Agenda Joint Coral/Habitat Protection Committee

Gulf of Mexico Fishery Management Council

Marriot Beachside Hotel Flagler Ballroom Key West, Florida

Wednesday, June 10th, 2015 11:00 a.m. – 12:00 p.m.

- I. Adoption of Agenda (Tab N, No. 1) Williams
- II. Approval of Minutes (Tab N, No. 2) Williams
- III. Action Guide and Next Steps (Tab N, No. 3) Kilgour
- IV. Review Joint Coral SSC/AP Meeting Report **(Tab N, No. 4)** Kilgour a. Committee Recommendations- Williams
- V. Other Business Williams

Coral Committee Members:

Williams, Chair Stunz, V. Chair Bosarge Cook/Brand Sanchez Wiley/Bademan

Habitat Protection Committee Members

Diaz, Chair Sanchez, V. Chair Bosarge Cook/Brand Dohner/Constant Greene Perret Williams

Staff: Kilgour

1 2	GULF OF MEXICO FISHERY MANAGEMENT COUNCIL
3 4	JOINT CORAL/HABITAT PROTECTION COMMITTEES
5 6	Marriott Beachside Key West, Florida
7 8	June 23, 2014
9	CORAL COMMITTEE VOTING MEMBERS
10	Roy WilliamsFlorida
11	Martha Bademan (designee for Nick Wiley)Florida
12	Dave DonaldsonGSMFC
13	Corky PerretMississippi
14	John SanchezFlorida
15	
16	HABITAT PROTECTION COMMITTEE VOTING MEMBERS
17	Dale Diaz (designee for Jamie Miller)Mississippi
18	Leann BosargeMississippi
19	LCDR Jason BrandUSCG
20	Dave DonaldsonGSMFC
21	Harlon PearceLouisiana
22	Corky PerretMississippi
23	Patrick RileyTexas
24	Bob ShippAlabama
25	Phil Steele (designee for Roy Crabtree)NMFS
26	Roy WilliamsFlorida
27	
28	NON-VOTING MEMBERS
29	Kevin Anson (designee for Chris Blankenship)Alabama
30	Doug BoydTexas
31	Glenn ConstantUSFWS
32	Pamela DanaFlorida
33	Myron Fischer (designee for Randy Pausina)Louisiana
34	John GreeneAlabama
35	Campo MatensLouisiana
36	Lance RobinsonTexas
37	
38	<u>STAFF</u>
39	Doug GregoryExecutive Director
40	Karen HoakAdministrative and Financial Assistant
41	Morgan KilgourFishery Biologist
42	Mara LevyNOAA General Counsel
43	Phyllis MirandaDocument Editor/Executive Assistant
44	Emily MuehlsteinFisheries Outreach Specialist
45	Mark Mueller
46	Ryan Rindone
47	Charlotte SchiaffoResearch & Human Resource Librarian
48	Carrie SimmonsDeputy Executive Director

1	
2	OTHER PARTICIPANTS
3	Captain Mike's Island Lady Deep Sea FishingFort Myers, FL
4	Jeff BargerOcean Conservancy, Austin, TX
5	Holly BinnsPew Charitable Trusts
6	Steve BranstetterNMFS
7	Eric Brazer
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9	Glen Brooks
10	Rita CotterCongressman Garcia's Office, Key West, FL
11	David CupkaSAFMC
12	Buddy Guindon
13	Chad HansonPew Charitable Trusts
14	Don JonesFort Myers, FL
15	Barbara KellyFKCFA, FL
16	Bill KellyFKCFA, FL
17	TJ Marshall
18	Sharon McBreenPew Charitable Trusts
19	Bonnie PonwithNMFS
20	Tom SteberOrange Beach, AL
21	Bob ZalesPensacola, FL
22	
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25	The Joint Coral/Habitat Protection Committees of the Gulf of
26	Mexico Fishery Management Council convened at the Marriott
27	Beachside, Key West, Florida, Monday afternoon, June 23, 2014,
28	and was called to order at 1:30 p.m. by Chairman Roy Williams.
29	
30	ADOPTION OF AGENDA
31	APPROVAL OF MINUTES
32	ACTION GUIDE AND NEXT STEPS
33	
34	CHAIRMAN ROY WILLIAMS: This is the meeting of the Joint Coral
35	Committee and Habitat Protection Committee and our briefing
36	materials are behind Tab I and I would refer everyone to Tab I,
37	Number 1, which is Adoption of the Agenda. Is there a motion to
38	adopt the agenda?
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40	MS. JOHN SANCHEZ: So moved.
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42	MS. MARTHA BADEMAN: Second.
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44	CHAIRMAN WILLIAMS: It's moved by John and seconded by Martha.
45	Is there discussion? Hearing none, is there objection? Hearing
46	none, the agenda is approved.
47	

The next thing would be Approval of the Minutes from the August

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28, 2013 meeting and that's Tab I, Number 2. I think that's San Antonio and is there discussion of those minutes? Hearing no discussion, is there a motion to approve the minutes?

MS. BADEMAN: So moved.

CHAIRMAN WILLIAMS: It's moved by Martha and seconded by John and is there any more discussion? Hearing none, is there objection? Hearing none, the minutes are approved. The next item on this is Tab I, Number 3 and really, Tab I, Number 4. I think we can probably deal with both of those together and I am going to turn it over to Mark Mueller right now to go through these.

MR. MARK MUELLER: Thank you, Mr. Chairman. I have about a tenminute presentation for you, in which I will summarize the meeting of the Joint Coral SSC and AP. This was April 24 in Tampa.

Here is what the meeting covered and I will detail each of these bullets in my presentation, but, in brief, we recapped the workshop from May of 2013, the workshop in interrelationships between corals and fisheries, which I presented at the August meeting. We discussed the Coral EFH map and some issues with that, along with a handful of relevant management issues and then went into detail about deepwater coral.

In August, I gave you this report here summarizing the May 2013 workshop and following that, you asked that we convene the Special Coral SSC and Coral AP to review the findings and recommendations from that report and particularly to get the group's input on potential HAPC designation of some recommended areas that have large deepwater coral aggregations.

I explained to the SSC and AP what I told you in August, that the workshop provided the latest research and recommendations. It guided my data collection efforts over the last two years and was synthesized into that report as well a related book that expanded on a number of the topics from the workshop and which will be published next month. We will have copies of this book for all of you and that book, as well as everything else from that workshop I want to point out was funded by the Coral Reef Conservation Program, through your grant with this.

After I reviewed the workshop, the group passed a sort of general recommendation that the council continue encouraging efforts to, quote, understand, maintain, and restore, if necessary, healthy coral community structure and so basically

they encourage the council to continue doing what it can to improve our understanding and to help actions that will help maintain or improve coral health and condition.

I explained to the group what I told you in August, that the textual definition of Coral EFH, and moving on to the next issue, is the legal description, which describes the total distribution of coral species throughout the Gulf, but in practice, what is really used is the map and the GIS layer and that's basically our best-guess representation of where coral are distributed.

The group, the SSC and AP, agreed with the workshop participants that there are some problems with that current coral EFH map. It's a little hard to see and you may want to look in your briefing book materials for a better version of this map, but you can see in the red boxes here the orange polygon, the orange crosshatch polygon, is the current representation of coral essential fish habitat and there are large areas that we know for certain have significant coral aggregations, such as Pulley Ridge and surrounding areas and the Dry Tortugas and parts of the Florida Reef Tract, which for some reason were not covered under this 2005 created GIS layer.

There are some obvious places that have coral that aren't included and, conversely, there is also some places, like I call it the large blob off of the West Florida Shelf, that the entire area was included as coral EFH, but we also know that the majority of the time, the majority of this area, there is a veneer of sand that covers any hard bottom and many parts of that area.

In some cases, what we would be doing, if we were to fix this, is actually reducing the EFH map, while in other areas, where we know there are coral and they are not represented, we would be increasing it and so basically we would be using new best available science to improve it.

Fortunately, thanks to this grant, I have been gathering a variety of different best available science datasets that will help us to address those problem areas and others and to generally help us improve our estimates of where coral and hard banks occur.

For example, on this slide here, this is some high-resolution multibeam bathymetry from a PhD student, Harriet Nash, at Harte Research Institute in Texas. On this, if you can see, the green crosshatched areas are the current 2005 era EFH, whereas the

green to red shown there, and you can just ignore those white areas, those represent the actual locations of those banks and you can see black lines around the relief of the banks itself.

 What was going on here is there was some information that there are banks occurring out there, but in the last ten years, we've learned more precisely exactly where those are and the shape and so that's a zoomed-in of three of those banks. This is the South Texas Banks, all of them, with the previous best-guess representation right alongside the newer data. Just generally, this type of dataset can help us improve that representation.

CHAIRMAN WILLIAMS: Mark, if I may ask a question, they should coincide, right? The gridded area should cover and they don't?

MR. MUELLER: Exactly and that's -- If we were improving this, we would basically be shifting those, to make them be in the right place and also the right size. That was a good example where it was pretty close to begin with, but it's easy to see the improvement.

This is the South Texas Banks and that's one of the areas where we have great data available and the Florida Reef Tract as a whole we also have a new dataset that we can provide that would much better represent that entire area.

After I showed this to the SSC and the AP, they made this motion, that the council continue the effort to improve the coral EFH map, in coordination with the NOAA Office of Habitat Conservation and this is, in particular, David Dale and his group at the St. Pete Office.

We have actually already had some conversations with David and they requested that we provide that Harriet Nash dataset that I just showed you as well as the reef tract one and so they are eager and willing to start making use of these data for their EFH consultations.

There was also some background presentations at the meeting and Phil is going to describe the Coral ESA rule and so I'm not going to go into that. Mr. Perret had asked for an update on live rock aquaculture status and regulations and so we had a presentation from Jessica Beck-Stimpert about that.

Just briefly, and if you need more detail later, Corky, I am glad to provide that, but she mentioned that they must be harvested by hand and any harvest is prohibited if there are endangered species present.

 There is about sixty-seven permitted sites in federal waters and Martha can speak to anything about the state waters and about twenty-five of those are renewed each year and so about twenty-five are being harvested in any given year.

The permitted sites would not interfere with any of the potential regulatory actions that were also discussed about deep water. They are in completely different areas.

We also had a presentation from Jim Nance at NMFS Galveston about royal reds and their species biology. He noted that the depth range is usually about 250 to 550 meters and he also talked about the general effort and the representation in the ELB data. The numbers seem to fluctuate from year to year. I have up there fewer than twenty vessels prosecuting that fishery and utilizing probably about five distinct ports.

This is a map from Jim showing ELB data and he estimated that there's maybe five royal red vessels represented in the ELB program and so that's what we believe is showing up in these deeper water areas along the shelf and up here in the Viosca Knolls and that general area.

The heart of this meeting though was about deepwater coral and specifically, we focused on its distribution and important known aggregations. We had four presentations from leading scientists working in the Gulf.

As you have heard before from me and from Sandra Brooke, who presented to you a few years ago, we really have an increasing understanding that these deepwater reefs are -- Some of them are reef building and, through that, provide very important habitat for a number of fish, such as snowy grouper, and invertebrates, such as golden crabs, which is right there in that middle photo.

have also, the same time, gotten Wе at an increasing understanding of the threats to these deepwater coral. are concerns from both the workshop group and the Coral SSC about the high vulnerability of deepwater coral to anthropogenic threats, such as bottom disturbance. This is one from the nearby Pulley Ridge that was provided showing some sort of bottom disturbance of a lophelia reef.

Sandra Brooke also noted that there may be increased effort for other fisheries, such as golden crab, that could have increasing interactions, from traps, for example.

Just a couple more slides. The group came up with a very detailed motion and I can pull that up if you would like. It's your PDF of the report, but we tried to represent it with this map here. It shows the areas that were named in the motion and so all of these individual orange points, if you can see on there, represent individual lease blocks, which is a very small area. I think it's a kilometer-by-a-kilometer.

The Viosca Knolls had two of those and there's a couple of Grand Canyon, Garden Bank, Mississippi Canyon. They also identified the Pinnacles Trend Area, which is just north of Viosca Knolls and a couple of parts of the West Florida Slope shown there and some parts southwest of the existing HAPC for Pulley Ridge.

They also talked generally about areas of the western and central Gulf. Part of, and I will get to it a second, what they recommended was because there is still data coming in on exact locations from this and not all of that data were available at the time of our meeting.

To achieve their detailed motion naming all these individual sites and general areas, what they recommended was that the council form a working group to determine the criteria and boundaries and other specifics for the sites and members of that would include Sandra Brooke, Paul Sammarco, Peter Etnoyer, G.P. Schmahl, John Reed, Judy Lang, and Erik Cordes.

The idea was that these specific deepwater coral experts could best get to the essence of the best available science, which, as mentioned, wasn't all available in April, but many of these folks have those data and they could develop the most appropriate boundaries that would be focused specifically on those known aggregations.

After that group met, they would then return their specific recommendations to the full Coral SSC and AP for further discussion and so this working group would basically focus on where exactly these HAPCs should be focused.

The last slide, this is just the two main action items for the consideration of the committees and this is also in your action guide. The first would be that the committee recommends that the staff initiate the appropriate action to modify coral EFH and identify new areas as potential HAPCs.

The exact mechanism for that is we started having discussions about it and we didn't want to get too far ahead of ourselves until you had a chance to weigh in and give us some guidance on that, but assuming that we had that, the next action would be to form that working group, as recommended by the SSC and AP, and then have them meet and then come back again to the full Coral SSC and AP to review their recommendations. That is all I have and I am happy to take any questions.

CHAIRMAN WILLIAMS: Questions for Mark?

MR. CORKY PERRET: Do we want to form that committee first and then have them work with staff to possibly identify and modify the current areas? Is that basically the way it should happen?

MR. MUELLER: I will let Carrie and Morgan weigh in on that. I think it probably could go either way, unless they have other ideas.

DR. CARRIE SIMMONS: I think you could it either way. I think our thinking was just have this working group get a better idea of exactly where these areas are and then look at any potential interactions with other fisheries and then the council would initiate some action, if they wanted to move forward, based on their recommendations, again, with more information, with the appropriate action as to designate these as potential HAPCs or not.

Also, we need to document, as Mark mentioned, the modification to the GIS layers for the Coral EFH and so we somehow need to show how we have that new information and put it into a document and so we're hoping we can do that in one document right now.

 CHAIRMAN WILLIAMS: Corky, if I may add here, one thing that has really occurred that became apparent to me, having been at the joint SSC/AP coral meeting, is there is a lot of deepwater video now that was not available ten and twenty years ago when people started doing this. There is an awful lot of it out there, including areas where -- They had one picture there with a golden crab laying under one of these deepwater corals using it as protection and that kind of stuff didn't exist a decade ago or twenty years ago, for sure.

MR. PERRET: Years ago when we spent time on coral and these habitat areas of special concern and all, there was a lot of concern about deterioration due to anchoring and all that sort of stuff and I think we put measures in to prevent that and the coral reefs were being reduced in size and who knew why, acidification and things like that.

Is there -- There must be better data now to tell us the status

of these coral reefs or if they're increasing rather than decreasing or do these scientists that are doing this stuff, can they enlighten us on the status of the coral and the health of the coral, I guess?

 MR. MUELLER: We actually tried to capture that the best that we could in the workshop report, which was some sixty-seven pages. As far as deepwater coral, the main thing that's really been going on is every time there is a dive, they discover more of it and so in that sense, it's always increasing and we're always finding more of it.

I don't know if there is enough data to kind of come up with a trend for the deepwater coral specifically. I know there were impacts from the oil spill documented in some locations.

MR. PERRET: That's what I was wondering, since the accident of 2010 and potential impacts on the deepwater corals and the affected area and if we had any information that we could use.

MR. MUELLER: Yes, there's been a couple of papers and I can forward them to you. One documented pretty dramatic effects on one side about eleven kilometers southwest of Macondo and there has been a variety of other posters and things that I've seen documenting individual impacts. I think that's still kind of being synthesized in terms of overall impact on deepwater coral though.

 MR. PERRET: Big Boss Executive Director Gregory, if we were to form this committee, and I don't know how many times it would have to meet, do we have the funds for another committee, Mr. Gregory?

 EXECUTIVE DIRECTOR DOUG GREGORY: Yes, we do. We would be paying all their travel and they would not be getting stipends. Maybe if an SSC member was a part of the working group, they might get a stipend, but we would be paying for all the travel and setting up the meeting rooms and all that.

CHAIRMAN WILLIAMS: Some of it could possibly be done by webinar 41 too though.

43 MR. MUELLER: Several of the members are NOAA and so we won't be 44 paying for them either.

46 MR. KEVIN ANSON: I'm not on your committee and I don't know if 47 this is a question, Mark, you can answer or just council staff, 48 but in setting up EFH, now that technology is progressing and everything and you provided that slide off of Texas with those three pinnacles there, coral areas, when you set the boundary for that, is it just going to be the actual margin of the reefs or are you going to be providing a buffer to account for potential interactions and such, to try to keep it away from the margins of those areas? How is that going to develop, that process?

MR. MUELLER: That's a good question and it may actually vary a little bit from place to place. In the case of the South Texas Banks, we had the expert who did her PhD on that define those boundaries and I talked with her and so I feel pretty confident about those particular ones.

Also, in the Reef Tract, we have -- This is the FWRI product and what they gave us was the perfect level of information on the top and that was generally all coral and hard bottom in brown and if you look below that, there is individual aggregate or patch reefs defined within that and so in that case, it makes sense to sort of incorporate the natural buffer, in that it's really good habitat and probably was colonized in the past, even if it may not currently have an active coral head on it.

The South Texas Banks and Reef Tract, I think we have that question answered, but that is one of the things I put in front of the SSC and AP, to try to get some more guidance for tougher to answer areas like the West Florida Shelf.

 I don't have a specific rule that will hold all the time. Basically, we try to talk to the right people and come up with the best representation of it that is neither too stringent nor too conservative, I quess.

MS. LEANN BOSARGE: I just went to the South Atlantic Council meeting not last week, but the week before. They were dealing with a lot of this and I think they had gone about it in a little different way and I like our process for this.

One thing I would like to see, which just looking at what they were dealing with and the problems and issues that they were confronted with, is when we put together this committee and then you said you want the committee to also get with the Coral AP and do a joint meeting with the Coral AP and the Coral SSC, you mentioned some royal red shrimpers.

I would like at some point, before all this comes to us for us to actually analyze it and make some decisions, for those groups to also have a joint meeting with the Shrimp AP, and I am not

sure how many royal red representatives we have on that Shrimp AP and we would need to look at that and possibly pull some of those guys in if we don't have any of that representation, but I would like to see someone try and garner some input from those people, simply because -- I made this comment at the South Atlantic meeting.

Shrimpers and coral are like oil and water. They want nothing to do with each other. We drag a net across the bottom and if you drag a net across the bottom with some sort of substrate, with some sort of coral or something, you put a lot of holes in your net and a net with a bunch of holes is not good for production. All your shrimp just go right out of it.

 We have logbook data and we have a lot of tracks that is information collected by the government and you can see the holes in that data where there are not tracks, where we are not dragging. I would like to see if that overlays with some of this information you have with Texas and if you can correlate those and validate that, yes, okay, these holes that we see, there's a possibility that that does represent some coral.

In other words, before we go and encompass areas, I would like to make sure we get the input from those people, so that we don't encompass an area where we are taking away productive bottom that we don't have a lot of assurance that there is coral there. Let's just get their input and make sure, on the front end, we get all these opinions and information, instead of trying to do it on the back end and open up something that we've closed.

CHAIRMAN WILLIAMS: Leann, what you would be looking for, if we approved a group to get together, a group of coral scientists to get together and recommend some deepwater areas, you would like to have them, after they're done, to meet with some shrimpers, royal red shrimpers or the whole Shrimp AP, to discuss that with them?

 MS. BOSARGE: Yes and I think the Shrimp AP would be the entity that I would want. I would want to have as much input as possible and we already have that Shrimp AP established. I would simply want to look at the AP and make sure that if there are no royal red representatives on that AP, bring some of those people in. As we said, there's less than twenty of them and so it's not a huge fishery and you could get some good input there.

CHAIRMAN WILLIAMS: Does the Shrimp AP meet each year or it irregular like most of them? It's irregular? Okay.

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MR. PERRET: Leann, how many council meetings have you made?

MS. BOSARGE: Three.

MR. PERRET: I don't know who is influencing who. Are you influencing me or am I influencing you, but here's what I wanted to say and I am quoting from the minutes. I have been through and I was around when we set up these habitat areas of particular concern and we didn't always set them in the right places, but I am going to quote Mr. Cupka and this is our minutes of the last meeting.

He emphasizes working with the fishermen and he talks about it gets very contentious and I remember when we set these up years ago that indeed it did and that the fishermen were, with the VMS and their track data, they were able to establish areas and modify boundaries and all that, which really worked very well and helped all groups kind of mesh things better.

I am saying exactly the same thing Leann is saying and I quote Mr. Cupka again, to include fishermen very early on in the process and utilize their expertise. I think we do have to have fishermen involved that are fishing those areas.

Roy, you mentioned the golden crab on the coral and years ago, we had a potential conflict or a conflict between that deepwater crab gear and royal red gear and do we still have a golden crab fishery that's going on and if we do, we probably should try and get somebody from that group, even though we don't have a golden crab plan, probably to offer their input.

CHAIRMAN WILLIAMS: I think that golden crab fishery comes and goes, depending upon price. As I recall, that was kind of controlled by the price of the comparable crab in New England and fuel would have something to do with it too, but when price would get really high, then they would gear up and go do it. Otherwise, the fishery was dormant. That's my recollection.

MS. BADEMAN: I was just going to echo what Leann and Corky said. I think it's really important to get the industry in here right off the bat. The South Atlantic has been pretty good about that as they've been going through this process, as Leann mentioned.

They have some data that we don't have. They have that VMS data, because all the deepwater shrimpers over there have VMS, but I think the collaborative approach is definitely the way to

1 go. They did have, at one point, the Coral AP and maybe the 2 Habitat AP and the Shrimp and the Law Enforcement APs kind of 3 have representatives that got together at one time and met.

David can probably remind me, but I think that was a good thing. I think staff was a little bit nervous about how that was going to go with so many people and so many opinions, but I think the exchange of ideas was pretty good and I think the council got some good information from that meeting.

CHAIRMAN WILLIAMS: Would you object to putting together this Deepwater Coral AP to just meet by themselves initially and then have them meet jointly with the others? I mean it seems to me like it might go a little better that way.

MS. BADEMAN: Yes, I think that's fine. I think the people have the scientific information definitely should iron out exactly what they have and where they want to start and then just pull the industry in early.

CHAIRMAN WILLIAMS: Good suggestions. Mark, go ahead and then I've got John and then Phil.

MR. MUELLER: Martha and Corky and Leann, I think that was the intention of this group, was not to exclude, but rather just to have their information solid before they approached them. We also did anticipate this need and actually built it into our grant funding for education and outreach and with the royal red fishermen directly and Morgan has also had conversations with Jim Nance and so we're getting ready to identify those individuals and boats so that we can do whatever the council wants us to do with them.

There has never, at any point, been any intention to exclude them in any way, but it was just to get the science hashed out first. As a first step, before any sort of regulatory action occurs, then bring them in. Morgan may be able to answer the question about whether there is current representation of royal red fishermen on the shrimp committee.

EXECUTIVE DIRECTOR GREGORY: No, there is not. I was just talking with them and so when we get to that point, if we have reached out to the royal red shrimp fishery and if that's the only part of the shrimp fishery affected, we might be able to just limit it to them, but we will talk about that again at a future meeting.

MR. PERRET: Certainly now, but if indeed there are areas that

are proposed that are in shallower waters that may impact the penaeid shrimp fishery and whatever else, we certainly want input from people knowledgeable in the areas.

MR. MUELLER: There is proposed or limited to deepwater.

MR. PERRET: But I have learned one thing. Expect the unexpected and it's going to happen.

 MR. JOHN SANCHEZ: I guess I would like to make a couple of motions and I will start with this one, but before that, I would just like to say let's not limit it just to royal red and let's consider some golden crab input, maybe, but, of course, the cart before the horse.

You've got to identify the areas specifically and so I think we should break this up accordingly and then make sure all user groups, deep-drop fishermen and bottom longline and anybody that might be impacted with displacement or something, be considered and keep them included in the process, all the industry folks.

With that, I will make I guess the first motion and it's right from the document and it's one of the SSC/AP recommendations, that this council form this working group to determine the criteria, the boundaries, and other specifics for the sites identified. The working group consists of Sandra Brooke, Paul Sammarco, Peter Etnoyer, G.P. Schmahl, John Reed, Judy Lang, and Erik Cordes, and I guess if anybody has anybody else they might want to add to that, I wouldn't have a problem with that.

CHAIRMAN WILLIAMS: Is there a second for that? Let's make sure we get the motion up there, John. Phil, while they're working on this, is what you wanted to say relevant to the motion?

MR. PHIL STEELE: No and it may be getting a little ahead of the game, but I can give you a little background on your regulatory authority and how you can go about establishing these deep-sea corals if you would like a little bit of background on that, just for your own info, or we can do it later or not at all.

CHAIRMAN WILLIAMS: Maybe we better get the motion up first here. This is basically the recommendation in 4(a), pages 5 and 6, the bottom of 5 and the top of 6. John, do you want to look that over and see if that's your motion?

MR. SANCHEZ: Yes.

CHAIRMAN WILLIAMS: That's the motion.

 MR. PERRET: I assume that's the leading coral experts in the Gulf, but they are going to give us criteria and boundaries and other specifics and that's going to be their recommendations and when are we going to get the fishermen's recommendations that may totally, like Mark's slide he had up there -- We didn't do too well on some of them years ago and now, granted, technology is a lot better today, but it seems, to me, that in that working group we should have that practical experience from advisors who fish those areas and so on and when would their input come in?

CHAIRMAN WILLIAMS: Mark, do you want to speak? Well, let me first. My impression is that we would get these people together and let them talk first and make some recommendations and then we can get the whole group together again with the shrimpers, but I think it would be easier to let just them -- Shrimpers and golden crabbers, but let them make the recommendations first and work by themselves and then get them together with the fishermen. That's the way I envision it and I think it would go the most smoothly that way.

MR. PERRET: You give a scientist that opportunity and you might want to protect a really important ten-acre area and they may make the area a thousand acres and that's where the practical application needs to come in.

CHAIRMAN WILLIAMS: I think there's a chance to fix that right behind if they do something like that.

MR. MUELLER: The working group, the intention on that, was not that they would ever have the final word and that they would just come up with a draft for the larger group, with more perspectives. I think that would be the perfect time to have all the royal red and golden crab folks as well.

 MR. PEARCE: Corky, we might could solve that problem if we added -- This just says including these people, but we can include other people as well if you would like and maybe put a representative of each one of the fisheries that we're concerned about at this meeting to let them know exactly what our problems might be. I mean I'm just throwing it up for suggestions and, John, it's up to you.

MR. SANCHEZ: I kind of started off my little diatribe with that, that I wanted industry included in this. I don't want to muddy the waters by having too much to do at one and then we're herding cats, but I am thinking we kind of start to identify the things and then ultimately this is going to get kicked back to

us with these recommendations from scientists or industry people and we're going to have the final say to forge these two things together and get rid of ridiculously large buffer areas and all these types of things and so whatever you want and it doesn't matter to me either way, to answer your question.

MR. PEARCE: Just as a follow-up, as long as our fishery representatives have a say, I am fine, whether it's after the fact, but I don't see a mechanism for them to have a say yet and do you, Corky? I don't see anything that says we're going to sit them or talk to them or whatever. I know it will come back to the council, but I want to make sure that the people involved, the golden crab and the royal reds and pink shrimp or whatever it is, bottom lines or whatever, at least have an option to speak before we do something as a council.

CHAIRMAN WILLIAMS: I think we've been pretty clear that we're going to work with industry to let them -- Before this comes to the council for any kind of final approval, we are going to have meetings with the golden crab fishery and the royal red fishery or any other fisheries if they're affected and give them a chance to speak to it.

I don't think they would have -- Honestly, I don't think they would have a lot to contribute at this point. This is pretty specialized knowledge on most of this stuff and so I would let these scientists get together and make some recommendations and if they're too egregious in their recommendations, we will grab them by the short hairs and say this is too much and we're going to cut back and you can't have this much, but I just don't see it being all that useful. I think it would be a waste of the industry's time right now to be a part of this. Morgan, you're trying to get in on this too and I'm sorry.

DR. MORGAN KILGOUR: I just wanted to echo what Mark said and the reason why these people were put on this working group is because they are currently doing coral work and so they have really fine-scale resolution of where these corals exist and so I don't think their goal is to do these enormous areas, but they just want to identify where are the deepwater corals, so that we can fine tune things.

It was, like Mark said earlier, it was always our intention to bring in royal red shrimpers and any other affected groups before we even brought it back to the council to get their input.

MS. BOSARGE: I understand some of the comments about not

muddying the waters and this is more of a scientific group, whereas if you put fishermen on it, you're pulling in a lot of different people together, but when I went to the South Atlantic meeting, what happened was that they did have these two groups separated.

These shrimpers had their data and because the two groups were separated, even though the Shrimp AP had a chance to comments and things like that, their data never seemed to actually make it the SSC, to the scientific group, the unbiased scientific group that looks at the data and judges the data for what it is.

I worry that we're going to put all this time and energy into the scientific side of it and not bring in that data from the industry side until they've drawn their boxes, whereas, if it was me and you wanted to be efficient with this, you would want all that brought to the table first for your scientists to look at and evaluate as a whole. Does that make sense?

MR. PERRET: Martha has indicated that the system in the South Atlantic seems to be working pretty well and David, in the minutes from whatever meeting that was, talked about bringing fishermen in the process early on and that it works real well.

With that, Mr. Cupka, since you guys have been at it, would you tell us how the South Atlantic does it? It seems, to me, if something is working that we ought to try and duplicate it.

MR. DAVID CUPKA: It was mentioned earlier that we had what we called a mega AP meeting at one time, where we had our Coral AP and our Habitat AP and our Law Enforcement AP and our Shrimp AP and we've even done it with Golden Crab. We've had them all get together at one time and we were kind of leery of that.

 As Roy has pointed out, as time has gone on, there's a lot more information and it's kind of what you would expect. The scientists wanted to protect as much area as they could and the fishermen, of course, wanted to have access to as much area as they could, legitimate access, to areas that they could actually fish and not be fishing on coral.

Actually, they played together pretty good and we were surprised at how well they did play and they brought forth some recommendations. I can tell you that neither side was completely satisfied, as you would expect, because you had to make some compromises, but I still think the earlier you can get industry involved in the process, the better off you're going to be.

If they can work among themselves to resolve some of these things, I think it's better that you go that route than somebody sit down and tell them it's going to be this way or that way. As much as they can resolve themselves, I think you're better off for that.

MS. BADEMAN: I was just going to say before that mega AP happened, the Coral SSC I guess had kind of figured out areas, which I think is important and I think we need to do that, because until we have the areas, we're not necessarily going to know who they're going to impact.

I mean we kind of know that royal red shrimpers, yes, and maybe some golden crab, but who knows what else and so I think that getting this group together once and let them lay out some boundaries and then we get a mega group together, so to speak, of whatever scientific folks, whether it's these folks and the Coral SSC plus the royal red industry plus whoever else. I think that would be appropriate.

CHAIRMAN WILLIAMS: I think that's good advice and I think that's the way to proceed. Let's create some kind of strawman and designate these areas and then let the fishermen speak to those areas.

I am going to make a substitute motion and my MR. PERRET: substitute motion is to form a working group made up of Sandra Brooke, Paul Sammarco, Peter Etnoyer, G.P. Schmahl, John Reed, Erik to determine the Lang, and Cordes criteria, boundaries, and other specifics for potential sites and once this has been determined, that this group meet with appropriate representatives of potentially impacted fisheries, i.e., royal red shrimp, golden crab -- Is there any fixed gear, John, that might -- And any potentially impacted fisheries. motion.

CHAIRMAN WILLIAMS: Your motion is really like the first one, except it's specific that after they've met that we will bring the fishermen in. Do we have a second? Second by Harlon and so we have a motion and a second.

 One thing that I didn't do early on that I should have done is we've got two different committees here and I think we can probably work by consensus and just consider it a committee of the whole. I think we're trying to all work together here and we're not really divisive on this issue and so I suggest and if nobody objects, we will just go ahead and vote as a committee of

the whole. Is there any objection to doing it that way? Okay. That's the way we'll do it.

Is there -- We've given this a lot of discussion already and I kind of think we've reached a consensus on this and are people ready to vote on it? The motion before us is Corky's motion to form a working group made up of Sandra Brooke, Paul Sammarco, Peter Etnoyer, G.P. Schmahl, John Reed, Judy Lang, and Erik Cordes to determine the criteria and boundaries and other specifics for potential sites and once that has been determined, that this group meet with any potentially impacted fisheries.

MR. PERRET: Meet with representatives of any potentially impacted fisheries.

CHAIRMAN WILLIAMS: Okay. Does that look right now? She has 17 modified it.

19 MR. PERRET: I think we ought to have law enforcement. I think 20 David said they brought them in also and I think we probably 21 should have law enforcement.

CHAIRMAN WILLIAMS: Impacted fisheries including members of law enforcement. Look that over. Is that your motion?

MS. BADEMAN: I am assuming for the law enforcement that we're talking about the LEAP or --

MR. PERRET: Probably, since it's going to be off your state and Texas and I guess knowledgeable people from those areas, wherever the potential sites may be.

CHAIRMAN WILLIAMS: Is there further discussion on this motion? Hearing no discussion, all in favor of the motion signify by saying aye; opposed. The motion carries. Now we need to -- Carrie, what do you have?

DR. SIMMONS: I am a little concerned about our current APs, other than the Shrimp AP and the Law Enforcement AP, based on what I have heard from the committee, such as deep droppers and golden crab fishermen. Is this something you would like to advertise for and have a special ad hoc group, because I am not sure we have the correct membership potentially for this right now. I am not even sure we have any royal red shrimpers on our Shrimp AP. Morgan just said we don't and so -- Is it something that the council has an idea of the individuals they would like to appoint to this group? Right now, it's pretty vague to me.

 CHAIRMAN WILLIAMS: Couldn't we, once we have some kind of a recommendation from this panel, advertise for interested parties, golden crabbers or royal red shrimpers, to be part of this? Would that work as well or not? I think it would. Is there any discussion of that? I think I threw a wet blanket over this.

MR. PERRET: I think we did have royal red members on our Shrimp AP at one time and we had a golden crab committee and we had involvement with golden crab sometime back. It seems, to me, that's a very small number of people and that if indeed, as this thing progresses, when we get to that point, we certainly should be able to identify those handful of people involved in the fishery and give them a phone call and say, hey, look, this is what's coming down the pipe and we need some input and who would best represent your group. I don't think we'll have any problem and I don't think we have to make that effort at this time. That's just my feeling.

CHAIRMAN WILLIAMS: Martha, do you want to speak to that?

MS. BADEMAN: I was going to say we could certainly figure out who those people are that are fishing for golden crab. I just had a question. The last time that you all had a golden crab group, do you know if it was a lot of the same people that are fishing golden crab in the South Atlantic? A lot of those guys are based in Florida.

CHAIRMAN WILLIAMS: When I was on the council before, they were mostly based out of the Tampa Bay area. They weren't coming around from the Miami/Fort Lauderdale area. Phil, do you have any -- You have worked with those groups off and on over the years, haven't you? Do you have any knowledge of that?

MR. STEELE: That's a long time ago. I remember Mr. Nielson used to come around and participate a little bit and much more so I think as an advisor than as an actual fisherman, but most of the people in the Gulf gave up on that fishery a long time ago.

CHAIRMAN WILLIAMS: Okay.

MS. MARA LEVY: Just a question. Is this focused on deep-sea corals and looking at areas to protect those as either under the discretionary authority to protect deep-sea corals or potentially as essential fish habitat if it isn't already designated as such or is it about essential fish habitat or what exactly is the goal with respect to these sites?

 CHAIRMAN WILLIAMS: Goal in the legal sense? It's to protect them. The goal is to protect them, but you're asking do we want to do it through essential fish habitat or through some other authority and is that right?

 MS. LEVY: I guess I'm asking because this discussion about golden crab kind of threw me off and so there's no golden crab fishery in the EEZ and so whatever we're talking about would be in state waters?

CHAIRMAN WILLIAMS: There used to be a golden crab fishery in the EEZ. It's come and gone and it's irregular, but there used to be one and only a few boats.

MS. LEVY: Does the council manage that now? There is no golden crab --

CHAIRMAN WILLIAMS: No.

MS. LEVY: Right and so it actually looks like it's considered, quote, unquote, a -- Well, we have like a prohibition on fish traps and there's a very specific exception to that. I guess I just was trying to understand where the golden crab thing fit into the whole deepwater coral authority, if that's where you were going, but I will just let it progress and see what happens.

MR. STEELE: Maybe I can shed a little light on that. Working with David Dale, it was our understanding that the original goal of the council was to get these new deep-sea corals identified as EFH/HAPC under the Coral FMP, but it came up at the CCC meeting that maybe there was a way to offer these some protection under the Magnuson discretionary authority, which some people thing it might be a little quicker and dirtier and I'm not quite sure that's the case, but all it does to these deep-sea corals under the Magnuson is protect it from fishing and fishing gear.

Now, if you want to extend this to non-fishing activities like oil exploration or whatever, then you would want to go through the EFH consultation cycle, which would be amending your FMP and so forth and so on.

You can do either and/or at this stage of the game. I don't think there's a lot of threat to these currently and so you've got a little time to go either way you want. You could either go through this discretionary and handle it maybe quickly and it

only protects it partially or you go through the normal -- Get the FMU cleaned up, for one thing.

I think there's some concerns about whether these DSEs actually are essential fish habitat and habitat areas of particular concern under the current definitions under the Coral FMU. That needs to be straightened up first and that would be my recommendation and we might want to go down the FMP route and develop our FMP and get our EFH consultation done, because it will take a little bit of time, but then you will have thorough and complete protection for these HAPCs once all of this is decided.

CHAIRMAN WILLIAMS: I was just wondering, if we get this group together, could you and staff talk about this sort of thing with the Chair and figure out what the right avenue to do this is? I mean I don't think this committee is going to be able to figure that out right now.

MR. STEELE: Yes, our folks in Habitat, David Dale and his folks, are well up on this and he gave me this language here to present to you folks and so I think we just need to proceed and get this committee established that you're talking about, so you get the areas that you know what you're talking about, and then we can come in and decide what we want to do with them.

MR. MUELLER: That was exactly the intention of the group and David was there and we've had some preliminary discussions with him and basically, we've identified that we need to figure out exactly what the appropriate action is, but we didn't want to do too much work on that before we got your approval to start that.

CHAIRMAN WILLIAMS: I think we've reached the end of that portion of the agenda and have we not? Morgan, do you have something or Carrie?

DR. SIMMONS: I mean I guess just to follow up a little bit on what Mr. Steele said. We have been talking to the Regional Office staff in a lot of detail about this, but we just wanted the council to tell us to start initiating an action and form this working group and then as we move forward, we will see the best way the council would like to move forward with establishing these areas.

 I think that's kind of the steps we were thinking of taking and the other thing I wanted to bring to the joint committee's attention and the council is, as Mr. Steele mentioned, we will start our generic five-year EFH review and that will help us 1 gather a lot of the information and that's a requirement. We 2 have to do that every five years.

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That has to be completed in October of 2015 and so that is something else that staff will be working on and it kind of goes alongside these various actions, but we will have to start working on that and we will have to figure out, with the Regional Office, how much detail we're going to have to go into, based on all this new information and how much of it will have to go into the review and how much of it will potentially go into any amendments you make in a Coral FMP or some other document, another generic document, depending on the best way to go, but I just wanted to let you know that we will be working on that as well.

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CHAIRMAN WILLIAMS: Mark and I were just talking and under Tab I, Number 3, the first bullet really, it says the committee may recommend that staff initiate appropriate action to modify coral EFH and identify new areas as potential habitat areas particular concern. Would it be helpful if we approved a motion to that effect? It would be? Would somebody on one committee or the other be willing to make that as a motion? It's under that very first bullet of Tab I, Number 3, to recommend staff initiate action. The Chairman would make the motion if he could, but he can't. Martha, would you care to make that motion?

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MS. BADEMAN: Yes and can it be as simple as a motion to have staff initiate the appropriate action to modify coral EFH and identify new areas as potential HAPCs or do we need to be more specific than that?

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CHAIRMAN WILLIAMS: I think that would do it. Carrie or Mark?

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MR. MUELLER: That's good.

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MS. BADEMAN: Perfect. I will make that motion then.

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CHAIRMAN WILLIAMS: John seconds the motion. I really doubt -Hopefully this doesn't need a lot of discussion. Does anybody
want to discuss it? Hearing no discussion, is there any
objection to this motion? Hearing no objection, the motion is
approved.

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I think the only other thing -- That brings us to the end of that portion of the agenda and then Phil is going to give us an Update on the ESA Coral Listing Final Rule.

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UPDATE ON ESA CORAL LISTING FINAL RULE

MR. STEELE: Sure. As a way of background, for you all who haven't stayed up late at night and read the Federal Register notice like we all should, as you know, in late December of 2012, the Federal Register came out with a notice for a proposed rule to list sixty-six species of reef-building corals and fifty-nine of them in the Pacific and seven of them in the Caribbean. Mark is telling me now that the Caribbean and the Gulf are all considered as one water body and so I found that quite interesting.

Also, it to reclassify two of the threatened species of Acropora up to endangered. It had a ninety-day comment period and they extended that for another thirty days and the commenters raised a lot of concerns about risk of extinction and extinction levels and so forth and so on and so what we did then was extend the comment period for another six months and that came out in late 2013 when we extended that comment period.

Given all the new information that we are working on and trying to incorporate into the final coral listing, we are not confident that we will have a final rule in June, but we are confident that we'll be able to make the final determination on these corals this summer and that's about all I have to give you right now, Mr. Chairman. It's a work in progress.

 CHAIRMAN WILLIAMS: Any questions for Phil? Thank you, Phil. That was a good short report and we appreciate that. Any other business to come before these committees? Hearing no other business, we are adjourned.

Whereupon, the meeting adjourned at 2:30 p.m., June 23, 2014.)

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Joint Coral/Habitat Protection Committee Meeting June 10, 2015 Key West, FL

Joint Coral/Habitat Protection Committee: Action Schedule for Tab N

Agenda Item IV: Review Joint Coral SSC/AP Meeting Report

Timeline Status: Information

Council Input and Next Steps:

- Committee may recommend that staff initiate the appropriate action to address the recommendations from the Coral SSC/AP and Coral Working Group
- Staff would prepare a draft options paper for the Council to review

Sharon McBreen

Mark Sramek

Tom Wheatley

Amber Whittle

Joint Coral Scientific and Statistical Committee and Coral Advisory Panel Summary May 27, 2015

<u>Coral SSC</u> <u>Shrimp Fishery</u> <u>Others in Attendance</u>

Walter Jaap, Chair Representatives David Dale

Sandra Brooke Steve Bosarge Alexandra Eliopoulos Judith Lang Johnny Nelson Lauren Eliopoulos

Paul Sammarco

George (GP) Schmahl Council and Council staff

Roy Williams

Coral APLeann BosargeShelly Krueger, ChairCorky PerretJoseph Weatherby, ViceMorgan Kilgour

Chair Charlotte Schiaffo
J.P. Brooker Carrie Simmons
Portia Sapp Bryan Schoonard

John Talbott

The Coral Scientific and Statistical Committee (Coral SSC) and Coral Advisory Panel (Coral AP) met jointly on May 27, 2015 at the Council office in Tampa, Florida. The agenda was adopted as written and minutes from the April 24, 2014 meeting of the Coral SSC Coral AP were adopted as written. Shelley Krueger was elected chair of the Coral AP and Joseph Weatherby was elected as vice chair of the Coral AP. It should be noted that for brevity, identical motions outlining recommending proposed sites were condensed into one motion. It should also be noted that motions in the summary are not necessarily in the order in which they are made.

The Coral SSC/AP reviewed the working group summary report and divided the Gulf of Mexico into regions for discussion. Based on the recommendations from the working group, the Coral SSC/AP decided that all areas that were discussed in the meeting would be discussed as coral habitat areas of particular concern (HAPCs), and that for discussion at the meeting the Coral SSC/AP would focus on the areas that were described as "discrete" areas in the working group report. The Coral SSC/AP also discussed the recommendation from the working group to reincorporate deepwater octocorals into the Council's fishery management unit. The Coral SSC/AP recommends "that the Council reincorporate deep-water octocorals known to exist in 50 meters of water or deeper in the FMU."

The first areas that were investigated were off the Gulf coast of Florida (Florida Banks; Figure 1). For each area that was discussed the observed species, depth, size of the proposed area, and any other information available (e.g. vertical relief, coral density, number of fish species present). This information is summarized in Appendix A. There was significant discussion about incorporating members of the shrimp fishery (and other potentially affected fisheries) early in the process. The Coral SSC/AP discussed a desire to establish a timeline to provide more

information to the group in a timely manner. Throughout the meeting, there was significant concern and discussion that all affected fisheries/fisherman should be included in the process of establishing boundaries. It was noted that the key fishery that was identified as being affected was the shrimp fishery and the royal red fishery in particular for certain areas. The Coral SSC/AP advised that VMS data to be incorporated for future analyses and to identify if reef fish fisherman may use any of the proposed areas. Because some areas would have more of an effect on the shrimp fishery as boundaries are currently drawn, the Coral SSC/AP made two designations when recommending areas: 1) the group recommended the area as proposed by the December 2015 working group, or 2) a recommendation was made to reevaluate the boundaries of a particular area based on more information from the fishery to accommodate areas that are already prime trawling areas. The Coral SSC/AP recommended "to create priority sites as well as a category for sites that may need more data for boundary revisions."

Shrimp industry representatives stated that they do not want to trawl on coral grounds or coral habitat as doing so would damage their nets; thus, where current trawling tracks exist, there is no coral. In particular, industry representatives felt there was concern that the boundaries of the south Reed site would affect royal red shrimping and that the boundary for this site may be inappropriate based on current drag practices. There was discussion on if it was easier to follow a straight line or a depth contour for the fishery and that following a contour line was easier with current technology. It was suggested that this is a contentious site and should fall into the boundary reevaluation category. The coral SSC/AP recommends "to propose that the south Reed site belong to the category that needs more data."

It was noted that a main problem fishing concern may have been the golden crab fishery which is not allowed in the GMFMC waters. Based on the discussion of the Florida Banks areas, the Coral SSC/AP made many recommendations. The Coral SSC/AP recommends "to accept the proposed boundaries presented for the Pulley Ridge, Okeanos Ridge, North Reed, Many Mounds, and Long Mound sites as the Working Group recommended."

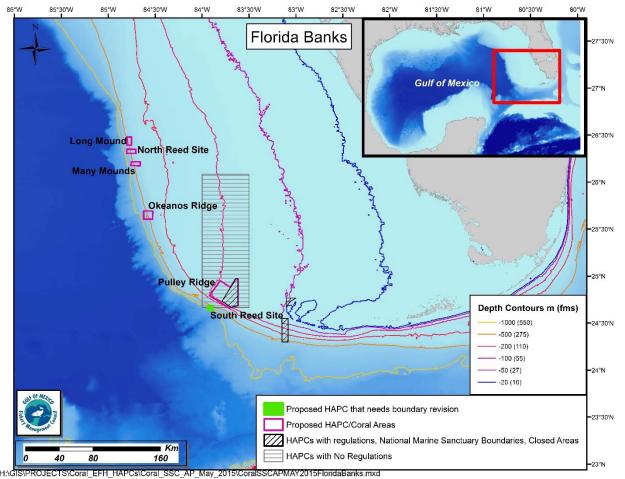


Figure 1. The proposed coral HAPCs from the Coral SSC/AP meeting. Note that the areas in bright green were recommended to have boundary revision with the inclusion of new data. The depth contours are in meters (in parentheses, fathoms). Existing HAPCs, closed areas, and National Marine Sanctuaries are noted but not labeled on this map.

Staff from the Florida Keys National Marine Sanctuary (FKNMS) presented on the process and the current status of the proposed expansion of FKNMS. For the proposed expansion boundary and study area, it was noted that draft boundary lines have not been proposed for Pulley Ridge though it will likely encompass areas that have been identified with recent expeditions. It was noted that identifying an area as a national marine sanctuary provides more protections to an area (such as no oil and gas extraction and no bilge discharge) than just designating an area as a coral HAPC. The light area (proposed study area) would affect shrimping in the north, and that the light area to the south was estimated to reduce the royal red shrimping area off of the Keys by 75% (Figure 2). This presentation on the FKNMS proposed expansion will be made to the Council at its June Council meeting.

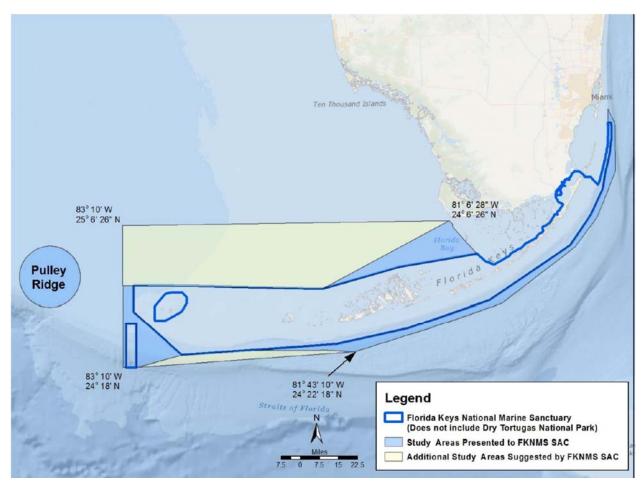


Figure 2. Proposed Florida Keys National Marine Sanctuary expansion and study areas from Dieveney presentation to the Coral SSC/AP.

Staff from the Flower Garden Banks National Marine Sanctuary (FGBNMS) reviewed the status of the proposed boundary expansion of the FGBNMS. The FGBNMS Advisory Council suggested areas to be included in the FGBNMS expansion based on the following criteria: resource significance, structural connectivity, biological connectivity, potential or perceived threat, public and scientific priority. Banks were ranked and sanctuary expansion proposal was based on the highest ranked zones. The FGBNMS is still in the process of identifying areas for expansion and should have a draft EIS by the end of 2015. The Coral SSC/AP recommends "that the Council support the proposed expansion of the Flower Banks Marine Garden Sanctuary."

The Northwestern Gulf Banks were discussed next (Figures 3 and 4). For each area that was discussed the observed species, depth, size of the proposed area, and any other information available (e.g. vertical relief, coral density, number of fish species present). This information is summarized in Appendix A. Several areas (29 Fathom, MacNeil, Sonnier Bank, and Alderdice Bank; Figure 3) were identified as needing more data before moving forward with proposed boundaries. It was noted that many of these banks are currently under consideration for FGBNMS expansion and several are currently GMFMC HAPCs with no regulations. There has

been significant research on coral density in many of these areas (Appendix A) in recent years. Areas that were identified as potentially affecting shrimp fisheries were suggested to have revisions based on the incorporation of shrimp track lines (and other fisheries), but that the overall features should be further investigated so appropriate boundaries can be established. Based on the information the Coral SSC/AP made the following recommendation: "to propose that the 29 Fathom, MacNeil Bank, Sonnier Bank, and Alderdice Bank belong to the category that needs more data."

The Coral SSC/AP also recommends "to accept the proposed boundaries presented for the Geyer Bank, Garden Bank 535, Rankin Bright Bank, Elvers Bank, Bouma, Rezak Sidner, Parker, Jakkula, Green Canyon 354, Green Canyon 140 and 272, Green Canyon 234, Green Canyon 852, and Garden Banks 299, Mississippi Canyon 751 and 885, AT047, and AT357 sites as the Working Group recommended."

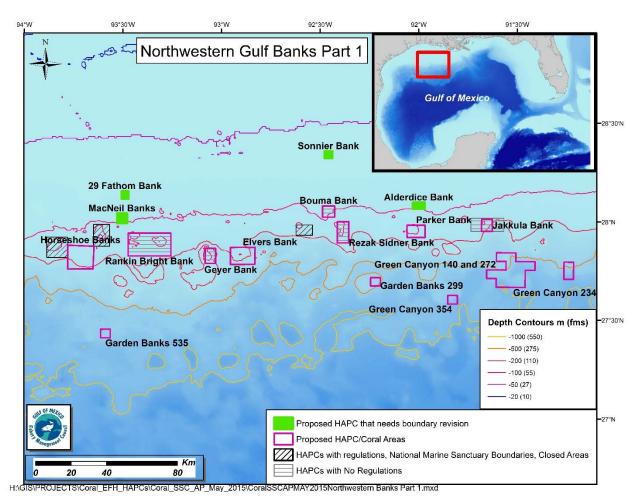


Figure 3. The proposed coral HAPCs from the Coral SSC/AP meeting. Note that the areas in bright green were recommended to have boundary revision with the inclusion of new data. The depth contours are in meters (in parentheses, fathoms). Existing HAPCs, closed areas, and National Marine Sanctuaries are noted but not labeled on this map.

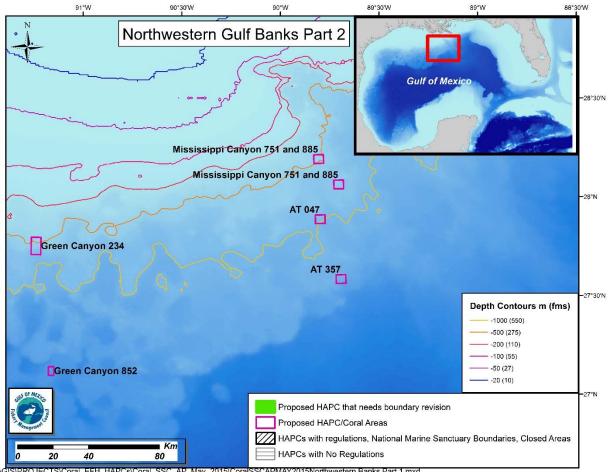


Figure 4. The proposed coral HAPCs from the Coral SSC/AP meeting. Note that the areas in bright green were recommended to have boundary revision with the inclusion of new data. The depth contours are in meters (in parentheses, fathoms). Existing HAPCs, closed areas, and National Marine Sanctuaries are noted but not labeled on this map.

The Coral SSC/AP clarified that it would like similar regulations for these proposed coral HAPCs as those that currently apply to the existing coral HAPCs such as Pulley Ridge. The Coral SSC/AP recommends "that within the discrete zones, there be fishing restrictions consistent with those for the existing coral HAPCs: Fishing with a bottom longline, bottom trawl, buoy gear, pot, or trap and bottom anchoring by fishing vessels are prohibited year-round in the area of the HAPC."

The Coral SSC/AP discussed the Northeastern Banks (Figure 5). For each area that was discussed, the observed species, depth, size of the proposed area, and any other information available (e.g. vertical relief, coral density, number of fish species present) were provided and are summarized in Appendix A. Several areas were identified as needing boundary revisions (Mountain Top Bank 3, Alabama Alps Reef, Pinnacle 1 Near West and West Pinnacle 2, and Far Tortugas). The Far Tortugas site was moved into the "needs more data" category not because of potential fishery interactions, but because of the lack of coral data. Staff will need to investigate

this area further to see if it warrants discussion in the future. The Coral SSC/AP made the following recommendations: "to propose that the Mountain top Bank 3, Alabama Alps Reef, and Pinnacle 1 Near West and West Pinnacle 2, and Far Tortuga sites belong to the category that needs more data."

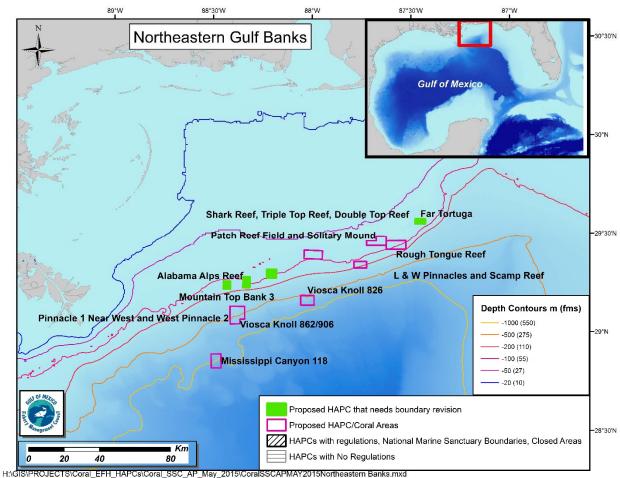


Figure 5. The proposed coral HAPCs from the Coral SSC/AP meeting. Note that the areas in bright green were recommended to have boundary revision with the inclusion of new data. The depth contours are in meters (in parentheses, fathoms). Existing HAPCs, closed areas, and National Marine Sanctuaries are noted but not labeled on this map.

Two areas that were identified by the working group as being particularly vulnerable and unique were Viosca Knoll 862/906 and Viosca Knoll 826. These two areas, if the boundaries are kept as the working group presented would significantly affect the royal red shrimp fishery. Royal red shrimpers use these areas to pull up nets, but are not trawling directly on the banks. However, looking at effort and the current track lines for the shrimp fishery, there was not a viable boundary alternative that would protect both Viosca Knolls without limiting the royal red shrimp fishery. The Coral SSC/AP made the following motion to accommodate the royal red shrimp fishery because while they are technically "towing" inside the boundaries proposed, the gear is

not contacting the bottom and affecting the coral, and the areas is sensitive to other bottom disturbances. The Coral SSC/AP felt the proposed boundaries are appropriate, but that the royal red shrimp fishery should be exempted as it is not contacting the bottom. The Coral SSC/AP recommends "that the Royal Red Shrimp Fishery be exempt from the boundaries proposed for Viosca Knoll 862/906."

Additionally, the Coral SSC/AP recommends "to accept the proposed boundaries presented for the Viosca Knoll 862/906, as the Working Group recommended."

The Coral SSC/AP also recommends "to propose that the Viosca Knoll 826 site belong to the category that needs more data."

For all other Northeastern Gulf Banks areas, the Coral SSC/AP recommends "to accept the proposed boundaries presented for the Mississippi Canyon 118, Shark Reef, Triple Top Reef, Double Top Reef, Rough Tongue Reef, Patch Reef and Solitary Mound, and L&W Pinnacles and Scamp Reef sites, as the Working Group recommended."

The Coral SSC/AP discussed the proposed areas on the South Texas Banks (Figure 6). There was a brief discussion on the state of the shrimp fishery with regard to current permits and the U.S. Coast Guard regulations. Each of the banks was discussed and it was presented that there is significant shrimping near to all of the banks. Staff will revise boundaries based on the track lines of the fishery and the location of the banks and present them to the Coral SSC and Coral AP when they are revised. There was discussion that the other affected fisheries would be recreational and not bottom contact fisheries. The Coral SSC/AP made two recommendations about the South Texas Banks:

- 1) "to accept the proposed boundaries presented for the Harte Bank site, as the Working Group recommended,"
- 2)"to propose that the remaining South Texas Bank sites belong to the category that needs more data."

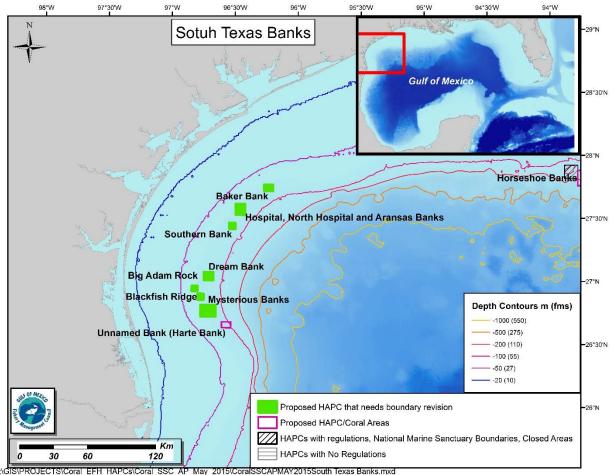


Figure 6. The proposed coral HAPCs from the Coral SSC/AP meeting. Note that the areas in bright green were recommended to have boundary revision with the inclusion of new data. The depth contours are in meters (in parentheses, fathoms). Existing HAPCs, closed areas, and National Marine Sanctuaries are noted but not labeled on this map.

In total, the Coral SSC/AP considered a total areal footprint of 1,186 square miles. Of those areas, 15 were recommended to have additional analyses conducted to refine the boundaries. The total area of boundaries needing revision was 204 square miles. It was also recommended that if areas that were identified as coral areas previously (from past amendments, etc.) are found to not have corals, that they be removed as coral HAPCs.

Following the discussion on the areas proposed by the working group, the Coral SSC/AP discussed next steps. The Coral SSC/AP recommends "that the Council start an amendment to designate coral HAPCs." Following the initiation of this document, the Coral SSC/AP recommends "The Coral SSC/AP requests that the Council convene a meeting with representatives of the Joint Coral SSC/AP and Shrimp SSC/AP."

The meeting adjourned at 4:00 p.m.

Appendix A.

KEY= Bold species are species identified in MSA, Bold and underlined species are species of concern from IUCN, Underlined Block names indicate current HAPCs

Block	Black corals present	Scleractinian corals present	Alcyonacean corals present	Area (km2)	Vertical Relief (m)	Depth (m)	Coral density data (individua I/m2)	Fish Species Present?
Florida Banks								
Long Mound	Bathypathes sp., Leiopathes sp., Stichopathes sp.	Enallopsammia sp., Lophelia sp.,	Anthomastus sp., Chelidonisis sp., Muriceides hirta, Paramuricea sp., Plumarella sp.,	46.60		300-700		
Many Mounds	Bathypathes sp., Leiopathes sp., Stichopathes sp.	Desmophyllum sp., Lophelia pertusa, Lophelia sp., Madrepora oculata, Thecopsammia socialis	Acanella sp., Anthomastus sp., Anthothela sp., Paramuricea sp., Plumarella dichotoma, Plumarella sp.,	44.71		200-700		
North Reed Site		Lophelia pertusa, Madracis sp., Madrepora oculata	Anthomastus sp., Plumarella sp.	46.60		300-900		
Okeanos Ridge	Bathypathes sp., Leiopathes sp., Stichopathes sp.	Lophelia sp.	Paracalyptrophora sp., Paramuricea sp., Plumarella sp.,	93.18		300-900		
South Reed Site	1 family (Antipathidae)	Lophelia pertusa	4 families (Chrysogorgiidae, Isididae, Paramuricidae, and Primnoidae)	23.28		400-1500		

			(km2)	Relief (m)	(m)	density data (individua I/m2)	Species Present?
Florida Banks							
Pulley Ridge Antipathes atlantica, Antipathes furcata, Antipathes gracilis, Cirrhipathes sp., Cupressopathes gracilis, Elatopathes abietina, Leiopathes sp., Rhipidipathes colombiana, Stichopathes lutkeni, Stichopathes sp., columnaris, Tanacetipathes hirta, Tanacetipathes sp.	Agaricia agaricites, Agaricia fragilis, Agaricia grahamae, Agaricia lamarcki, Agaricia undata, Agaricia sp., Leptoseris cucullata, Madracis asperula, Madracis auretenra, Madracis brueggemanni, Madracis decactis, Madracis formosa, Madracis myriaster, Madracis sp., Madrepora carolina, Manicina areolata, Montastrea cavernosa, Mussa sp., Oculina diffusa, Porites astreoides, Scolymia lacera, Scolymia sp.	Carijoa operculata, Carijoa sp., Chironepthya caribaea, Diodogorgia nodulifera, Ellisella atlantica, Ellisella barbadensis, Ellisella schmitti, Leptogorgia barbadensis, Leptogorgia cardinalis, Leptogorgia sp., Lytreia plana, Lytreia sp., Nicella deichmannae, Nicella goreaui, Nicella Stylopathes guadalupensis, Nicella sp., Nidalia occidentalis, Placogorgia mirabilis, Pterogorgia citrina, Scleracis guadalupensis, Scleracis petrosa, Stereonephthya portoricensis, Swiftia exserta, Swiftia koreni, Telesto sp., Thelogorgia studeri, Thesea citrina, Thesea nutans, Thesea sp., Trichogorgia viola, Villogorigia nigrescens	666.25		50-200	0.02-17.05	60

Block Northeastern Banks	Black corals present	Scleractinian corals present	Alcyonacean corals present	Area (km2)	Vertical Relief (m)	Depth (m)	Coral density data (individua I/m2)	Fish Species Present?
Alabama Alps Reef	Antipathes atlantica, Antipathes furcata, Antipathes sp., Aphanipathes pedata, Stichopathes lukeni, Stichopathes sp.,	Cladopsammia manuelensis, Deltocyathus calcar, Guynia annulata, Javania cailleti, Madracis myriaster, Madracis sp., Madrepora carolina, Oculina sp., Paracyathus pulchellus, Phyllangia pequegnatae, Polycyathus senegalensis, Pourtalosmilia conferta, Schizocyathus fissilis	Bebryce cinera, Bebryce grandis, Bebryce sp., Ellisella sp., Hypnogorgia pendula, Hypnogorgia sp., Nicella guadalupensis, Nicella toeplitzae, Nicella sp., Nidalia occidentalis, Placogorgia sp., Siphonogorgia agassizii, Swiftia exserta, Swiftia sp., Thesea sp.	18.46		50-200		28
Far Tortuga Mississippi Canyon 118			Chrysogorgia sp., Paramuricea sp., Placogorgia sp.	12.55 37.88		50-100 800-1500		11
Mountain Top Bank 3	Antipathes sp., Stichopathes sp.		Hypnogorgia sp., Swiftia sp.	13.37	6	100-200		

Block	Black corals present	Scleractinian corals present	Alcyonacean corals present	Area (km2)	Vertical Relief (m)	Depth (m)	Coral density data (individua I/m2)	Fish Species Present?
Northeastern Banks								
Patch Reef Field and Solitary Mound		Madracis myriaster	Placogorgia rudis, Swiftia exserta	36.91	3	50-100		25
	Antipathes furcata, Antipathes gracilis, Aphanipathes pedata, Aphanipathes salix	Cladopsammia manuelensis, Coenocyathus parvulus, Coenosmilia arbuscula, Javania cailleti, Madracis sp., Madracis asperula, Madracis myriaster, Madracis sp., Madrepora carolina, Oculina sp., Paracyathus pulchellus, Phyllangia americana, Pourtalosmilia conferta	Bebryce cinera, Bebryce grandis, Ctenocella sp., Ellisella sp., Nicella guadalupensis, Nicella sp., Thesea guadalupensis, Thesea sp., Villogorgia sp.	22.96	18	100-300		32
Pinnacle 1 NW and W pinnacle 2		Cladopsammia manuelensis, Oculina sp., Madrepora carolina	Ellisella sp., Nicella sp.,	20.21	18	50-150		

Block	Black corals present	Scleractinian corals present	Alcyonacean corals present	Area (km2)	Vertical Relief (m)	Depth (m)	Coral density data (individua I/m2)	Fish Species Present?
Northeastern Banks								
Rough Tongue Reef	Antipathes atlantica, Antipathes furcata, Antipathes sp., Cupressopathes gracilis, Stichopathes lutkeni, Stichopathes sp., Tanacetipathes hirta, Tanacetipathes	Cladopsammia manuelensis, Dasmosmilia lymani, Javania cailleti, Madracis myriaster, Madracis sp., Madrepora carolina, Oculina sp.,	Bebryce cinera, Bebryce grandis, Bebryce parastellata, Bebryce sp., Ctenocella sp., Ellisella barbadensis, Ellisella sp., Hypnogorgia pendula, Hypnogorgia sp., Nicella goreaui, Nicella	46.65	15	50-200		29
	tanacetum, Tanacetipathes thamnea	Paracyathus pulchellus	guadalupensis, Nicella spicula, Nicella toeplitzae, Nicella sp., Paramuricea sp., Placogorgia rudis, Placogorgia sp., Scleracis guadalupensis, Scleracis sp., Swiftia exserta, Swiftia sp., Thesea sp.					

Block	Black corals present	Scleractinian corals present	Alcyonacean corals present	Area (km2)	Vertical Relief (m)	Depth (m)	Coral density data (individua I/m2)	Fish Species Present?
Northeastern Banks								
Shark Reef,	Antipathes atlantica,	Balanophyllia	Bebryce sp., Ctenocella sp.,	43.26	3.5-12	50-100		17
• •	Intipathes lenta, Stichopathes lutkeni,	floridana, Cladopsammia	Ellisella funiculina, Eugorgia sp., Hypnogorgia pendula,					
	Stichopathes sp.		Leptogorgia stheno, Swiftia exserta, Telesto flavula, Thesea sp.					
Viosca Knoll 826	Leiopathes glaberrima,	Caryophyllia	Acanella sp., Anthothela	35.36		500-900		
	Leiopathes sp., Sibopathes macrospina	berteriana, Lophelia pertusa, Oxysmilia rotundifolia	grandiflora, Anthothela tropicalis, Anthothela sp., Callogorgia americana, Callogorgia gracilis, Callogorgia sp., Muriceides hirta, Nicella sp., Paragorgia sp., Scleracis sp.,					

Block	Black corals present	Scleractinian corals present	Alcyonacean corals present	Area (km2)	Vertical Relief (m)	Depth (m)	Coral density data (individua I/m2)	Fish Species Present?
Northeastern Banks								
Viosca Knoll 862/906	Antipathes sp., Leiopathes glaberrima, Leiopathes sp.	Caryophyllia sp., Lophelia pertusa	Acanthogorgia sp., Callogorgia americana, Callogorgia sp., Keratoisis flexibilis, Keratoisis sp., Muriceides hirta, Paramuricea multispina, Paramuricea sp.	64.5		300-700		
Northwest Banks								
29 Fathom	Antipathes furcata, Antipathes sp., Plumapathes pennacea, Stichopathes sp., Tanacetipathes sp.,	Oxysmilia rotundifolia	Ellisella sp., Muricea pendula,	14.79		50-100	0.01-1.12	
AT 047 AT 357	Bathypathes sp.	Madrepora oculata Madrepora oculata	Paramuricea sp., Swiftia sp. Paramuricea sp.	23.29 23.29		1000-1500 800-1500		

Block	Black corals present	Scleractinian corals present	Alcyonacean corals present	Area (km2)	Vertical Relief (m)	Depth (m)	Coral density data (individua I/m2)	Fish Species Present?
Northwest Banks								
Alderdice Bank	Acanthopathes thyoides, Antipathes furcata, Antipathes sp., Aphanipathes pedata, Elatopathes abietina, Stichopathes sp., Tanacetipathes hirta, Tanacetipathes sp.	Madracis bruggemanni, Madracis myriaster, Madracis pharensis, Madracis sp., Oculina diffusa, Oxysmilia rotundifolia, Paracyathus pulchellus, Polycyathus senegalensis	Bathyalcyon robustum, Bebryce cinerea, Chironepthya caribaea, Ellisella sp., Hypnogorgia sp., Leptogorgia sp., Placogorgia sp., Scleracis guadalupensis, Scleracis sp., Swiftia sp., Thesea rubra, Thesea rugosa, Thesea sp.	20.69	35	50-100	0.01-1.59	
<u>Bouma Bank</u>	Acanthopathes thyoides, Antipathes furcata, Antipathes sp., Aphanipathes pedata, Elatopathes abietina, Phanopathes expansa, Stichopathes sp., Tanacetipathes sp.,	Madracis asperula, Madracis brueggemanni, Madracis sp., Madrepora carolina, Oculina sp., Oxysmilia	Bathyalcyon robustum, Bebryce sp., Bellonella sp., Callogorgia gracilis, Chironepthya caribaea, Diodogorgia nodulifera, Ellisella sp., Hypnogorgia sp., Nicella sp., Nidalia occidentalis, Scleracis sp., Swiftia sp., Thesea sp.	37.80		50-100	0.01-8.08	

Block	Black corals present	Scleractinian corals present	Alcyonacean corals present	Area (km2)	Vertical Relief (m)	Depth (m)	Coral density data (individua I/m2)	Fish Species Present?
Northwest Banks								
Elvers Bank	Acanthopathes thyoides, Elatopathes abietina, Phanopathes expansa, Plumapathes pennacea, Stichopathes sp., Tanacetipathes sp.	•	Bathyalcyon robustum, Bebryce sp., Bellonella sp., Calliacis sp., Callogorgia gracilis, Chironephyta caribaea, Diodogorgia nodulifera, Ellisella elongata, Ellisella sp., Hypnogorgia sp., Muricea sp., Nicella guadalupensis, Nicella sp., Scleracis sp., Swiftia sp., Thelogorgia stellata	120.53		100-300	0.01-7.66	
Garden Banks 299	Leiopathes sp., Stichopathes sp.	Lophelia pertusa	Callogorgia americana, Callogorgia sp., Keratoisis sp., Paramuricea sp.,	22.42		400-600		

Block	Black corals present	Scleractinian corals present	Alcyonacean corals present	Area (km2)	Vertical Relief (m)	Depth (m)	Coral density data (individua I/m2)	Fish Species Present?
Northwest Banks Garden Banks	Antipathes sp.,	Lophelia pertusa,	Acanthogorgia armata,	23.33		500-600	0.01-1.15	
535	Elatopathes abietina, Phanopathes expansa, Stichopathes sp., Tanacetipathes sp.	Oxysmilia rotundifolia	Bebryce sp., Ellisella sp., Hypnogorgia sp., Muricea sp., Narella sp., Nicella sp., Scleracis sp., Thesea rubra					
Geyer Bank	Antipathes atlantica, Antipathes sp., Elatopathes abietina, Phanopathes expansa, Stichopathes sp., Tanacetipathes thamnea, Tanacetipathes sp.	Javania cailleti, Madracis asperula, Madracis brueggemanni, Madracis myriaster, Madracis sp., Oxysmilia rotundifolia, Paracyathus pulchellus,	Bebryce sp., Bellonella sp., Callogorgia verticillata, Ellisella elongata, Ellisella funiculina, Ellisella sp., Hypnogorgia sp., Nicella guadalupensis, Nicella sp., Nidalia occidentalis, Placogorgia rudis, Riisea paniculata, Scleracis guadalupensis, Siphonogorgia agassizii, Swiftia exserta, Swiftia sp., Thesea guadalupensis, Thesea rubra	45.05	150	100-200	0.01-1.15	
Green Canyon 140 and 272			Callogorgia delta	280		300-1000		

Block	Black corals present	Scleractinian corals present	Alcyonacean corals present	Area (km2)	Vertical Relief (m)	Depth (m)	Coral density data (individua I/m2)	Fish Species Present?
Northwest Banks								
Green Canyon 234	Sibopathes macrospina	Caryophyllia berteriana, Caryophyllia sp., Deltocyathus italicus, Javania cailleti, Labryinthocyathus facetus, Lophelia pertusa, Tethocyathus cylindraceus	Callogorgia americana, Callogorgia linguimaris, Chelidonisis aurantiaca, Keratoisis flexibilis, Muriceides hirta, Swiftia sp.	46.62		400-900		
Green Canyon 354	Antipathes sp., Cirripathes sp., Leiopathes sp., Sibopathes macrospina, Stichopathes sp.	Caryophyllia sp., Labyrinthocyathus facetus, Lophelia pertusa, Madrepora oculata	Acanthogorgia armata, Anthothela sp., Bathyalcyon sp., Chelidonisis sp., Keratoisis flexibilis, Muricea sp., Muriceides hirta, Paracalyptrophora carinata, Paracalyptrophora sp., Paramuricea sp., Paramuricea multispina, Placogorgia sp.	23.32		500-1000		

Block	Black corals present	Scleractinian corals present	Alcyonacean corals present	Area (km2)	Vertical Relief (m)	Depth (m)	Coral density data (individua I/m2)	Fish Species Present?
Northwest Banks								
Green Canyon 852	Bathypathes sp.	Enallopsammia rostrata, Madrepora oculata, Solenosmilia variabilis	Corallium medea, Corallium sp., Iridogorgia pourtalesii, Keratoisis sp., Narella sp., Paramuricea sp., Swiftia sp.	13.10		1500-2000)	
Horseshoe Banks	Acanthopathes thyoides, Antipathes atlantica, Antipathes furcata, Aphanipathes pedata, Cirrhipathes sp., Elatopathes abietina, Phanopathes expansa, Plumapathes pennacea, Stichopathes sp., Tanacetipathes sp.	Madracis asperula, Madracis brueggemanni, Madrepora carolina, Oculina sp., Oxysmilia rotundifolia	Bathyalcyon robustum, Bebryce sp., Callogorgia sp., Chironepthya caribaea, Chironephthya sp., Diodogorgia nodulifera, Ellisella sp., Hypnogorgia sp., Leptogorgia sp., Muricea pendula, Muriceides sp., Nicella sp., Scleracis sp., Swiftia sp., Thelogorgia stellata, Thelogorgia sp., Thesea sp.	170.93		100-300	0.01-11.03	

Block	Black corals present	Scleractinian corals present	Alcyonacean corals present	Area (km2)	Depth (m)	Coral density data (individua I/m2)	Fish Species Present?
Northwest Banks							
<u>Jakkula Bank</u>	Antipathes sp ., Stichopathes sp.	Madracis sp.	Bebryce sp., Callogorgia sp. , Hypnogorgia sp., Placogorgia sp.	36.63	100-300		
MacNeil Banks	Acanthopathes thyoides, Antipathes atlantica, Antipathes furcata, Antipathes gracilis, Antipathes sp., Aphanipathes pedata, Elatopathes abietina, Phanopathes expansa, Stichopathes sp., Stylopathes columnaris, Stylopathes litocrada, Tanacetipathes tanacetum, Tanacetipathes sp.	Madracis decactis, Madracis senaria, Madrepora carolina, Oculina sp.	Chironepthya caribaea, Ellisella sp., Leptogorgia sp., Muricea pendula, Nicella sp., Swiftia sp., Thesea sp.	27.81	50-150		

Block	Black corals present	Scleractinian corals present	Alcyonacean corals present	Area (km2)	Depth (m)	Coral density data (individua I/m2)	Fish Species Present?
Northwest Banks							
Mississippi Canyon 751 and 885		Caryophyllia polygona, Desmophyllum dianthus, Lophelia pertusa, Madrepora carolina, Madrepora oculata	Callogorgia americana, Callogorgia sp., Muricea sp., Paragorgia johnsoni, Paragorgia sp., Paramuricea multispina, Paramuricea sp.,	46.57	400-700		
Parker Bank				62	100-150		

Block	Black corals present	Scleractinian corals present	Alcyonacean corals present	Area (km2)	Vertical Relief (m)	Depth (m)	Coral density data (individua I/m2)	Fish Species Present?
Northwest Banks								
Rankin Bright Bank	Acanthopathes thyoides, Antipathes atlantica, Antipathes furcata, Antipathes sp., Aphanipathes pedata, Elatopathes abietina, Phanopathes expansa, Plumapathes pennacea, Stichopathes sp., Tanacetipates sp.	formosa, Madrepora	Anthomastus agassizii, Bathyalcyon robustum, Bebryce cinera, Bebryce sp., Calligorgia gracilis, Callogorgia sp., Chironepthya caribaea, Chironephthya sp., Diodogorgia nodulifera, Ellisella sp., Hypnogorgia sp., Leptogorgia sp., Muricea pendula, Muricea sp., Nicella americana, Nicella flagellum, Nicella sp., Nidalia occidentalis, Placogorgia sp., Scleracis guadaleupnsis, Scleracis sp., Siphonogoriga agassizii, Swiftia exserta, Swiftia sp., Thelogorgia stellata, Thelogorgia sp., Thesea nivea, Thesea rubra, Thesea sp.	278.22		100-200	0.01-4.32	

Block	Black corals present	Scleractinian corals present	Alcyonacean corals present	Area (km2)	Vertical Relief (m)	Depth (m)	Coral density data (individua I/m2)	Fish Species Present?
Northwest Banks								
Rezak Sidner Bank	Acanthopathes thyoides, Antipathes furcata, Antipathes Elatopathes abietina, Plumapathes pennacea, Stichopathes sp., Tanacetipathes tanacetum	Paracyathus	Bathyalcyon robustum, Bebryce cinera, Bebryce sp., Bellonella sp, Callogorgia sp., gracilis, Chironepthya caribaea, Ellisella elongata, Ellisella sp., Hypnogorgia sp., Muricea sp., Nicella guadalupensis, Nicella sp., Riisea paniculata, Scleracis guadalupensis, Scleracis sp., Siphongorgia agassizii, Scleracis guadalupensis, Swiftia sp., Thelogorgia stellata, Thesea nutans, Thesea sp.	68.58	125	100-200	0.01-2.48	
Sonnier Bank	Acanthopathes thyoides, Antipathes furcata , Antipathes sp. , Phanopathes expansa, Stichopathes sp.	Oxysmilia rotundifolia	Bebryce sp., Ellisella sp., Hypnogorgia sp., Leptogorgia sp., Muricea pendula, Nicella sp., Placogorgia sp., Scleracis sp., Swiftia sp., Thesea sp.	14.58		50-100	0.01-2.32	

Block	Black corals present	Scleractinian corals present	Alcyonacean corals present	Area (km2)	Vertical Relief (m)	Depth (m)	Coral density data (individua l/m2)	Fish Species Present?
South Texas Banks								
Big Adam Bank Blackfish Ridge	Antipathes furcata, Antipathes sp., Stichopathes sp., Tanacetipathes barbadenis, Tanacetipathes tanacetum			23.32 25.75	14	50-100 50-100	0-2.3	
Dream Bank		Madracis myriaster, Oculina sp.	Bebryce cinera, Scleracis guadalupensis, Thesea nivea, Thesea parviflora, Thesea sp.	55.05		50-100		23
Hospital, North Hospital, and Aransas Bank	Antipathes furcata, Antipathes sp., Cirrhipathes sp., Stichopathes setacea, Tanacetipathes barbadensis, Tanacetipathes tanacetum	Madracis asperula, Madracis brueggemanni, Paracyathus pulchellus	Bebryce cinera, Hypnogorgia sp., Muricea pendula, Nicella sp., Thesea sp.	71.78	14	50-100	02.3	27
Mysterious Bank				122.9		50-100		

Block	Black corals present	Scleractinian corals present	Alcyonacean corals present	Area (km2)	Vertical Relief (m)	Depth (m)	Coral density data (individua I/m2)	Fish Species Present?
South Texas Banks								
Southern Bank	Antipathes atlantica, Cirrhipathes sp., Stichopathes gracilis, Sticopathes setacea, Antipatharia	Madracis asperula, Madracis sp., Paracyathus pulchellus	Thesea nivea	26.4	16	50-100		
Unnamed Bank (Harte Bank)	Antipathes furcata, Antipathes sp., Stichopathes sp., Tanacetipathes tanacetum		Hypnogorgia sp.	37.19	16	50-100		14