it. It was one of the points that I wanted to make was by using some of these newer numbers we were excluding some of the historical commercial guys from it. I was more looking to protect them while not allowing some of these newer guys with the bigger boats that have been out and closing out the fishery in 52 days for the last two years. They obviously are going to be the ones that get the lion's share, and I think that's wrong, and that's why I was looking to go back that far if not even further back to capture some of those historical commercial fishermen.

MR. CARDIN: Kenny, if you used bigger numbers, what we're talking about is a small year span. Like if you use a ten-year span, you incorporate 80 or 90 different boats, and that is why at the time when you discussed an IFQ would never work in it if you divide the quota between 80 or 90 boats; or if you endorse – if you do a longer years period, you're endorsing people that aren't even fishing anymore. I mean someone in 2001 could have caught 80,000 pounds that qualifies. But the 2,000 pound qualifier is to incorporate the smaller boats to harvest at a smaller level.

MR. DeMARIA: Can we vote on this? Read the motion?

MS. BROUWER: The motion reads support the original alternative recommended by the tilefish workgroup for Action 2. That is Subalternative 2A; eligibility requirement of at least 2,000 pounds gutted weight when landings from '06 through '08 are aggregated.

MR. DeMARIA: All those in favor. It passes.

MR. CARDIN: Roy Crabtree keeps saying this 4,000 pound trip limit and 2,000 pound question like Kenny is saying. I think if staff could just pass on the idea that we're not trying to include just only highliners. There are boats in the fishery that don't even have 1,000 pound holds. Back with this 13C, I was on the AP then, some of the Florida boats wanted a 2,000 pound trip limit.

The 4,000 pound trip limit was just because some of the northern boats, because they travel further, wanted a bigger trip limit. When you're associating the two – and back at 13C, back then it might have taken you five days to catch 4,000 pounds. The fishery is different today. It is a different fishery.

MR. HARTIG: Kenny, the only reason that is 2,000 pounds is when the workgroup met, there were two new fishermen that had gotten into the fishery in the last year or so. The guys that had been in it for all the time made a conscious decision to allow those two new entrants in the fishery, and this the only reason it is 2,000 pounds is because of that.

MR. FEX: Yes, I agree with you; I have no problem with it by any means. I was just thinking 2,000 pounds is not much. I mean, honestly, I catch 2,000 pounds of grunts a year. That's what I'm saying, if you are going to lay a gear, you should be able to catch 3,000 pounds in a couple days.

I mean, it's gotten to that point now where the fishery has rebounded. I was just making that point. I totally support it; I wasn't trying to make an argument with none of you guys. I was just understanding that the fact that at 2,000 pounds, that is not part of your dependence, that is my point. That was the only thing I was trying to acknowledge.

MR. DeMARIA: We've got to move on; I think we pretty much covered that.

MR. GOULD: First, Myra, how long did it take from the opening of the golden tilefish fishery this year to the closure?

MS. BROUWER: I would have to look that up, Terrell, to tell you the exact time, but it was very short.

MR. GOULD: A month and a half?

MS. BROUWER: Yes, it was about six weeks, five weeks.

MR. GOULD: Six weeks and the entire ACL was shut down?

MS. BROUWER: Yes.

MR. GOULD: Let's take the vote there and then we'll get back to what I'm getting to.

MR. DeMARIA: We already voted.

MR. CARDIN: This was under the longline endorsement action; this was longline landings.

MR. DeMARIA: Well, I suppose we should back up to the endorsement part and see if we agree with the endorsements. I just had a question for Ben before we get into discussing the endorsements. We're going to go back to the endorsements, but I want to know how was the quota divided out; what is the council leaning towards? What percent for the longliners and what percent for hook and line?

MR. HARTIG: 75 percent longline and 25 percent hook and line. That's what we've decided.

MR. DeMARIA: Historically before 1980 this was like a bandit fishery.

MR. HARTIG: It was 100 percent bandit fishery in the seventies and about 1980 it changed over.

MR. DeMARIA: So I'd be correct in saying historically this was 100 percent bandit fishery.

MR. HARTIG: Yes, you would be correct.

MR. JOHNSON: I just have a question. Did they do away with – if I remember right, the hookand-line endorsement, it's not even there anymore?

MS. BROUWER: Correct.

MR. JOHNSON: Basically the hook-and-line guy, the bandit fisherman is done, he's out.

AP MEMBER: He's not out; no, he's in.

MR. JOHNSON: Yes, but he's competing against the longline.

MR. CARDIN: No.

MR. JOHNSON: No, okay, it is 25 percent of the quota, but there is not an endorsement.

MR. DeMARIA: Right.

MR. JOHNSON: Okay, I got you.

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MR. GOULD: Does the ACL that is allowed for the longline, if they go over it is that deducted out of the hook-and-line ACL?

MS. BROUWER: No, the intent is for there to be separate ACLs, one for longline and one for hook and line with each one having their own accountability measures. They need to be tracked separately.

MR. HARRIS: Myra, isn't the accountability measure for the longliners, if they go over their ACL that the fishery just closes for them, there is no payback associated?

MS. BROUWER: Correct.

MR. CARDIN: Wait a minutes, in the past there has been no payback, it was managed together. This amendment breaks them apart; and then whatever paybacks will be addressed at that point. Up to now there haven't been any paybacks, but with this amendment it is actually assigning TACs to individual gear types.

MS. BROUWER: Just to add to that, Bobby, the council has been consistent in selecting an accountability measure that requires a payback when the species is undergoing overfishing or is overfished, which is not the case with golden tile. The accountability measure that is currently in place for the commercial sector would be that once that ACL is projected to be met, then the fishery shuts down.

MR. DeMARIA: I think the council is looking for our opinion on these endorsements. Is there anybody that wants to make any kind of motion or discuss this a little more? Any thoughts about the endorsements; do you agree with this? We should really give the council our advice in the form of a motion I think, a formal recommendation. Well, their preferred alternative, do we want to go with that for the endorsement or how do we feel about that?

MS. BROUWER: Are we going back to Action 1?

MR. CARDIN: Action 1, we preferred the longline endorsement with those qualifiers, correct?

MS. BROUWER: Action 1 simply establishes that the council will use an endorsement program for the longline sector.

MR. CARDIN: Right, right we support that.

MS. BROUWER: At this point I believe you are already on record supporting the establishment of an endorsement program, so I don't believe it's necessary for you to reiterate that.

MR. CARDIN: We're supporting it for the longline. We supported what qualifiers, and then we went onto the question the bandit, and at this point the council doesn't support a bandit endorsement. How about us; what do we support?

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MR. FEX: I personally don't support a hook-and-line endorsement. I think that should be left alone for the bandit fishermen. I supported longline endorsement because of the gear type. It's so expensive. I mean now that we're all stripped down and getting cut back here and there, I think we as hook-and-line fishermen should be able to go catch them separately from the longline endorsement. I support the longline endorsement for that rationale, and I don't support a hook-and-line endorsement.

MR. CARDIN: I make the motion that we support council's preferred alternative of no hook-and-line endorsement.

MR. DeMARIA: Is there a second on that? Seconded. Do we need to discuss it anymore or can we vote on it? All those in favor; and those opposed. **It passes.** Are there any thoughts on the way this quota is divided up, 75 percent for longlines and 25 for bandits? Does anyone have any recommendations on that; accept it or change it? Go ahead, Robert.

MR. JOHNSON: Well, I think if it traditionally was a bandit fishery, I don't think it's too much to give the hook and line 25 percent. I wish we could do that with the black sea bass fishery, but that's another issue.

MR. GOULD: What I'm seeing here is there has been a lot of discussion or thoughts about this has become a derby fishing in this fishery. If you recall a couple of three months ago, Greg DeBrango sent out an e-mail about all the fish that were on the dock and how it was flooding the market. The price had dropped dramatically and there were a lot of fish that couldn't be moved.

I think we need to look at a way where Florida does not get all of this both in the longline or the hook and line, too. We need to come up with a way that each state that has a traditional golden tilefish fishery in it has a chance to partake in it before the ACLs are caught up. The way I'm seeing it the only way to be able to do this would be to divide all the golden tilefish up state by state by state by its own ACL and let the states do the work on keeping track of what's going on.

Now, during the January opening of golden tilefish, Florida has the weather advantage. If we were to take and do this state by state by state, we could have rolling openings, which would keep from flooding the market with golden tilefish all at one time and then not having any the rest of the year.

It would give each one of the states – because of their weather demographics in the winter, it would give them an even chance to be able to partake whether the longliners were to take and move up the coast to fish for them or whatnot and the traditional bandit fishermen.

Like up off of Hatteras they don't even get a chance and haven't had a chance at them in ten years because the ACLs are all caught up by the time the weather hits. I think it would be something that this AP should look at real close and come up with a recommendation to the

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council to start dividing this up by states and do it by a historical landing record prior to, say, '75 or '80.

MR. DeMARIA: Myra said we're getting a little bit ahead of ourselves here, so let her go through some of her presentations unless you've got something really that can't wait then we're going to go on.

MR. CARDIN: Terrell, that is exactly that kind of question is why this amendment has been moved four or five years because of that type of discussion. I will tell you this much. This year South Carolina boats came to Florida and a lot of those Florida landings were by South Carolina boats, because they came down and fished the weather.

I would just like to remind people in this AP October '07 is when this started, when they asked for something to be done. The discussions of state by state – all these questions we have now are what have held this amendment up. We kind of want to get it through, and then we are going to address the other issues as they come.

North Carolina has never had a golden tile fishery. We are needing to give them their own quota. South Florida, they need to have their own quota because they haven't been longlining fishing 15 years. These are all things that need to be done and can be addressed, and they can start right here in this AP. I would ask this AP to go ahead and support this amendment and go ahead and get something done and put an end to this derby fishery. Thank you.

MR. DeMARIA: Let's let Myra go through some more of this.

MS. BROUWER: Well, I just wanted to capture the AP's recommendations for each of the actions; and I didn't want to jump around two actions down the line, that's all. But as far as a discussion goes, by all means this is important. Action Number 3 is simply an administrative action that establishes an appeals process. I believe the AP has already expressed their support for the council's preferred alternative, which is up on the screen. This is on PDF Page 133.

MR. DeMARIA: Do you want any additional remarks from us on this or are you fine with it?

MR. CARDIN: I make a motion we support the council's preferred.

MR. DeMARIA: Does anybody want to second it? Can we just vote on it? Okay, all those in favor, those opposed. **It passes.**

MS. BROUWER: Okay, Action 4 is the one that would allocate the total ACL between the hook and line and the longline. As Ben mentioned earlier, the council's preferred is to assign 75 percent to the longline fleet and 25 percent to the hook-and-line sector. As you know, Regulatory Amendment 12 would adjust the ACL – would increase the ACL based on the latest stock assessment. Currently the ACL for the longline sector would be 405,971 pounds gutted

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weight assuming Regulatory 12 is implemented. For the hook and line it would be 135,324 pounds gutted weight.

MR. DeMARIA: Any discussion on this? Does someone want to make a motion to accept it or reject it?

MR. JOHNSON: I make a motion we accept the council's preferred.

MR. DeMARIA: Is there a second? Kenny.

MR. CARDIN: Traditionally speaking, it has been a 90 percent longline fishery. Traditionally speaking, I'm talking about almost 30 something years. Ben does have a point what the fishery once was; and if the council wants to keep traditional fisheries, this is a way to do it, and I applaud the council for keeping traditional fisheries.

Now, with a new increase in the stock assessment, the longliners will be able to catch about what they've been catching now. Let's say we live with that. Well, they caught up to a million pounds in the past, but, anyway, I'd like to say can we put some kind of stipulation that if we're going to give the bandit fishery this extra poundage, this extra 15 percent, right now we're thinking we're giving it to the whole grouper snapper fleet; we're not going to turn around and get some kind of bandit endorsement that gives this quota to 10 or 15 boats.

I do not support giving a limited number of fishermen this additional quota. However, if it's for the whole grouper snapper fleet, I would support this and is this what you wanting to do 25 percent and go the whole grouper snapper bandit fishery?

MR. JOHNSON: Well, that's how the amendment is set up, right? I mean there is no hook-and-line endorsement so that basically means anybody with a valid snapper grouper permit can harvest golden tile, so, yes.

MR. CARDIN: That is the intent that this remains the entire?

MR. JOHNSON: That's correct.

MR. DeMARIA: Can we vote on this? Do you want to read it first?

MS. BROUWER: This is a motion that the AP supports the council's preferred under Action 4, and that action is to allocate the commercial quota between longline and hookand-line sectors.

MR. DeMARIA: All those in favor; those opposed. **It passes**.

MS. BROUWER: Action 5 allows for the transferability of the endorsements, and this is on PDF Page 144. The language has been tweaked a little bit since you last saw this mainly to make it

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clear for NMFS permits office to be able to administer the program in a better way. The wording currently, which the council has not yet approved, by the way – the council hasn't seen this language yet – is a valid, meaning not expired, golden tilefish endorsement, or a renewable – expired but renewable golden tilefish endorsement can be transferred between any two individuals or entities that hold or simultaneously obtain a South Atlantic unlimited snapper grouper permit.

Endorsements would be transferrable independently from the South Atlantic unlimited snapper grouper permit. Landings of golden tilefish using the longline endorsement would be associated with the South Atlantic unlimited snapper grouper permit to which the endorsement is linked at the time the landings take place.

MR. CARDIN: I'm going to make a motion, but first I'm going to explain something. This transferability issue is one of the things that had this amendment dead in the water. It's trying to decide which way to do it, what's legal, what's not legal. I think that they should be transferable. But at this point perhaps as an AP we support in this amendment the transferability issue not even be addressed in order to get this amendment through and in place before we start a new derby fishery in a new year. Transferability has been – I mean that is what put Amendment 18A on the back burner two meetings ago.

MS. BROUWER: Right, but those issues were sorted out and we've been in contact with the permits office and they have been involved in making sure the appropriate language is included in the preferred alternative and in the regulations to make it a smooth process.

MR. CARDIN: Okay, then my motion would be to accept council's preferred; and furthermore, if this becomes a problem at the council's meeting, we ask that council remove it altogether. We would also support that.

MR. DeMARIA: Does anyone want to second that?

MR. CARDIN: However, if it becomes a problem, then we would support not being transferable for the first two years of the program. Do we need to break these down into two? No, one rests on the other.

MS. BROUWER: Bobby, if the whole action is removed from consideration, then the time period for the implementation of the transferability, of course, -- it's a package, so that would also be removed, as you said to prevent this from slowing down the amendment.

MR. CARDIN: Your preferred is, Myra.

MR. ATACK: My question is why do you prefer A over B on your two preferred options there, Bobby?

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MR. CARDIN: No, it's not really the timeframe; it's the legality of what transfers. Is it the permit that is transferable or is it the endorsement that is transferable? You've got this matching the sea bass at this point.

MS. BROUWER: Exactly; 18A and golden tile would be exactly the same as far as transferability of endorsements goes.

MR. CARDIN: Okay, make that motion be a support what the council has preferred on the transferability.

MR. DeMARIA: Have we got a second for that? It's seconded. Any more discussion or can we just vote on it?

MR. CARDIN: More discussion; transferable at the implementation of the program; and that's not just then, it is throughout the program, correct?

MS. BROUWER: Yes, it would be implemented at the very start and it would continue throughout the length of the program.

MR. DeMARIA: Do we need to read this one or can we just vote? All those in favor; those opposed. **It passes.**

MS. BROUWER: The next action looks at adjusting the fishing year, and that is on PDF Page 149. Currently the council's preferred is no action; to retain the existing calendar year as the golden tilefish fishing year, January 1 through December 31.

MR. DeMARIA: There must be some discussion on this.

MR. JOHNSON: Well, the purpose of that opening is because that's when the grouper are closed; isn't that correct? The market needs fish. It wouldn't make any sense to adjust it.

MR. ATACK: I guess the reason they were looking at maybe adjusting it was so that further in the north you'd have a chance to catch the fish before the ACL was met. That was why they were looking at starting it throughout different times of the year.

MR. CARDIN: Yes, in the beginning some of the South Florida guys wanted September, some of the South Carolina guys wanted maybe April and May, and there were all these different dates. However, what we've seen is now with the four-month grouper snapper closure, up until this past year it made the tilefish worth a lot more, and even the northern guys were liking that part of the January opening.

Admittedly, there was this derby fishery this year. There were some problems. There still needs to be some further discussions on this. But once again this is another thing that's got this amendment dead in the water for four or five years. All the tile fishermen that I personally know

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support the January at this time. They just want this to get on through. They want to identify the fishery, know who the endorsements are, talk with each other and try to regulate themselves.

MR. DeMARIA: One of the complaints I heard from the boats off the Carolinas, especially bandit boats and whatnot, is they really didn't get a chance to participate in the fishery because it opened in January and the weather was bad. But if they're on a separate quota, then that kind of eliminates that problem, right?

MR. ATACK: Plus you are going to have less longliners fishing when this goes through, so that will help that, also.

MR. DeMARIA: Does anyone want to make a motion on this and give the council some direction as to what we want?

MR. ATACK: I make a motion to go with the council's preferred Alternative 1 action, retain existing calendar year as this year.

MR. DeMARIA: Does anyone want to second it? Robert seconds it. Do you need a discussion or can we just vote on this one? All those in favor. Kenny, do you want to vote? **It passes.** Those opposed.

MS. BROUWER: The next action, Action 7 would modify the tilefish trip limit, and this is on PDF Page 154. Currently the council's preferred is to remove the 300 pound gutted weight trip limit when 75 percent of the ACL is taken. The rationale here is that initially that 300 pound gutted weight trip limit was put in place to allow the hook-and-line sector to continue to fish. Now that they're going to have their own ACL, there really isn't any reason to retain it.

MR. DeMARIA: Can we get a motion on that?

MR. JOHNSON: I'll make a motion we accept the council's preferred.

MR. DeMARIA: Is there a second; Kenny. Any discussion or can we vote on that one? All those in favor, those opposed. It passes.

MS. BROUWER: Finally, Action 8 would establish trip limits for fishermen who do not receive a golden tilefish longline endorsement. This would be for everybody that has an unlimited snapper grouper permit. Currently the council's preferred is to establish trip limits of 500 pounds gutted weight for the golden tilefish component of the snapper grouper fishery for commercial fishermen who do not receive a longline endorsement. Vessels with longline endorsements would not be eligible to fish for that trip limit.

MR. DeMARIA: Motion on that?

&&MR. JOHNSON: I'll make a motion we accept the council's preferred Alternative 4.

MR. DeMARIA: Seconded. Any discussion? All those in favor, those opposed. Okay.

MS. BROUWER: Are you going to reconsider that motion? That's all the actions under Amendment 18B. What's going to happen is we're going to finalize the analyses for the new alternatives. We're updating the description of the fishery and the economic and social description of the amendment through 2011 to incorporate those data in the document. Then the council will look at this amendment in June and approve it for submission to the secretary at that meeting.

MR. DeMARIA: We had a few things under other business. We could either take a break for lunch or just spend another half hour and get through it. I know some of you want to take off. Let's just keep going? Want to take a break? Okay, we'll take a twelve-minute break.

(Whereupon, a recess was taken.)

MR. DeMARIA: Let's go ahead and start again. The first thing I wanted to do under other business. I've gotten several phone calls from a guy in Jacksonville that has been a real prolific letter writer. He has sent letters to President Obama and copied Rush Limbaugh and everybody else in the planet.

He's got some valid concerns, so I wanted to discuss one of his letters. He's written several. Let's go through one and discuss it and maybe you'll make a recommendation, some kind of motion, do you agree with him or what. Do you know him? He was supposed to be here, but I told him we would discuss this. He is really interested in what we have to say about his recommendations. Maybe you all can read over his letter real quick. You should have gotten it from him already. Somebody make some sort of a motion. It's up there now.

MR. JOHNSON: A lot of these points are valid, really. The same points have been made time and time again at I don't know how many public comments about what the closure has done, especially in our area, red snapper closure. It was our bread and butter, but I don't know.

MR. DeMARIA: Well, what do you want me to tell him when he calls me? Do you want to make a motion?

MR. JOHNSON: I'll address that. I don't think this guy is a pure sport fisherman kind of person. I think he just thinks it is horrible what has happened to the fishing industry in general. I think he'd be very supportive of you as a commercial fisherman. I've met this man. He's elderly.

He has seen what it has done and has lived long enough, like a lot of people on this panel, to see what red snapper were like 25 years ago; and go through all these decisions that the council made, you know, two fish per person, 20-inch minimum size limit, and see the stock starting to

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recover and fishing just getting better and better; just to see it completely shut down, it's frustrating. I think he's just putting that to pen.

MR. DeMARIA: I'd have to agree with Robert since I've talked to this guy on the phone. He's in his late eighties, and I don't believe he even fishes much anymore. He says the fishing really – whether he catches another fish or not it's not a big deal. He's worried about his friends.

I think it was commercial and recreational he was really – when he talked to me on the phone, if you all have some kind of recommendation that I could tell him when he calls, because he is going to call me.

MR. SMITH: I also spoke at length and I remember the day when I talked to him – I think he was a doctor, if I'm not mistaken – for about 20 minutes. My suggestion is that you would tell him that you put it up on the screen and we all read it and we discussed it, too.

MR. DeMARIA: Well, I mean does it – make a motion did we agree? Maybe the majority does and maybe they don't, I don't know.

MS. WESTMEYER: Unfortunately, what he's requesting in his letter is that the president passes an executive order that will remove all these closures. What he's effectively doing is asking the president to pass an executive order which will contradict congress' wishes, which if you think that's okay, you think that's okay.

I think that my response, if he was asking me about this for some reason, would be that instead of making that request, which is pretty farfetched, he instead supports some of the proposed legislation that's going towards congress right now for flexibility in rebuilding fisheries and flexibility in management.

MR. DeMARIA: Does somebody want to make a motion?

MR. JOHNSON: I'm not making a motion; I just wanted to comment. We all talk about flexibility of Magnuson. The truth is Magnuson is not the problem. It's the science and the funding for the science. If we had accurate numbers, accurate science, we wouldn't be in this situation. Granted in some ways Magnuson might be used as a tool against us, but it's not the issue.

The issue is data collection and congress giving money for that purpose to get out there, you know like this deepwater stuff we need to have looked at. There is no money. There is no funding. There are no personnel. It is not a top priority. That's the issue. They're asking the council to do things without giving them the tools to do them.

MR. DeMARIA: Okay, when he calls me, I'm going to tell him we read it, we discussed it and Robert Johnson has the answer.

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MR. JOHNSON: This gentleman has fished with me 25 years ago. He can call me anytime; I'll talk to him. He has called me.

MR. DeMARIA: He's very concerned about it and he's taken the time to write all these letters. I think we should discuss it and we have, so let's move on.

MR. GOULD: I would just like to say one thing as far as the economic impact. In the last five years, the last five major regulations that we have had has basically cost me a lot of days at sea. On the average, even in the economic downturn, with my business being the cheap option for people to go out, we're taking people that have got their own boats now that can't afford to run them.

I can document for each one of the regulations with the vermilion to grouper, the other stuff that has come up has cost me an average of \$40,000 in gross, which equates out the loss in using the bait, buying the bait, the tackle, the fuel, lodging, the food for the other people. My \$200,000 loss; probably if you looked down at the food chain, you are looking at \$750,000 out of the economy just from the support industries on top of this.

I'm all about getting some change in this and making it more flexible than what it is, especially in the time when from the bridge of my boat I'm spending more time avoiding fish than what I am being able to keep, because there are so many of them that people are going to go over your limits, get tickets and everything. I want to stay within the law but I'm getting so constricted now that it's eventually going to drive us down because of a bad situation. That's about all I can say.

MR. DeMARIA: Jim, you wanted to go into the recreational grouper limits.

MR. ATACK: Myra, can you throw up the trends that Mike put together? What I had Mike do was look at the ACLs for the recreational landing of the grouper, and you've got a trend there for gag, black grouper. There are the recreational landings for gag. The last two dots are 2010 and 2011, and the ACL.

They put it on a ratio so you wouldn't see the actual numbers. Almost 0.8 is the ACL limit and you are less than 50 percent of that. You're running probably 45 percent of the limit the last two years, and that is with the one gag per person limit. The black grouper, you can go to look at that also. That is running a much lower percentage, maybe 10 percent of the limit. Red grouper – and the reason I was looking at all these is because you also have the aggregate bag limit for the grouper.

Right there, the red grouper is one-third of the ACL the last couple years; and then scamp, that's running the last couple years it is less than also 50 percent of the limit. I guess what I'm thinking I'd like to make a motion is council to look at increasing the bag limit on gag from one to two and the aggregate maybe from three to four.

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It looks like if we make those two changes, we don't need a stock assessment, we've already got the existing ACLs and we won't exceed the ACLs. If you're less than 50 percent on the gag and you go from one bag limit to two, you will not double the take for the year. You still should be quite below the ACL. I think it is an opportunity to give something back to the recreational fisherman.

When he did this, a lot of things changed; January through April closure affected the ACL; eliminating the bag limit sales probably has; other fish closures, gas prices, and the economy. Then these numbers are actually probably a little bit higher than they would have been with MRFSS. These numbers include the MRIP numbers. It's the most accurate recent data that we have.

MS. BROUWER: Jim, what was your recommendation for the change in the aggregate grouper limit?

MR. ATACK: From three to four.

MR. DeMARIA: Is there a second on this? Any discussion?

MR. HARRIS: Jim, I applaud you for this because of the fact that I've got several motions here that address this specifically, but goes so far as to actually even look at – because right now we've got a three-grouper aggregate bag; only one of which can be a black or a gag. Changing the gag for those of us in my area would really do very little for me, because one of my motions was to increase that so that within that bag limit you could only have one gag.

But then because the predominant fish in my area is black, it would allow for up to two or three blacks to be included in there. We don't catch a lot of gags, but we do catch blacks, and blacks is the only one that has not been traditionally shown as overfished, but yet we're still only limited to one per day.

MR. ATACK: Would you want to change that then to the gag/bag limit, because I guess right now it is one gag or one black. Do you want to change it to two gags or two blacks as part of the aggregate?

MR. HARRIS: I would find it very easy to support that, because that covers you, because you don't catch a lot of blacks, we don't catch a lot of gags, so that serves both purposes at once.

MR. FEX: I have to disagree with this motion. And to the recreational sector I'm not trying to be mean. They put that aggregate bag limit in there to keep you guys underneath your ACL so you guys don't get closed. If you go over your ACLs, you guys have got to pay it back the next year. You guys have been closed out of a lot of fish. The reason the council put that there is to keep you guys fishing year round. That is the whole intention of a bag limit.

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You're going to do that and then you're going to have a chance of going over your ACLs. The economy is going to get better; people are going to go back fishing. The economy is bad and people can't afford to go fishing. Come next year you might have the things go up, just like you've seen the landings go up and down. They did that to keep you guys fishing.

I would disagree with that/ I've talked to recreational guys in my area, charter ones specifically that don't see no rationale for somebody to be able to keep four or five groupers along with all their other fish. You're talking about a cooler full of fish. In my area the gags are big; you're talking about a 10, 12 pound fish at least.

When you go ahead and allow that, then you have an excessive amount of fish. My buddy tells me, he's like, yes, these guys go fishing with me they say, I still have fish in my freezer from last year. Intentionally it was to keep you guys as recreational charter fishermen and everything fishing year round, so I can't support it. I'm not trying to be mean to keep taking anything from you. You guys deserve this just as much as I do, but I'd rather see you guys keep fishing to make a living instead of giving it to this guy that is just going to take it home and maybe put it in his freezer.

MR. JOHNSON: Well, first off, we're just like the commercial sector, the recreational and forhire sector. We have a four-month spawning closure, so we do not have a year-round fishery. I can support it. All I can say is if we shut down the ACL and have to pay it back the next year, then we can revisit it. But the numbers he's seeing in the last couple years they haven't come close to catching 50 percent.

MR. ATACK: The other point is the ACL will change. As the stock rebounds, the annual catch limit will also go up. If the economy changes and the fishery rebounds – because they had originally planned so many years of this, and then as the rebuilding takes place, all the ACLs go up.

MR. SMITH: Jim, were you going to add the black to the gag bag there?

MR. DeMARIA: Any other discussion or can we vote on this?

MR. CARDIN: Do we know the blacks can stand that; was that shown on the black ACL?

MR. DeMARIA: Is that okay now; can we vote on this? Do you want to read the motion?

MS. BROUWER: The motion reads recommend that the council consider increasing the gag/black grouper bag limit from one to two and the aggregate grouper limit from three to four (two gag and/or two black grouper).

MR. DeMARIA: All those in favor; those opposed. **The motion passes**. What else do we want to discuss under other business? Kenny.

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MR. FEX: I have two motions I'd like to bring forth; the first one being that the retention of the bag limit by a commercial vessel conducting a commercial snapper grouper trip limit be removed. I don't think the commercial guys should be able to go out there and take away from the recreational sector.

I don't think the stock assessment the scientists should be able to quantify that, because I know sometimes I don't even want to keep a recreational bag limit, but then that will just take away from the recreational sector. I don't think that's fair, because I fought so hard against eliminating the recreational taken against for my commercial quota against the bag limit sales. I would make a motion to do that; to eliminate the recreational retention on a commercial snapper grouper trip, not to say you can't do it when you're not commercially fishing snapper grouper, but while you are doing that not to retain the recreational bag limit.

MR. DeMARIA: Is there a second on that? Second. Is there discussion?

MR. JOHNSON: Didn't I make this motion at the last meeting? Yes.

MR. CARDIN: I think it was seconded; Robert seconded it.

MR. CARDIN: I've got a question. Now this is being worded a little different on the commercial snapper grouper trip. Now if I'm on a commercial kingfish trip, then I can have a recreational bag limit of grouper?

MR. FEX: That's correct.

MR. CARDIN: When I might accidently bycatch a grouper snapper while grouper snapper fishing, I can't keep it, I've got to discard it dead then.

MR. FEX: You're saying that if you're trolling for kings and you catch a gag that you cannot -I don't understand what you're saying.

MR. CARDIN: No, my question is if I'm on a commercial king fishing trip, I can deliberately target a bag limit of grouper snapper; but if I'm grouper snapper fishing and inadvertently have a bycatch of – let's say Warsaw is opened up and you're allowed one, black sea bass or whatever. I've got to deliberately throw it back?

MR. FEX: Yes, that's correct, because if I'm out there catching 2,000 pounds of fish, I don't there is any need for me to keep some recreational bag limit, because in my area these guys are intentionally catching these fish, whether it be B-liners, black sea bass. Whatever they do with it, I don't know, but I don't see any rationale for me to have 2,000 pounds of fish to have to take from a recreational allocation and to let the scientists extrapolate that in some formula where it takes even more from the recreational sector.

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MR. CARDIN: Well, it's extrapolated off a commercial boat. But, once again, if I'm out deliberately catching 3,500 pounds of kingfish, I can also deliberately catch a recreational bag of grouper snapper?

MR. FEX: I have no problem with that, because if we went that way, then the guys doing the grouper/wahoo with the federal permit would be arguing against it, too. I just want the guys that are bottom fishing not to be able to retain recreational bottom fish.

MR. ATACK: Example of what kind of fish are they retaining with this bag limit?

MR. FEX: A guy goes out commercially fishing May 1; he's out there, has 15 B-liners on the vessel; the coast guard comes up on him, oh, that's fine, that's my recreational fish. Whether he's cutting them up and using them for bait, whatever he's doing with them, I don't feel comfortable with that, because I know what's going on just as much – probably more than you guys do, because I interact with these barbarians that I think of.

I want them to be eliminated from being able to do that. I want this stock to rebuild more than a lot of you guys do. That's what I'm trying to do, to keep these barbarians from doing bad things like that. When you're talking about upping the bag limit on the grouper, come January when the grouper is closed, if the commercial sector gets their ACL met in October, and all of a sudden you guys of recreational have a bunch, well, when I'm out there commercial fishing I can keep a pile of grouper, and that's not fair. I don't think these guys should be able to keep these fish. They have plenty of other fish to retain.

MR. CARDIN: I get that point, Kenny, but the point I don't get is if I'm out deliberately catching – if I'm on a commercial kingfish trip and I catch 3,500 pounds of kingfish, then why should I be able to recreational catch a couple snapper groupers and extrapolate it from – that's what I'm saying. Is this going to be an across-the-board thing? I don't understand.

Now on the other hand if I'm out grouper snapper fishing and I might accidently interact with something that I could – I've got my rig on the bottom. I reel it up, I reel something that is caught or that I can't commercially sell, I'm going to kill it if I throw it back.

I mean the reason why we were allowed to keep a recreational bag limit in the first place was to cover some bycatch or get away from dead discard. If we're going to kill it, why not keep it? I don't understand why I can deliberately try to kill them on a commercial kingfish trip, but when I accidentally kill them on a grouper snapper trip, I can't keep them.

MR. FEX: If you eliminated them to be able to do it on a dolphin and wahoo, a king mackerel trip, a tuna trip; if you have a tuna on your boat and you're out there trolling and you caught a tuna with your federal permit, that means that you can't go inshore and catch recreational fish. I'm not trying to do that, because a majority of them people, the dolphin-wahoo, sell their fish, our charter fishermen.

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I'm just trying to allow that to not be a big argument. I'm just trying to keep the commercial guy that's out there bottom fishing from keeping a recreational bag limit that he has really no need for. That's the whole intention of it. They need to try to eliminate anybody that's trying to keep the guys that I know doing what they do from doing what they do.

MR. SMITH: I think Kenny is on the right track. I think he's trying to close a loophole, that's how I see it. I'd like to see you go out there and catch 3,500 pounds of kingfish and then decide you're going to do a little bit of recreational fishing there, Bobby. I know you're alpha male but that would be really something.

MR. CARDIN: Well, to that, when I'm out commercial fishing and the people or girl or whatever with me want to take fish home, I don't let them take my commercial fish home. I tell them to grab a fishing pole and catch the recreational limit. I do the same thing if I'm out spearing grouper and the boat driver wants some fish. Well, grab the fishing pole and catch your ten sea bass and you can take those home.

MR. SMITH: I think that's admirable, but you're not doing the fishing, whoever is fishing with you is doing the fishing with their recreational license, correct?

MR. DeMARIA: Let's not have this back and forth. Robert has something.

MR. JOHNSON: When I made this motion last AP, my intent was if someone had a valid snapper grouper permit and they were engaged in commercial fishing, that they could not possess a recreational bag limit, pure and simple, because it does close loopholes. Now my intent was not if Bobby Cardin wanted to go out fun fishing with his family on his commercial boat that he couldn't keep a recreational limit.

My intent was if you're out there commercial fishing – and we worked with this for ten minutes and worded it the way it was supposed to be worded. I stick by my motion. I think it needs to be done. As a charter boat operator, my customers used to count on me keeping my catch. Now there were commercial guys I guess that thought charter guys that had commercial permits were selling their charter catch.

This AP, before I was on it, made a motion and the council adopted that that prohibits captains and mates from keeping their catch. I have no problem with that. I just see this as the same thing. If you're engaged in commercial fishing, then you don't need to be keeping a recreational bag limit. If you want to eat a fish, take one of those ones you were going to sell and eat it, pure and simple. It's not that complicated.

MR. DeMARIA: Robert, can I say something? I remember going through this before. In the state of Florida, I still believe it's prohibited to mix recreational and commercial bag limits.

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MR. CONKLIN: In South Carolina, in order for a commercial fisherman to take a fish off the boat to take home to his family, he has to have a recreational license. Whether he's from South Carolina or he's from Florida or he's from Egypt, you've got to have the license.

MR. CARDIN: But this stops that guy from taking that fish now, because there is no recreational bag limit on a commercial boat anymore.

MR. CONKLIN: It should remain that way.

MR. JOHNSON: I was just trying to clarify it for law enforcement purposes, so you don't have this gray area. That's what you ran into when they had their commercial grouper closure. Every commercial boat that was fishing had their recreational bag limit of grouper. Those fish we all know were making it into the marketplace through backdoors of restaurants and everywhere else. That's just the intent of this. If you're commercial fishing, reef fishing, and you want to eat a fish, take one home to eat it, but it needs to be something you could easily harvest.

MR. CARDIN: I agree with what Kenny is saying, I agree with everybody, but what's different here is last time the motion was about commercial fishing couldn't have a recreational limit of grouper snapper. I want to know how come now it is only about commercial fishing for grouper snapper. All the points that you said and could bring up it, did bring up, and that's my point.

What we've got now is we've got people in North Carolina, they are going to go out there and going to shoot more groupers, hogfish, and they want to sell their lobster, the lobster from the trip. My point is it should either be either if you're engaging in a commercial trip, you should have no recreational limits, it should be across the board. It shouldn't be the one guy that has a reason to interact with the bycatch of grouper snapper be the one guy not allowed to keep it.

MR. FEX: I understand that, but I'm just trying to get this idea passed through, because I know if you put it that rationale way, and I understand that, but like I said the guy that's out there dolphin/wahoo trolling and he's going to go sell them wahoo, he then can't go inshore and catch some bottom fish. I don't have no problem, because he's recreational majority, anyways, because it is not a strictly commercial fishery.

Okay, if you think you'd like to word it – because you were actually the ones that made the big discussion about it last time at the last meeting. I'm just trying to clarify the law to make it easier, so that way it could be done. If you think there is a better way to word it without any opposition that would be even clearer, I would be fine to hear it, but I don't see it. That would be the most logical way I could see.

MR. CARDIN: I was pointing out the other issues it brought up, because I wanted to be clear that that's what it did. You're either a commercial fishing boat or not. What I don't like about this is if you're commercial grouper snapper fisherman, you might actually have a bycatch of something that's on the recreational limit. Now this guy has to throw away a dead fish that he

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accidentally killed, but yet you're letting everyone else go commercial fish for other things and deliberately kill the fish. It should be across the board.

MS. BROUWER: I guess I'm a little confused and I wanted to bring up that the council does have in place several accountability measures for the commercial sector that allow for them to retain the bag limit but stop fishing commercially when that ACL is projected to be met. How is that going to jive with this?

MR. CARDIN: That's what council has done and council has always elected to leave a little recreational bycatch to cover stopping post-mortality discard. Kenny doesn't like that and he wants to go against that, which is fine and this AP can support it, but it should either be across the board or it should be the way council has selected to do it, one of the two.

MS. BROUWER: Okay, so those accountability measures for all those species would need to be changed.

MR. CARDIN: Right, the problem we're getting into – no, I don't really want to change it. It is Kenny's motion and people support, but we're getting into things that we got 30 or 40 grouper snapper species that are not going to have ACLs. It's only going to be your recreational limit in the first place. There might be a point where I'm catching tomtate or white mouths or whatever, that I'm going to have to discard all of them because I'm not going to be allowed to have a recreational limit on board. I kind of like the way the council has been doing it and the council has been doing it for a reason.

MR. DeMARIA: Can we vote on this? Do you want to read the motion?

MS. BROUWER: The motion reads recommend that the council consider disallowing retention of the bag limit while on a commercial snapper grouper trip.

MR. DeMARIA: All those in favor; all those opposed. Okay, **the motion fails.** Is there anything else we really have to discuss?

MR. MARHEFKA: A real quick motion here; that the council relaxes the commercial red porgy trip limit and add another 120 head to a 240-head per trip.

MS. BROUWER: Would you please repeat that?

MR. MARHEFKA: That the council relaxes the commercial red porgy trip limit and add another 120 heads to be 240-head per trip.

MR. DeMARIA: Second on that.

MR. CARDIN: I second that. Mark, what's the science behind that.

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MR. MARHEFKA: The science behind that to me is that in 1992 we put a 12-inch size limit on red porgy; we got a cut there. In 1999, seven years later, we went to a 14-inch size limit on red porgy. In '99 we went to a prohibitive harvest of red porgy. By 2000 that emergency action was lifted; we went to a 50 pound trip limit.

Six years later of only harvesting 50 pounds of red porgy, we went back to a 14-inch size limit, a four-month closure and we got an increase from 50 pounds to 120 head. Six year later we need to go and see a little bit of payback here. We're only looking at 127,000 pounds of gutted weight red porgy. It's time to go and see a little bit of return on our investment here, and the council needs to go and sort of step up to the plate.

MR. FEX: I will support this motion. When I was at Key West, that discussion was actually brought up by council members, but the stock assessment is coming out this year. We had almost met the ACL on the last year; I think we were close to it by 40,000 pounds. I think I will support it again, but I think they will tell you to wait until the next stock assessment. Again, I will support it. I just wanted to make you understand that we had went down – our landings had actually gone up and now we were really close to it last year by they said 30 or 40,000 pounds. They kept that. If you doubled it, we would go over that so we might be shut down.

MR. MARHEFKA: You don't have to make me understand. I understand that we went and we had a lot of fish taken away from us and it's time to go and turn them back on. There are a lot of red porgy offshore right now and we need to go and sort of start tapping into this. There is no reason why we can't go and add a little bit more weight there.

MS. BROUWER: Just for your information, there is a red porgy update scheduled for this year. And as Kenny said oftentimes it's better to wait for the results of a stock assessment before the managers can go ahead and make any changes.

MR. THOMPSON: I'll just make a recommendation. It's only a recommendation right now, but I would like to see us -- like Terrell said, let's go from our three to a four at least on the recreational side, bump them both up; and when that information comes out, we will at least be already recommending to increase.

MR. MARHEFKA: Yes, I agree. If you want to go ahead and adjust that to the recreational side to add whatever – what was it from a three to a four? Yes, I'm fine with that. Once again, yes, it is a recommendation, and, yes, I do understand that we have to go through a full-blown stock assessment before we go and do anything. I just want it to go and be a recommendation as coming from the AP.

MR. CARDIN: I seconded the motion; I agree with the recreational change. I would however ask Mark, and, yes, we've got a stock assessment coming but we see how long it takes to give fish back. Why not go ahead and get an amendment going now. But, Mark, do we really think that the stock is going to handle – I mean, we might think that the stock is going to handle it, but

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do we think the stock assessment or the TAC is going to allow that? Do you really want to double it? Can you get a number in between there, say, 200 fish?

MR. MARHEFKA: Well, I'm just going to go and shoot high and let's go and just see what happens. I mean that's the way we've got to work around here, shoot high. And if there is only 50 head, then that is fine, we'll deal with 50 head. It's not like I want to live with that. It's just I'm looking at economic feasibility of going offshore and actually harvesting something that we have that's available and not to manage all the management that has been put in place already on these fish.

MR. DeMARIA: Well, the council can always cut back from that 240 number. Why don't we go ahead and vote on this. Can you read the motion?

MS. BROUWER: The motion is recommend that the council consider relaxing the commercial red porgy trip limit and add another 120 head for a total of 240 head per trip; also recommend that the recreational bag limit be increased from three to four.

MR. DeMARIA: All those in favor; those opposed, one opposed.

MR. CARDIN: Can we change the wording from relax the commercial to relax the commercial and recreational?

MR. DeMARIA: Is there anything else that we really need to discuss? Any other motions or can we try to wind up this meeting?

MR. HARRIS: Since we're talking about the golden tilefish fishery, I've got a motion I'd like to make. Based solely on the fact that we are in a position right now where we are doubling the ACL, we're looking at going back to some historical catches for the endorsements, the one thing that I was a little disappointed and see the council didn't address when it had its last meeting was the allocations. I would like to make a motion to change the allocation for the golden tile fishery to a 90/10 split between the recreational and the commercial.

Right now we're increasing the commercial ACL. This would be the best time to do an actual change to the allocation because the commercial guys are going to gain regardless of what you do with the allocation, but it gives you a chance to give something back to the recreational guys while you're doing an adjustment to the ACL. We just did an assessment and this is the time that it makes the most sense to increase the allocation for the recreational guys.

MR. DeMARIA: Is there a second to that?

MR. SMITH: I second it.

MR. CARDIN: Rob, longliners are giving 75,000 pounds to the bandit fishery, and I understand why it would be a good time to ask for a part of it. But I've got to ask what are we going to do?

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Just a couple years ago it was like – the recreational harvest was like 4,000 percent over the target.

I mean, when we're talking about paybacks we're looking – there is a chance that NMFS might have to shut down the recreational tile fishery for 20 or 30 years to pay that back. Where are we back with that 300,000 pound tilefish year? Is that being addressed in any way, staff or anybody?

MS. BROUWER: I'm sorry, Bobby, could you repeat your question?

MR. CARDIN: Yes, when we looked at the landings for the recreational in the tile fishery, we had a couple spike years, 300,000, 200,000 pounds; when does that get addressed?

MS. BROUWER: Are you talking about the landings that looked anomalous in 2008, I believe it was; is that what you're referring to?

MR. CARDIN: Yes, I only saw like 10 or 20, 30,000 pounds landed recreationally in my inlet. I don't know where 300,000 pounds came from.

MS. BROUWER: Yes, and we did bring this up to the regional office and we were told that those numbers originated with the MRFSS database and that was the number that they had been provided. It is my understanding that is what the database is showing the landings were during that year, 240,000 pounds.

MR. CARDIN: Well, let me rephrase my question. Right now we hear the council struggling with the idea of how they're going to manage 400 tilefish and 500 snowies and what have you. You're talking about adding another 500 or 800 tilefish or something to the pot. If we're going to talk about adding allocations, are we going to talk about some kind of tagging program or just plain old give the fish there or are we going to quantify how we're going to give it and who gets it or what have you?

MS. BROUWER: The council is actually – the idea of a tagging program was taken out to scoping earlier this year for that very reason and for that purpose, especially to address golden tile. The council chose to basically not discuss that right now, and also get more input from the states, because they felt it would be more appropriate for the states to step up and establish their own tagging program since some states already have them. That's where we are as far as that goes.

MR. CARDIN: Rob, just as an AP, we're giving suggestions to the council that we want there to be a bigger recreational ACL. What can we tell council; just give it to us and we'll count it ourselves? Any suggestions on how you'd like to get that?

MR. HARRIS: I actually have several ideas. First, it's very easy for the recreational guys to exceed a 1,500 fish limit because of the fact that the reporting systems that we have in place right

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now are - to put a finer point on it, they just absolutely suck. There is no way to account for 1,500 fish. In the snowy grouper fishery we get 523 fish.

We're not talking pounds; we're talking actual heads of fish. When you've got 400,000 pounds in the ACL that is increasing and now you're telling the largest user group, which would be the recreational fishermen, that you get 1,500 fish; one longliner, a commercial trip for him is three times of the entire recreational ACL.

This is a time to give back because we know that the recreational fishermen fish in this fishery. We're not so far removed from when we didn't have limits, but we also didn't have a global community that we could put a finger on and say these are the amount of people that are fishing in the fishery.

What I'm trying to do now is to get back some of the fishery. Three percent of a fishery like that with 100 percent mortality rate when we fish it, it just doesn't make any sense to me. It's not worth the effort for the guys to go out and get. In my area where we fish them we actually fish them further out than what we do the snowy grouper.

Well, right now we don't have snowy grouper, so at some point when they start to look at this again they are going to say, oh, well, the recreational guys haven't been doing anything with their fishery. Well, that's not true. We're being shut out of it because of the fact that we don't fish it or we have no way to actually represent those of us that are fishing it. I've got a follow on motion that actually asks the council to require a permit similar to an HMS permit for that deepwater fishery so we can start isolating who was actually participating in that fishery.

MR. DeMARIA: Let's take one more comment from Jim and then we're going to vote on this.

MR. ATACK: Yes, basically you've got 3 percent of the ACL right now, right, and you're talking about going to 10. Right now 295 is your ACL. It would be going to 406, the longline part based on the current things we're proposing, and 135,000 to hook and line. If he goes from 3 percent to 10 percent, you're still going to go from 295 on the longline to about 390.

You're still going to have about a 95,000 pound increase and the hook-and-line guys are going to get their 125,000 pounds. Everybody goes up; you still go up quite a bit. His 4,000 percent overage is going to be closer to probably the 10 percent of the landings.

MR. DeMARIA: Let's go ahead and read the question and vote on it. We can argue about this the rest of the afternoon.

MS. BROUWER: The motion is to recommend that the council consider changing the allocation of the golden tilefish ACL to 90 percent commercial and 10 percent recreational.

MR. DeMARIA: All those in favor, those opposed. **The motion passes**. Do you want to make another motion?

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MR. ATACK: The last AP meeting we had we talked about triggerfish and hogfish and we sent it to council. The council sent it back that they didn't want to do any minimum size changes until they do a stock assessment. I guess I'd like to throw it back to council again and make a motion to look at increasing triggerfish to 14 inches and hogfish to 18 inches based on biology.

You don't really need a stock assessment to know what size the minimum stock breeding size is. That was the whole idea. The extra pressure on the triggerfish, there was fishermen here complaining last night about all the triggerfish that were getting hammered because the grouper season is closed, and next think you know we're not going to have any triggerfish. I think they can make those minimum size changes based on the biology of the fish. We can be pragmatic about this and ask that they do that.

MR. DeMARIA: Is there anyone that wants to second that? Robert. The 18-inch hogfish thing didn't go over very well in Florida, I can tell you that.

MR. STIGLITZ: An 18-inch hogfish down where we're at, we'd never get to keep one, ever.

MR. ATACK: I guess I can tend to disagree with that. The reason you don't have them now is because they mow the grass; and as soon as they're above 12 inches, they shoot them, so you're right, they won't get to be 18 inches. But they are fast-growing fish, there is biology on it, there is research on it. There are big fish in the Gulf. The Keys are so hit hard by divers and snorkelers, that is why they don't get any bigger.

MR. STIGLITZ: Well, in 40-some years and I've never seen them there, even before all the diving. They're not there.

MR. DeMARIA: Richard, can I say something here? I think if you'd have gone with the 14-inch size limit for hogfish and then bumped it up as the years went by, you wouldn't have been met with such resistance, but this 18 inches brought everybody out of the woodwork. If it had been 14 inches, you would have got your way, but you were asking for too much, and it's just the way it is. But we can discuss this and we can vote on it again if you want, but I think your 18 inches, I don't think it's going to go anywhere.

MR. SMITH: May I ask Jim if he would amend it and make his suggestion be 14 inches even though I support 18 inches. And not to argue with Richard here with his experience down in the Keys, but baseline just continues to shift.

MR. DeMARIA: Jim, what about something like 14 inches with something like as the years go by increasing the size limit, something like that, with increasing size limits in the years to come, but start out with 14. Do you want to change it to that and word it?

MR. ATACK: Yes, we can reword it to 14 and a year later maybe go to 16.

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MR. DeMARIA: What about just 14 with annual increases, something like that.

MR. JOHNSON: We want to make sure we don't get triggerfish and hogfish just lumped together there on the increase.

MR. DeMARIA: Does that work there?

MR. ATACK: Put 14 on triggerfish and hogfish 14 inches with annual increases.

MR. DeMARIA: Can we go ahead and vote on this?

MR. HARRIS: Just a quick comment, Jim, I can support the 14 inches. Personally I could support the 18 inches. When you put the annual increases for the hogfish in there, I hope you have more bedrooms because I'm going to have to move to your place if I vote to approve that.

MR. ATACK: Well, we can take off the annual increases. There will be a stock assessment down the road and maybe that could be where we go to another increase.

MR. DeMARIA: Can we go ahead and vote on this, if Myra will read it.

MS. BROUWER: The motion reads recommend that the council consider increasing the minimum size limit of gray triggerfish and hogfish to 14 inches.

MR. DeMARIA: **All in favor; does anyone oppose that?** Is there anything else we need to cover under other business? I know Terrell wanted to give some kind of a talk.

MR. GOULD: I've got about six hours worth there, but I'm done right now. Some of the stuff that I wanted to address was addressed with the golden tilefish with what we were doing. It was more along the lines of dealing with redistribution of the resource up and down the coast, but I think that was pretty well covered for the time being; take and see how it goes with this 75/25 redistribution.

My biggest concern is that Florida has basically monopolized the golden tilefish for quite a few numbers of years. Believe it or not, there has been golden tilefish caught up off of our coast, both south of Beaufort Inlet and on up towards Hatteras, which I would love to see our commercial fishermen being able to utilize, but they haven't because the ACL has been caught up before they had a chance to do it. We'll let that one lay for the next one and maybe during the next meeting we can put four or five hours behind there and discuss it a little bit.

MR. DeMARIA: I know a lot of you all want to get out of here early today, and that's why I'm kind of trying to wind this thing up. One more comment, Robert.

MR. JOHNSON: Well, actually I wanted to make a motion and have council look at adjusting the black sea bass recreational fishing year – I'll explain that if anybody has any questions – to

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when it's more economically valuable to the fishermen, say, a fall opening versus — we're opening black sea bass in June when we can catch just about everything else but red snapper. In the fall, October 31, vermilion snapper close, we have no fishery.

MR. DeMARIA: Is there a second to that?

MS. BROUWER: Robert, do you want to suggest a fall start or just leave it open?

MR. JOHNSON: I would like to see a November 1 start or I'm looking to the people from Carolina for some instruction here, but I know what's happening is we're having black sea bass open up in June, which makes absolutely no sense.

MR. GOULD: Can I say this much? If you open it up in November in North Carolina, that is the height – October, November, December, that is the height of the killing season before it shuts down, for the thing. We can kill sea bass year round. You saw how long it lasted this last go around. June, they shut it down, what, the middle of October like that. We went 57,000 pounds, I believe it was, over the ACL this year, 60,000 pounds last year.

If we'd leave it with the June opening, the ACL would not get caught up as quickly as it is now because it is during the hotter months. It will give you all a chance at them in the fall, us a chance at them in the fall. But from what I'm seeing is until we have another reassessment and this is upped on the ACL, you are going to be shut down before you even get going good.

That's just the way it is because there are so many fish now and so many people fishing for them. With the recreational MRIP, their data being so flawed, it will be caught up in no time and we won't have anything to fish for in the summer outside of the other stuff. I'd leave it status quo until another stock assessment comes up for them.

MR. DeMARIA: We really need to get a second to this motion before we discuss it. Is there a second or do you want to keep the motion, Robert?

MR. JOHNSON: I'll withdraw the motion. I'll just make this comment, Terrell. My point was you've got other stuff available in the summer. You've got gray triggerfish, amberjack, grouper, and vermilion snapper. You have nothing available in the fall. I mean, my point was why not have a fish that you can keep? We've got headboats in Florida catching ringtailed porgies and sharpnose sharks is all that are coming home in their fish box. We had a three-month black sea bass season last year; I don't know why you think we're all of a sudden get a big season again.

MR. DeMARIA: Robert, if you're withdrawing this, you and Terrell can discuss this afterwards, and we're pretty much finished with the meeting. One more and then we're going to close the meeting.

MR. HARRIS: To follow up on my last motion, I would also like to make a motion that council requires a recreational snapper grouper permit similar in fashion to an HMS

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permit that is already required for us; and to use this data in support of the number of anglers that are actually participating in the fishery and make it an annual permit that has to be renewed.

MR. SMITH: I'll second that.

MR. DeMARIA: Is there a discussion on this? Can we vote on this? All those in favor, those opposed? Bobby.

MR. CARDIN: Mr. Chairman, did that pass?

MR. DeMARIA: Yes, it passed.

MR. CARDIN: I'd like to make a motion that the council do another grouper snapper fishery cleanup and mimic the 1998 two-for-one thing to make more 225s, use the same numbers, the same qualifiers, just mirror the thing as in '98; and clean the grouper fishery up in the same style they did in 1998.

Qualify with a thousand pound qualifier; vessels catching from 1 pound to 999 pounds will receive a 225 permit. Vessels catching over a thousand pounds will keep their unlimited snapper grouper permit; vessels catching the same, a mirror of the fisheries cleanup, the same thing as Amendment 8, just in a new timeframe.

MR. DeMARIA: Is there a second to that? Well, we've got to second it to discuss it. Is there a second?

MR. JOHNSON: I don't know what the qualifiers were, so I can't really support something. I'm all for them cleaning up latent permits; but when you start attaching years and pounds assigned to years.

MR. DeMARIA: Do you all want to discuss this anymore or vote on it?

MR. CARDIN: The initial eligibility was you had to have a valid snapper grouper permit between 2000 – how would that be?

MR. DeMARIA: Bobby, I've got a question for you. If we still have the two-for-one permit, why do we need to do an extra step to eliminate people?

MR. CARDIN: Because right now we still have hundreds of permits that aren't actively fishing. We're talking about a fishery that could be overcapitalized. The council keeps talking about the fishery can be overcapitalized, all these reasons for IFQs and that. We've got like 200 and something permits with no landings. We have hundreds of permits with less than a thousand pound landings. If we just do a new cleanup and it can cap the fishery – the fishery is still too easily overcapitalized. All right, I'll withdraw the damned motion.

MR. BROUWER: Bobby, you may want to consider suggesting that the council conduct an analysis to see how many latent permits exist in the fishery or something along those lines that will give them a better footing to take action.

MR. CARDIN: I already have that in my bag, but okay. Can we do analysis of doing a mimic fisheries cleanup as in Amendment 8, just using years 12 years newer; a twelve-year fishery cleanup under the same guise as Amendment 8. Recommend that council consider taking action to clean up snapper grouper fisheries latent effort similar to what was done in the 1988 but using the new control date of – and I give you latitude to put the new control date in – is it September 2011, and use the same poundage qualifiers identical to the fishery cleanup in Amendment 8.

MR. DeMARIA: Is there a second on this? Is that a second, Mark?

MR. CARDIN: That would be a newer than 12 years. Can we give her latitude to do the proper year; I guess it would be 14 years. Is the word latent in there?

MR. MARHEFKA: Yes, we need to remove just latent permits.

MR. CARDIN: Not a new control date, using the control date that is whatever our last control date is.

MR. MARHEFKA: When was the last control date, September?

MR. CARDIN: Yes, that's good; we've got to use the most recent control date. You can't go back in time further.

MR. DeMARIA: I think we had a second on that I think. Can we go ahead and vote on this? All for it; all those opposed.

(Whereupon, the meeting was adjourned on April 19, 2012)

The following motion was missing from the recording, but was captured by Myra Brouwer

MOTION: AP REQUESTS AN ANALYSIS TO DETERMINE THE CUMULATIVE IMPACTS OF EXISTING REGULATIONS (4-MONTH CLOSURE ON GROUPER, LONGLINE CLOSURE, SMZs, SNOWY GROUPER REBUILDING PLAN, EXISTING MPAs, AND OTHERS AS APPROPRIATE) ON THE INCIDENTAL TAKE OF SPECKLED HIND AND WARSAW GROUPER

APPROVED BY AP

Snapper Grouper Advisory Panel

April 18-19, 2012

N. Charleston, SC

Transcribed By: Graham Transcriptions May 2012

Certified By:	Date:
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INDEX OF MOTIONS

- PAGE 20: Motion that the AP recommends that the council allow transit in the Oculina Bank and be consistent with transit provisions for all MPAs. Motion carried on Page 20.
- PAGE 84: Recommend the council should consider a small-scale experimental fishery for speckled hind and Warsaw grouper and request that harvest be conducted by fishermen and sampling be done by NMFS or DNR agencies. Motion was defeated on Page 84.
- PAGE 90: Recommend the council should approach the State of Florida and request that harvest of Warsaw grouper in Florida State (Atlantic) Waters be prohibited. Motion carried on Page 90.
- PAGE 94: Motion that the AP supports the council's effort to further identify and expand EFH and HAPCs for speckled hind and Warsaw grouper as a basis for potential MPA design and development. Motion carried on Page 94.
- PAGE 101: Limit terms for chair and vice-chair to two years (four meetings). Motion carried on Page 101
- PAGE 113: Motion to request that research to determine the effective existing MPAs on speckled hind and Warsaw grouper be undertaken. Motion carried on Page 113.
- PAGE 122: Motion to suggest to the council that VMS be mandatory for any vessel, commercial and recreational, harvesting fish in South Atlantic waters. Motion carried on Page 122.
- PAGE 124: The motion reads the council should request that enforcement of existing MPAs be stepped up and verified. Motion carried on Page 124.
- PAGE 126: Motion to request that the council include an action in CE-BA 3 that requires an evaluation and enforcement plan for all MPAs implemented and modified through CE-BA 3; and include acknowledgement of the fact that there is not enough data to put together well-planned MPAs. The MPAs in CE-BA 3 should be developed with sunset provisions which will effectively require scientists and policymakers to revisit the need for the MPAs, review the results of the evaluation, and verify the effectiveness of the MPAs in order to keep the areas closed in the future. Motion carried on Page 126.
- PAGE 128: Motion to suggest to the council that MPAs be designated as no fishing. Motion was defeated on Page 128.
- PAGE 126: (This motion was made off the record by an AP member) Motion to recommend to the council that they request that the Southeast Fishery Science Center conduct the analysis above, and this pertains to speckled hind and Warsaw grouper, as soon as possible. Motion carried on Page 126.
- PAGE 133: Motion to support the original alternative recommended by the tilefish workgroup for Action 2. Motion carried on Page 134.

INDEX OF MOTIONS (CONTINUED)

- PAGE 137: Motion to support the council's preferred alternative of no hook-and-line endorsement. Motion carried on Page 137.
- PAGE 138: Motion to support the council's preferred under Action 3. Motion carried on Page 138.
- PAGE 139: Motion that the AP supports the council's preferred under Action 4. Motion carried on Page 139.
- PAGE 141: Motion that the AP supports the council's preferred under Action 5. Motion carried on Page 141.
- PAGE 142: Motion that the AP supports the council's preferred under Action 6. Motion carried on Page 142.
- PAGE 142: Motion that the AP support the council's preferred under Action 7. Motion carried on Page 142.
- PAGE 142: Motion that the AP support the council's preferred under Action 8. Motion carried on Page 143.
- PAGE 147: Motion to recommend that the council consider increasing the gag/black grouper bag limit from one to two and the aggregate grouper limit from three to four (two gag and/or two black grouper). Motion carried on Page 147.
- PAGE 152: Motion to recommend that the council consider disallowing retention of the bag limit while on a commercial snapper grouper trip. Motion was defeated on Page 152.
- PAGE 154: Motion to recommend that the council consider relaxing the commercial red porgy trip limit and add another 120 head for a total of 240 head per trip; also recommend that the recreational bag limit be increased from three to four. Motion carried on Page 154.
- PAGE 156: Motion to recommend that the council consider changing the allocation of the golden tilefish ACL to 90 percent commercial and 10 percent recreational. Motion carried on Page 156.
- PAGE 158: Motion to recommend that the council consider increasing the minimum size limit of gray triggerfish and hogfish to 14 inches. Motion carried on Page 158.
- PAGE 159: Motion that council requires a recreational snapper grouper permit similar in fashion to an HMS permit that is already required; and to use this data in support of the number of anglers that are actually participating in the fishery and make it an annual permit that has to be renewed. Motion carried on Page 160.

INDEX OF MOTIONS (CONTINUED)

PAGE 161: Motion to recommend that the council consider taking action to clear up the snapper grouper fishery of latent permits similar to what was done in 1998, but using the control date of September 17, 2010, and using the same poundage qualifiers. Motion carried page 161.

The following motion was missing from the recording, but was captured by Myra Brouwer

MOTION: AP REQUESTS AN ANALYSIS TO DETERMINE THE CUMULATIVE IMPACTS OF EXISTING REGULATIONS (4-MONTH CLOSURE ON GROUPER, LONGLINE CLOSURE, SMZs, SNOWY GROUPER REBUILDING PLAN, EXISTING MPAs, AND OTHERS AS APPROPRIATE) ON THE INCIDENTAL TAKE OF SPECKLED HIND AND WARSAW GROUPER

APPROVED BY AP

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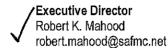
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N. Charleston, SC 29418

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SNAPPER GROUPER AP MEETING

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SNAPPER GROUPER AP MEETING

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