

SOUTH ATLANTIC FISHERY MANAGEMENT COUNCIL

JOINT SAFMC & GMFMC SPINY LOBSTER COMMITTEES AND ADVISORY PANELS

**Renaissance Orlando Airport Hotel
Orlando, FL**

June 7, 2010

SUMMARY MINUTES

SAFMC Spiny Lobster Committee

Mark Robson, Chair
George Geiger
Rita Merritt

Dr. Roy Crabtree
Ben Hartig
Lt. Brian Sullivan

GMFMC Spiny Lobster Committee

Bill Teehan, Chair
Ed Sapp
Corky Perret

Bob Gill, Vice- Chair
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Sean Espenship
Karl Lessard
Peter O'Bryan
Robert Rowe

Robert Burton
Bruce Irwin
Bill Mansfield
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GMFMC Spiny Lobster Advisory Panel

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Gregg Waugh
Myra Brouwer
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Observers/Participants:

Monica Smit-Brunello

Dr. Jack McGovern

Sue Gerhart
John Hunt
Phil Steele
Colonel Bruce Buckson

Bill Sharp
Carrie Simmons
Dr. Bonnie Ponwith
Bill Kelly

Additional Observers and Participants Attached

The Joint Meeting of the Spiny Lobster Committee and the Spiny Lobster Advisory Panel of the South Atlantic Fishery Management Council and the Spiny Lobster Committee and Spiny Lobster Advisory Panel of the Gulf of Mexico Fishery Management Council convened in the Ballroom of the Renaissance Orlando Airport Hotel, Orlando, Florida, Monday morning, June 7, 2010, and was called to order at 8:30 o'clock a.m. by Chairman Mark Robson.

MR. ROBSON: Good morning, everybody. We will go ahead and get started. My name is Mark Robson, and I'm going to be acting kind of as the chair today for this workshop. We have a lot folks here. I think the first order of business, of course, is going to let everybody know who you are and who you're affiliated with.

Again, I'm Mark Robson. I'm on the South Atlantic Fishery Management Council and I'm the chair of the lobster committee. Of course, as a joint committee and a joint AP process, we've got a lot folks here, and so I'm going to start off by introducing on my right Bill Teehan. Bill is more or less my counterpart today as the chair of the Lobster Committee for the Gulf of Mexico Fishery Management Council.

We're going to try to tag team here a little bit today. Of course, everybody from both APs is here. I think the first order of business would be allow everyone to just briefly give your name and just a very brief statement about what you do in terms of spiny lobster. We'll talk specifically to the AP members. I want to start by going around the room and allowing the AP members and then we'll also introduce the rest of the council members. Let's start with the Gulf of Mexico Fishery Management Council Lobster AP.

MR. LESSARD: I'm Karl Lessard. I'm the chairman of the Gulf AP. I have been a commercial lobster fisherman for 38 years. I was also the chair of the management committee for the Gulf Council Spiny Lobster for five years. I was a chairperson of the Gulf Council.

MR. STAFFORD: I'm Simon Stafford. I'm a commercial lobster fisherman out of Key West, Florida, spiny lobster and stone crab.

MR. SANSOM: Jerry Sansom, executive director, Organized Fishermen of Florida, former council member back in the dark ages or bright ages. It depends on how you want to reference where we are now – AP member for a long time; glad to be here.

MR. KELLY: Bill Kelly, Marathon, Florida. I'm the executive director of Florida Keys Commercial Fishermen. I served six years on the South Atlantic Snapper Grouper Advisory Panel. I have been a recreational lobster diver for 35 years.

MR. GAITANIS: My name is Bob Gaitanis, recreational fisherman. I've been on the AP Gulf Council for 15 years or so, from Newberry, Florida.

MR. ROWE: My name is Bob Rowe. I'm originally from Palm Beach County; recreational diver; part-time commercial fishing in the old days. I've been diving since '55. I now live in Atlanta. I'm just glad to be back in Florida.

MR. O'BRYAN: Peter O'Bryan. I'm on the South Atlantic Lobster Advisory Panel since '96 from Vero Beach, Florida, which is on the central east coast between Ft. Pierce and Cape Canaveral. I'm a recreational lobster diver.

MR. MANSFIELD: I'm Bill Mansfield from North Carolina. I'm a biologist. I've been diving off the coast of North Carolina for not quite as long as Bob has, but since 1965. I have been on the council advisory panel for probably since about '97, I think.

MR. WHITTINGTON: I'm Mickey Whittington. I'm from Georgia. I'm a recreational diver.

MR. ATACK: I'm Jim Atack, Oak Island, North Carolina. I've been on the AP since '98. I'm a recreational diver since the mid-eighties.

MR. BURTON: Bob Burton, Jupiter, Florida. I've been diving recreationally for lobster for 40 years. You can use that cuss word "incumbent" in my resume. I've been on the council for about 20 years.

MR. IRWIN: I'm Bruce Irwin, a lifelong commercial fisherman. I also sat on the Lobster Advisory Board for the state and I was chairman of the Lobster Advisory Group that the commercial fishermen put together a few years ago.

MR. ROBSON: Did I miss any of the AP members that didn't get a chance to introduce themselves? All right, thank you.. We're going to now just quickly introduce the council members. We have council committee members from both Gulf and South Atlantic. You know Bill and me. I'm going to start on my right with Bob Gill.

MR. GILL: I'm Bob Gill. I'm sitting in the commercial seat from Florida on the Gulf Council. I'm currently vice-chair of the council and vice-chair of the Spiny Lobster Committee.

MR. SAPP: Ed Sapp from the Gulf Council. I'm from Florida and I'm a recreational appointee.

MR. SIMPSON: Larry Simpson representing the Gulf States Marine Fisheries Commission. My first meeting of the Gulf Council was July 15th, 1978.

MR. PERRET: I'm Corky Perret, Gulf Council with the state of Mississippi. My first meeting was the first-ever meeting of the Gulf of Mexico Fishery Management Council, and I was chairman of the Spiny Lobster Committee for the Gulf Council even before Karl Lessard.

MR. GEIGER: George Geiger, South Atlantic Fishery Management Council from Florida.

MR. ROBSON: And we have NOAA staff as well; do you want everybody to introduce themselves?

DR. CRABTREE: I'm Roy Crabtree. I'm a member of the South Atlantic Council and the Gulf Council, but I'm only a member of the South Atlantic Council Spiny Lobster Committee, and I work for NOAA Fisheries.

MS. SMIT-BRUNELLO: Monica Smit-Brunello with NOAA General Counsel.

MR. STEELE: Phil Steele, NOAA Fisheries.

MS. MERRITT: I'm Rita Merritt, North Carolina representative, commercial seat on the South Atlantic Council, and I'm on the Spiny Lobster Committee.

LT. SULLIVAN: I'm Brian Sullivan. I'm with Coast Guard District VII in Miami. I sit on the Gulf and the South Atlantic Council.

MR. HARTIG: Ben Hartig, council member, Florida.

MR. ROBSON: And we also have council staff that are helping with this workshop today. David Cupka is in the audience from the South Atlantic Council. Gregg Waugh is assisting and Carrie Simmons from the Gulf Council staff is assisting. With that, let's get started.

The first order of business is to kind of go through the agenda with you. Gregg is going to help step us through a little bit of how we think this process will work today. We've got a large group and it is going to be a little bit complicated. First of all, I just want to make sure that everybody – if you've had a chance to look at the agenda, are there any changes or additions or concerns about the agenda today? If not, I want to go ahead and let Gregg talk a little bit about how we are going to try to operate today.

MR. WAUGH: Good morning. We do have extra copies of the agenda and the overview. If anybody needs a copy, hold up your hand and we'll get one to you. First we're going to lead off with presentations by John Hunt and Bill Sharp. They have certain sections; they have their talk broken into sections where we will open it up for questions and discussion.

Then what we do is work through, after the break, do the delegation issue and again getting questions and answers. We're saving the debate issues until later this afternoon. Once we get through those presentations, a combination of council and NMFS staff that are working on the document will give you presentations on a quick overview of each action item and a brief outline of the alternatives.

We definitely want to get any additional alternatives that you all want analyzed at this meeting. The timing we're looking at is the councils to go through this. We will be getting – as you all know, a stock assessment update is ongoing. The councils will review the draft amendment and approve for public hearings. The South Atlantic Council will do that at our December 2010 meeting. The Gulf Council will do that at their February 2011 meeting. We're looking at holding hearings in April after the lobster season ends.

Then the councils will review public comments and provide final guidance on the document at their June 2011 meetings, and then they will review the final document and approve for submitting to the secretary; the Gulf at their August meeting and the South Atlantic Council at their September meeting.

As I said, we'll go through and give you just a staff presentation outlining and answering any questions that you have and then we'll take a break for lunch. After lunch, when we come back, we want to get your AP inputs. If you all can come up with joint recommendations, that's fine; but if there is going to be any voting we need to vote separately by advisory panel.

The Gulf AP has a chair and that is Karl Lessard. The South Atlantic AP needs to get together and have some discussion during the break and over lunch, and the first item, when we come back after lunch, will be to appoint a chair of the South Atlantic AP. Then we will go through and get the AP recommendations on each item.

Again, what we're looking to do here is finalize the range of alternatives that we have. After the APs are finished, we will take a break and then come back in and each of the council committees will then debate, answer any questions and give us guidance on the range of alternatives for each of those action items.

When there is voting to be done, each of the councils' committees will vote separately, and then our council will act on our committee recommendations later this week, and the Gulf Council will review their committee's recommendations at their meeting next week. Then under other business we would like to get some guidance on public hearings – just make sure that date in April, that timeframe works – and some guidance on where to hold those hearings. That is a brief overview. Again, if anybody else needs a copy of the agenda, let us know.

MR. ROBSON: Were there any specific questions about how we would be handling that agenda process today? Again, we'll kind of work through this as we go. This is a complicated process with two different APs and two committees. All right, with that we want to go ahead and go into some of the presentations.

Of course, in the state of Florida we have been working quite a bit with the Lobster Advisory Group and with many of you at the table, if not all of you, and so a lot of information had compiled and gathered. We have asked some of the Fish and Wildlife Commission staff from Florida and from our Fish and Wildlife Research Institute to be here today to kind of give you the latest information that we have available regarding the spiny lobster fishery in Florida.

So with that, what I want to do is introduce the two key people that are going to be helping us with those presentations. They're on my left. We have John Hunt and Bill Sharp from the Research Institute. I'm going to go ahead and turn the meeting over to them for a little while this morning. John, are you going to start out; so we'll let you go ahead and take it away.

MR. HUNT: My name is John Hunt. I've been a scientist with the Fish and Wildlife Commission and its predecessors now for almost thirty years. I moved to Marathon, Florida, in 1981 and have spent much of that time working on lobsters from a biological and fishery science standpoint.

Before we go into the talk, you just got a piece of paper that was passed out to you. It is something that will be I think important later on today. You can think of this table that we provided you as Bill's and my update to your Table 4, I think it is, in your briefing document that

has our most recent analyses on the recreational landings. It won't come up for a while, but that is what it is. It will come up towards the end of our presentations.

At any rate, we're going to be talking about aspects of spiny lobster life history, fishing landings and allocations. In other words, these are the topics that pertain most to the issues that you'll be discussing over time; namely, those issues related to the Magnuson-Stevens Act with ACLs, et cetera.

I'll start with an overview of spiny lobster life history. Those of you that live in the Florida Keys are very familiar with lobster life history, and this will be very much a review for you but I felt that since it has been so long since we've been in a council meeting we should at least go through the bare-bones basics. Then we'll talk more about recent research on life history.

At the end of that time period, we'll stop and we can take any questions so that everybody understands the recent research and any other things about the biology of lobsters that we need to talk about. Then we'll go into some landing discussions and allocation discussions. Very briefly, the Caribbean spiny lobster, *Panulirus argus*, has a range from Brazil to North Carolina, including Bermuda. It is a very wide-ranging species, as are most spiny lobsters around the world.

In general it has a typical marine life cycle where the adults are on the reef. There is a planktonic larval stage, post larvae and juveniles. We're going to go through each of these stages in slightly greater detail. Throughout its range, the adult lobsters release their eggs on the offshore reefs or whatever the equivalent habitat is, wherever they are, adjacent to the oceanic currents of the Western Atlantic.

When those eggs float up to the surface and become a veliger larva, that we now know spans approximately six to seven months in the open ocean. We used to say nine, we used to say nine to twelve. Recent efforts in the laboratory have finally successfully raised the larval stage and on average it is six to seven months. I think that's a number that we can be fairly comfortable with.

Of course, because they're so long-lived, they have the potential to be widely dispersed from they were spawned, and this is a topic that we will come back to in more detail. That larval behavior, the eggs float up to the surface. The early stage larvae are very near the surface. We always thought about all the larval stages being near the surface, but again some recent research on Palinurids in general, especially in Western Australia but to a certain extent in the Western Atlantic, we now know that the late-stage larvae are in deeper waters, 50 to 100 meters or so, and they tend to move more towards shelf waters.

Then, finally, that post-larval stage metamorphoses offshore and actively swims into the inshore areas. That puerulus post larva is the clear lobster-looking like animal on the top left, and it is a very strong adept swimmer. It uses coastal chemical cues to orient shoreward. In the Florida Keys, based upon some laboratory experiments – those laboratory experiments done by Mark Butler and some of his students – found that they could actually detect coastal water chemical cues as far as 20 miles offshore. That is a pretty remarkable bit of detection.

In fact, they use those queues to actively swim towards shore. This stage is a non-feeding stage. You will see it is completely clear. It is a completely non-feeding stage. Then when they metamorphose to the juvenile stage, they actually develop their mouth parts at that point in time, and as you can imagine they're ready to eat. It is a very risky time for them right at that stage.

These early juveniles, we call them algal-phase juveniles. It is that size where it is about 6 to 20 millimeters carapace length. They are solitary at that point in time and they tend to, at least in the Florida Keys, dwell especially in these large macro-algal clumps that are found throughout the Bayside especially of the Florida Keys.

As they grow, they shift from being solitary into that gregarious behavior that we all observe all the time. They seek the daytime protection in crevice shelters. They become increasingly nomadic as they get larger and finally migrate offshore at the onset of maturity. That is the overarching kind of broad-based life history.

We're going to talk in considerably more detail about some recent life history research; one being the origin of Florida's stock; and, two, recent research on the virus that was discovered in the late nineties, the PA-1 virus. Both of these topics do pertain to your thinking as the day goes on.

First we're going to talk about the origin of Florida's stock. We're going to be talking about two different projects. One is a project funded by the MARFIN Program completed by Mike Tringali and myself, and the other is computer modeling on lobster connectivity done by Mark Butler and Clara Perez and Bob Cowan at the University of Miami, using the high-com model.

First the Micro Satellite DNA Analysis – we've always thought of the spiny lobster being one Pan-Caribbean lobster stock, but we haven't had much information on this topic. In fact, a number of people have postulated over the years that the gyres in the Florida Keys, the Tortugas Gyre, and some of the other gyres in the Florida Keys have been strong enough in the Florida Keys to actually have a fair amount of local self-recruitment.

It has been a topic that has been of interest for a long number of years. Finally, with the advent of more sophisticated DNA analysis, we felt that we could take a finer-scale look at our stock in Florida and also across the Caribbean using this genetic technique called Micro Satellite DNA Analysis.

One aspect of our study was collecting post larvae in the Florida Keys and we used these collectors right here to monitor the influx of that puerulus post-larval stage that I briefly talked about, and we sampled those collectors on Day 7 of every lunar cycle of every month and have done so for about 20 years, and we'll talk more about that aspect of it later, but for a little over a year we took our post larvae off the collectors and used them for genetic analysis.

Before we get to the results, though, I want to talk about a little bit of a genetic primer that Mike Tringali had to do for me, and so I figured it was probably worthwhile for all of us. These are three different examples of likely or possible genetic patterns that you can see in a population of a species. One is a highly structured genetic stock, the one on the top. Mike calls it a stew, and

it makes sense because stews are the combination of solid food ingredients and each ingredient is separate.

If you take a look at the population in that genetic stock, all the ones that are red are all exactly the same. The ones that are white – because each of these are different individuals, so these are all genetically the same, kind of like the piece of meat. These are genetically the same, et cetera. Another example is a bisque or a single randomly mating population where virtually every individual is very similar to every other individual and they contain a portion of the population genetic stock.

Then, finally, you have a mixture from multiple genetic stocks where there are some individuals that are the same as in the red, but you never really know from where they're coming from. To kind of look at some examples, the stew, a common snook is a good example of that. We can, with a very high probability, take a snook that we haven't seen and we don't know where it came from, do the genetics and tell you whether it came from the Atlantic or the Gulf stock; and so two distinct populations and very strong genetic structure. That is not lobsters.

In the case of Mike's bisque, a good example there is tarpon. All the individuals are assigned to each population with equal probability, and if you think about that tarpon come from many different locations to spawn, and so there is that kind of a population. The reason why we're going through this is lobsters are goulash. It is what is for dinner?

The point here is that we would go to our post-larval collectors month after month after month, and what we would find in our collectors would be a large number of individuals mixed together, and sometimes in one month it would tend to be one genetic structure mostly and the next month would be another one. Sometimes it would be several different genetic structures at the same time.

It is kind of what you would expect with a species whose has this long larval lifespan. An interesting thing, though, that came out of this is that when you run these data through Mike's genetic software programs, which I admit I could not explain to you, he estimates that there are four different genetic source populations settling on our collectors during this timeframe or approximately four different genetic source populations.

We can't tell you where they came from. We can just tell you that there are probably four. We also spent a huge amount of effort collecting lobsters or having folks collect lobsters for us around the Caribbean. We still have samples we have not analyzed or in the process of analyzing from the Barbados, Guadalupe, St. Vincent, several other locations in the Bahamas. Buster Giddens is hot to trot on that one for us and we need to get that done for him.

We don't have any Cuba, which has just proved to be difficult for us. At any rate, we have adult collections from a wide range, and not surprisingly you see the same story, goulash. Each one of these abbreviations is a location, so, for example, that is Bermuda, North Carolina, Ft. Pierce, Middle Keys, Lower Keys and a wide variety of locations in the Caribbean. VZ is Venezuela.

A good way to think of this is that if you look at the population in Venezuela, it is not very different than that from the Middle Keys; although there is one location that was fairly and that is the Flower Gardens Reef in Northwestern Gulf of Mexico. When we look through whole genetic structure, it looks like that across the Caribbean there are probably five different genetic populations. We have learned a lot, but in this study we still haven't been able to say there is a definitive source.

It is intriguing to start to think about what could be going on in the Caribbean, and that leads us to the computer simulations that Mark has been doing with the folks at the University of Miami where they're incorporating so far oceanographic models and incorporating spiny lobster larval and post-larval behavior, that behavior that I briefly went over with you early on, to try to predict settlement patterns.

They're using a fairly sophisticated model where they so far have released larvae at 13 locations across the Caribbean, and these 13 locations represent, they think, about 95 percent of the spawning populations of lobsters out there. They're taking that six- or seven-month larval lifespan. They're looking at the post-larval orientation to coastal nurseries and swimming towards shore once they're at the right age and they're about 20 kilometers offshore.

They did simulations with and without larval behavior. I'm going to present some fairly detailed results from this study to help us understand what is happening across the Caribbean and in Florida. This is an example of a larval dispersal in the model that incorporates larval behavior. No great surprise, but it turns out the larval behavior that we're now learning about is absolutely critical to retention of lobsters even in the Caribbean.

If I were to show you this same picture without the larval behavior, all these lines would shoot up through the Caribbean and all the lobsters would be shooting past Florida. The larval behavior, the change in depths, et cetera, et cetera, that we've talked about are critical to keep lobsters in the Caribbean. There are some interesting points here.

If we take the lobsters that started from adults here, you can see they moved through the Caribbean. Some of them get caught down in here, but they all ultimately end up into the Loop Current and coming by Florida. Another case, if you release the eggs down here in the Southwestern Caribbean, there is a fairly high level of retention. We'll talk a little more about that. These gyres are long enough so that there is some retention here, but sooner or later some of them still come all the way out and by us.

The same is the case for lobsters down here. They sooner or later come by us. Here is the Bahamas Region, which is probably the most separated from Florida, there were even a few that came down through and ultimately came by us. It is no surprise, just looking at this, that our population is goulash.

Now we're going to spend a fair amount of time on this one. This is their preliminary matrix. I'm going to have to say this is a very, very new research. It is unpublished but it is very, very new research and it is continuing on, but it is a preliminary connectivity matrix for lobsters in the Caribbean.

On this axis you have the spawning location and on this axis you have where the larvae ended up. On this scale red means high and dark blue means low, and there is no dark blue but there is a lot of light blue around. What we have, then, wherever you see these reds along in here, you see a very high settlement rate. While we're kind of in here, there are some reds.

This is Florida; this line is Florida; and the bottom line is Florida, so some of you are going to have a hard time seeing that. We have reds here, here and here, and then there are a lot of reds along here. These reds here are the areas of greatest probability of actually having larvae being retained near where they were spawned from. This is an interesting new development in our understanding of spiny lobsters.

For example, larvae spawned in Belize in this model – remember it is a model; it is not the real world – a fair number of them ended up in Belize but we also had some over here. We did this slide show a while ago and then I've been playing with oil ever since, and so I'm remembering as I go. I already told you that there was the self-retention in that Nicaragua/Honduras/Belize Region, so it is not returning to the actual spot of spawning. It is returning to that same general region.

In our case they had in their model a fairly high settlement rate from lobsters that were spawned in the Nicaragua/Panama/Columbia Area; in other words, that gyre I pointed out on the bottom-left of the Caribbean; also, from the Hispaniola/Southeastern Cuban Region; and also from the north coast of Cuba. That one surprises me a little bit.

It is also important for us to note that if there is anyplace that had settlement from everywhere at some level, it is Florida. What about settlement location? We looked at spawning locations and where they go –

MR. SANSOM: Before we get too far past this or into it, John, you're emphasizing this is a model and not reality. Is this a model based on expected larval characteristics and current characteristics; is that what –

MR. HUNT: Yes.

MR. SANSOM: Okay, I'm getting my head around the model and what makes the model work.

MR. HUNT: Okay, this is a model that combines – I didn't go through every little box on that one slide, but it is a model that combines all the details of Caribbean oceanography put into the High-Com Model, which is a worldwide oceanographic model. It is the same model that is being used for movement of oil spills, or is one of the same models being used for movement of oil in the Gulf of Mexico.

It also incorporated all the behaviors that we know about regarding how the larval stages behave. It also incorporated an estimate of mortality. We don't know much about that, but it incorporated an estimate. It incorporated that larval duration of six or seven months instead of the much longer nine months that we used to think of. There are other details underpinning all of that, that if you want you and I can sit and look at that box.

MR. SANSOM: No, I guess the bottom line to me is do we get to a point where there is some groundtruthing on this?

MR. HUNT: This is very new research, and we are initiating jointly – and it was going to be my final statement, actually, but we're initiating jointly an effort to incorporate putting PL collectors around the Caribbean, combining that with genetic work and additional modeling work to try to nail things down at the next level. That is not trivial exercise. It took me two years, practically, to collect adults across the entire Caribbean, working with the fisheries programs and universities. That is our next plan.

MR. SANSOM: Okay, so the bottom line is this is how it could work?

MR. HUNT: This is how it could work and it makes logical sense to me.

MR. SANSOM: I understand. Okay, thank you.

MR. HUNT: We've been talking about the sources, but now we're going to talk about the settlement location. Remember Florida is down here; and so if we have Florida as the source, what you see is the eggs released from model lobsters, Jerry, in the Florida Keys, very, very few – there are a few little blue dots down in there – very, very few end up in Florida. You will notice that none end up anywhere in the Caribbean in this model.

We're a little perplexed on some of this. Bill just reminded me and it is important to note that Bermuda is not in this model arena, so I would not be surprised if once Bermuda comes into this model, that it could be a source – it could be a point that receives lobsters from Florida. Those cold core rings that move towards Bermuda that are a source of their larval recruits are fairly slow moving. There are other refinements to be done, but that is the level of information that we have right now. North Carolina is not on the model either.

What this says is that those lobsters that are spawning in Florida, at least as far as we can say so far in the model world, are the eggs and larvae are not recruiting back into the Caribbean. That is Topic Number 1. The other life history topic that I want to talk about is the lobster disease. This is probably brand new information to some of you. For those of us in the Florida Keys, we've been learning about it over time, and I'm going to go through this in fairly great detail as well.

This virus was first discovered officially in 1998. It was discovered by Don Behringer. We've had a long relationship with Bill Herrnkind and Mark Butler at our lab. This was part of our collective work that was being done on nearshore hard bottom communities. Don, as a graduate student, noticed something and it turned into a great dissertation and to continue on his career, but unfortunately it is a virus that infects the blood of *Panulires argus*.

Once the visible signs of this virus are detectable to the human eye, it has nearly a 100 percent mortality rate. We also know the virus has been confirmed in St. Croix, Belize and Mexico. From that, we assumed that it probably throughout the entire Caribbean. As part of our next level of effort, we're going to be trying to learn more about that as well.

This disease has a very high prevalence in the individuals that are below 20 millimeters carapace length, and this is based upon only those that are visible to the naked eye. You know that many more of them actually have the disease. From this particular study, we just could not identify them at that point. We have techniques now that are called PCR, which we have developed that for the virus – or I should say they've developed that for the virus, not me.

It is pretty expensive and so we're still doing this kind of work using the visual viewpoint. As you can see, the prevalence of the disease goes down as the lobsters get larger. Interestingly, there have been some studies done – on all of this work has been done by Don through the years. He did some field studies and what he realized in the field here was that healthy lobsters were seldom co-occurring with infected individuals.

If you noticed on the last slide I talked about the shift to sociality, and I highlighted that in the life history section where I said once they get past that 20 millimeter carapace length size, they become gregarious. But once they become gregarious, the healthy lobsters and infected lobsters tend not to be co-occurring in the same dens.

You can see that when you have two healthy lobsters or more, they are typically co-occurring in very high percentages, 40 to 60 percent; but if there is an infected lobster there, that infected lobster tends to be by itself. The interesting mechanism for this is that the healthy lobsters will actually avoid contact with the infected lobsters. Somehow they're detecting this disease of some aspect of the disease at some point and they will actually avoid them, and that was done in the laboratory.

The other studies that were done were predation experiments. What Don did is he tethered lobsters out in the field and then looked at their survival rate with all the artificialness of being tethered, but what he found is that regardless of whether they had shelter or no shelter, the infected and diseased lobsters had a much higher mortality rate, indicating that one of the sources of mortality is a higher rate of predation on these diseased lobsters.

It is no surprise when you see them at the later stages they are quite lethargic. This kind of information is useful to us to try to start thinking about landings and other kinds of things, which is what we will go to next, but I'll briefly summarize this portion of the presentation. Our genetic analyses suggest that our post-larval lobsters here are a mixture of recruits from four perhaps five or so different genetic sources in the Caribbean, and that there is high connectivity and not really a very strong regional geographic structure.

The connectivity modeling kind of suggests that we might get some lobsters from some locations more so than others and very definitely the connectivity modeling suggests that local recruitment within Florida is unlikely. On the Pav-1 virus it has been confirmed from many locations, and we have some of these behaviors that I just talked about that suggests that between the widespread distribution of the virus and the fact that there are behavioral responses to the disease itself suggests that it has long been a part of the Caribbean spiny lobster population.

It just didn't pop up brand new in 1998. That is just when we found it. We would presume that especially these behavioral types of responses are things that have evolved over time and so that

is why we have come to the conclusion that this has long been part of the Caribbean spiny lobster population. With that, I would like to open up to any questions on this biology that you may have before we go on to the next topic.

MR. MANSFIELD: John, when you speak of coastal chemical queues; what does trigger that? I'm aware of red algae locations; what else is there beyond that, please?

MR. HUNT: I don't think we know, Bill. All these studies did was take water from differing distances from shore in the Florida Keys and took a lobster in a Y-tube and gave them a choice between one source of water and another source of truly oceanic water, and they would detect and go in one direction or another. The coastal water was simply coastal water. We presume there is a response to lorencia. We have done studies a long time ago on that topic where we've given post-larval lobsters that lorencia queue and a seagrass queue and they go to lorencia. From the coastal water standpoint, there might be other queues as well.

MR. MANSFIELD: John, another question, please; what would you say the size? I heard 20 millimeters when they become gregarious, so is that about the size they would start migrating in from these ocean currents to these local sites; do you know?

MR. HUNT: I don't think I understood that question.

MR. MANSFIELD: At what point in their life cycle, size or age, would they start this migration based upon this chemical queue? You mentioned 20 millimeters they became gregarious, and I was wondering if that's the same figure. What size are they when they start into the shallows? That's two different questions; I just answered it myself.

MR. SHARP: And, Bill, a followup just on the previous question on the chemical queue work that was done by one of Mark Butler's students, Jason Goldstein, in some of the trials he specifically tested lorencia against oceanic water, and that was actually the strongest response he got from lobsters. It was by far lorencia, much less so with seagrass, and they actually avoided hypo-saline water. It was a pretty strong response to the red algae.

MR. MANSFIELD: And the point of my questions, as John knows, I'm always trying to get some relationship to the one you don't have on your graph yet, which is North Carolina. I do recall, John, you and Rod, I believe, did something about sampling larval in the shallow areas of the Tortugas versus the deep. If I recall, you got very little settlement in the deep areas based upon that lack of chemical queue; do I recall that correctly?

MR. HUNT: I don't think we can say it is a lack of chemical queues, but on the bottom offshore with collectors we have a much lower settlement than we do nearshore. I presume they're testing the habitat. On the other hand – and that's why I'm not willing to only say lorencia. This is a little bit of an aside related to the topics you're going to talk about today, but on the other hand we did a fair amount of work in St. Croix for the National Monument there.

I'm drawing a blank on the name of it. It will probably come to me during the course of the discussion. We put collectors in that region around the island offshore – Buck Island Reef

National Park – and so we put our same collectors around Buck Island Reef National Park. At the location where we figured we would have the highest influx, we had more post-larval lobsters coming into those collectors than we ever see in Florida.

Something is as well going on in other parts of the Caribbean where there are large numbers of post-larvae coming in and the settlement habitats are very, very different, so they have to be using more than just lorencia queues. They're probably having higher mortality rates in those locations as juveniles as well would be my expectation.

MR. LESSARD: John, with the recruitment in Florida, that probably goes out into the Straits and through the Gulf Stream, and with the Gulf Stream moving between two and three knots, what do you think happens to that? Do you think of it goes up into Iceland over that five- or seven-month period and dies? Do you have any idea if it recruits to the lobster in the Carolinas?

MR. HUNT: I don't know how many are lost to the Caribbean lobster population and how many settle anywhere. I think it is certainly likely that some of them get entrained in a cold core ring from the Gulf Stream. The Gulf Stream has eddies and they pinch off and form mesoscale eddies that drift to the south. In the case of the cold core rings, many of them drift towards Bermuda, and some even come a little further south, so I think there is certainly potential for our spawning to be part of what goes into Bermuda, but we don't know that answer.

The rest of them are lost. Believe it or not, there is *Panulires argus* in the Azores, and so we know that lobster larvae get at least to the Azores. There are a lot of unanswered questions here, but I'm comfortable saying that lots of our larvae are probably lost to the Caribbean System.

MR. LESSARD: I was pretty amazed that there is no recruitment of the lobster from the Keys into the Keys.

MR. HUNT: Model lobsters.

MR. LESSARD: Of course, John, we always talk model lobsters.

MR. GEIGER: John, great presentation. I apologize if I missed this, but is there any potential hazard to human consumption of these diseased lobsters?

MR. HUNT: You didn't miss it because I didn't mention it. Early we collectively and immediately contacted the CDC and asked them about this, talked about it. They asked how do you cook lobsters, et cetera, et cetera, et cetera. The CDC was sufficiently comfortable that there was no risk that they did not even ask us to ship them anything.

The other thing I was going to mention, there has been concern expressed could this virus jump to other species. There have been tests where we have actually taken the virus and injected it directly into stone crabs, the large spider crab that is common in the Keys, and we also injected it into this lobster species here, which is *Panulires guttatus*, the spotted lobster on reefs – it is not the Caribbean lobster; we just like the picture – and none of those species contracted the virus. This is highly specific to *Panulires argus*, the Caribbean spiny lobster.

MR. PERRET: You gave a couple of specific examples of finfish, snook and tarpon, the genetic structure was pretty well identified, but I think you used the technical term goulash for the spiny lobster –

MR. HUNT: Highly technical.

MR. PERRET: – is that typical of crustaceans' work done with other crustaceans and it showed similar patterns; do you know?

MR. HUNT: Not necessarily. Mike is our genetics person at the Institute and he has done population genetics of a lot of different species, and I think this is the first time he has come across goulash. He kept on looking at it and that is what made him try to come up with these names. I think it is really specific to the long larval lifespan and the oceanography and as well to a certain extent the unique location of where we are in Florida on the whole kind of recruitment stream. I would say it is not that common.

MR. PERRET: You may have answered this when I was on the phone outside. Thirty or so years ago when I was more involved with spiny lobster we were told that recruitment probably came from the Caribbean, a very high percentage and so and so forth, and you may have said what the range of that percentage is based on the model, of course.

If indeed it is a high percentage of that recruitment coming from that area of the world, factors that – let's say detrimental factors that could affect that population could have more of an impact on our fishery here, say, than local rules, regulations and that sort of thing? I'm not trying to lead you, but if recruitment is indeed that high from the Caribbean, obviously, detrimental things down there could really impact our fishery here. Am I correct in that assumption?

MR. HUNT: You're correct in that assumption that changes in the spiny lobster population, especially the spiny lobster adult population in the Caribbean could have impact here is actually going to be kind of a topic of the next round that we're going to talk about this morning once we finish with these questions, and we can talk in more detail then.

MR. BURTON: Regarding recruitment, we've talked downstream a little bit, and unfortunately North Carolina nor Bermuda are on your graph. Would it not be logical that some of our recruitment benefits Georgia, South Carolina, North Carolina and Bermuda and potentially all the way to the Azores?

MR. HUNT: Well, I think that is kind of what I just said is that you have the cold core rings, which is just likely from – I can't speak to the Azores because that is a very unusual situation, but it is just as likely that North Carolina is getting recruits from throughout the Caribbean as well. If you looked at our genetic work, North Carolina was up there and it was the same goulash. I'm saying "same" because it is hard for us to discern the differences.

If you take the speed of the water moving through the Florida Straits, there is a lot of late-stage Panulires argus larvae that are sitting out there in the middle of the Gulf Stream off of Marathon

that aren't going to make it to the Florida Keys. They're going to get somewhere else. Your tertiary rock outcrops that you folks dive on up there, I don't know much about them.

I dove on them when I was a graduate student but that was a long time ago and I was just a recreational person doing that. It wasn't my research. If you look at those distances from the inner edge of the Gulf Stream, they're probably taking, in this case, the warm core rings that come through that region that serve as the recruitment events, and they have to be on top of those outcrops at the point that post larva says, "I've got to go." He says to his friends, "I've got to go; I'm going there; I know it's not the greatest place, but I'm going to take my chances."

MR. BURTON: I understand that. And talking upstream, which is of critical concern to the state of Florida as just mentioned, the basic tenet of all fisheries management in setting minimum size limits is having that species spawn at least once. To your knowledge, what are the rules and regulations in general of our upstream neighbors regarding size limits, bag limits, if any; and do they understand the importance of same?

MR. HUNT: Well, throughout the Caribbean there is a wide range of minimum sizes. Yes, sir, there is a wide range of minimum sizes. Many of them are actually larger than our minimum size. Cuba has been slowly increasing its minimum size, especially in the southwest Cuban fishery, and their minimum size is now I think a millimeter larger than ours. I've forgotten the details. Most of the nations have a minimum size.

The minimum sizes are at least 3 inches; many places are larger. Venezuela's minimum size is over a hundred millimeters carapace length. It is a question of the capacity to enforce those minimum sizes, so I think there is the biological understanding. It's the other issues that become important.

I'm going to debate a little bit with you at least in Florida because our minimum size is as much based upon growth rates and finding a good marketable size and ensuring that we are not highly growth overfishing just as much as protecting the spawning stock. The two go hand in hand.

MR. IRWIN: John, I kind of have a statement question, and I would like for you to either agree with it or elaborate on it, please. Florida seems to be the barometer of the health of the entire Caribbean lobster population, which yet our lobster eggs do not have a bearing on the health of Florida or the Caribbean lobster population; our local lobster eggs.

MR. HUNT: Well, I'm not willing to quite go as far as to say that we are the health and the barometer of the entire Caribbean. To rephrase it, the genetics work and modeling work so far says that our level of local recruitment is very, very low, extremely low, and I think we can put to rest some of the ideas that have been postulated about the potential for local recruitment that we have had out there that we couldn't really answer.

The genetics work and this modeling work I think answers that level and really puts this in some ways back where we said we were in the eighties when we would just say it. Now I think we're comfortable putting it into more quantitative terms. We'll talk more about recruitment to our

fishery and Caribbean-wide issues in the landings' section. I think we should let that kind of go for then.

MR. IRWIN: John, do you have any information – you said that you go through different levels; the lobster go down 50 feet as they –

MR. HUNT: Meters.

MR. IRWIN: – come into shore – 50 meters – do you have any information, do you have any collectors or anything on the different levels of the water columns, or do you just have the one on the top in several locations?

MR. HUNT: The only collectors we have now are surface collects 500 feet offshore from Long Key or so and another 500 feet offshore out in front of Big Munson Island there, the Little Palm Island area. We've had those collectors at those two locations for about 20 years. Back when I was contracted by the Loo Key National Marine Sanctuary, I convinced Billy to let us do a little bit of lobster research related to this on the side, and we took collectors and put them in about 120 feet of water on the same plane, offshore from those outlier reefs that drop off and stop and at about 90 feet or so.

We put a collector on the surface and in the middle and the bottom. We put collectors on the reef flat at Loo Key. We also put collectors on the surface and the bottom in Hawk Channel and we had our inshore collectors. We did all the different tests to ensure to the other scientists that these lobsters weren't landing one place and crawling to another on the rope.

What we found is offshore we had very, very few PLs in general land. By far most of them – and this is just memory. I have to go look at our numbers, but it was on the order of 80 percent of them were on the bottom collectors in a hundred feet of water. The same was the case at Hawk Channel, and, of course, nearshore a surface collector is a bottom collector because it is really one and the same.

What I think is going on is that once they're coming in – the other thing is based upon the color of the post larva, whether it was pigmented or not – and I'm not going to go into all those details, but based upon that, we were able to determine that those post larvae that landed on the bottom collectors in a 120 feet of water probably landed there a day or two or three before their buddies landed on the collectors nearshore.

I think once they get to shallow enough water, whatever that is, their behavior is started to change. They're probably testing habitats. Let's face it, an offshore sand plane or a coral reef for *Panulirus argus* is not a good place to settle. On the other hand, the spotted lobster preferentially settles on reefs. We don't know how they do it, though.

MR. STAFFORD: It is a question on the virus. Dr. Behringer discovered it in '98; right? You say it has probably been around before that. Is there any evidence other than just looking for it of it increasing or decreasing in the population or is it just sort of maybe think of a constant sort of background factor?

MR. HUNT: The evidence from just our field work is that is when we discovered it. Of course, it is kind of like tarballs in the Florida Keys. Tarballs in the Florida Keys have come around for a long time, but now everybody is looking at them and reporting them, so there is a heightened awareness. We had a heightened awareness at that point in time.

I can tell you that this whole research team, Mark and I especially, have drunk have a lot of rum and cokes looking back through time trying to say was that virus there, did we see it, we just missed it, and we think it was probably there. I'm going to hold off on answering your other question because it actually comes into the next part of the presentation, which reflects Bill's and my views on that. I will say we don't have any huge non-fishery landing-related basis to make any real conclusions; sort of leaving it in the pure field science biology side. We will be talking more about it and you'll hear my opinion them, so I'm holding off on my opinion, if you don't mind.

MR. WAUGH: John, to help just clarify in my mind between what we know and where the modeling starts, the modeling is trying to get at what are the sources of our larval supply, the specific countries, but the detailed genetic research that has been completed answers this question that we don't have local recruitment and our recruitment is dependent Caribbean-wide; is that correct?

MR. HUNT: I think so. We were actually hoping that our genetics would find actual higher likelihood source locations. That turned out not to be an outcome from that study. It was certainly written into the proposal that way, but it was not an outcome from that study. The modeling – that is why the two can go hand in hand, and that's why we're trying to go to the next level of this to see if we can really nail down are there greater likelihoods from certain locations. I think that is important.

We've heard a lot of questions in terms of fishery management in the Caribbean or risk related to that; and if we can get to the point that there is a greater level of connectivity from one region – and it really won't be a country. It is really going to be a region of the Caribbean. If we can get there beyond just the model lobster stage and be more comfortable there, we might give an avenue for increasing appropriate partnerships rather than just kind of a scattershot approach, which is where we've been unsuccessfully for a long time.

MR. ROWE: Last month I had the opportunity to fish out of Steinhatchee; and I guess with this oil slick and everything else, it is kind of like talking about what percentage of the recruitment goes up the Gulf Stream and offshore. I was talking to some of the people that dove around there and there is quite a bit of lobster on some of that reef structure out there. Has that been factored in as a model of what they contribute around the Apalachicola Bay and that surrounding area?

MR. HUNT: It has not been factored into these models, but quite a lot of lobster from the perspective of fishermen trying to catch them in a local area and quite a lot of lobster, when you think of the size of the lobster population across its entire range and across the entire Caribbean are two different things.

What I'll do is I'm just going to assert that the lobsters in the northern Gulf of Mexico, off Panama City – I mean, there was a tournament off Panama City and Bill collected 50 lobsters for our genetic study, but those lobsters are insignificant in terms of the dynamics of the spiny lobster population ups and downs in the Caribbean. They're a sideshow, but they're big and fun to catch up there.

MR. PERRET: John, I spent 30 years of my life working in Louisiana, and one animal we worked on and we've got a tremendous amount of information on is brown shrimp. Obviously, it is important that you get larval recruitment, but what we found with brown shrimp is it is not the number of larvae that come into the estuaries; it is the conditions they find when they get into those estuaries.

If the weather people tell me in January of the year what the Mississippi River is going to do, I can tell you what kind of brown shrimp crop you're going to have, for example. Regardless of where recruitment of the larvae is coming from, I think you said you have a long-term data base; does that data base have long-term numbers of larval indexes from year to year? Where I'm going is if you do, then I assume Florida and you scientists are following it up with conditions in recruited area; and if so, what is happening to that juvenile abundance in Florida when they get into the areas of their suitable habitat and that type of thing?

MR. HUNT: Well, first of all, I'm going to talk about brown shrimp. You may not know this but as a graduate student I did a model that predicted the brown shrimp harvest in North Carolina based upon the conditions in the primary and secondary nursery areas, and we got a very good estimate, and so I –

MR. PERRET: So you know how important those are.

MR. HUNT: I certainly understand that, and the state of North Carolina used it for a while until they realized that it altered how the people fished and it wasn't helping fishery management, so they stopped using it. Meanwhile I was in Florida by the time that all happened; but at any rate we have done a lot of work ourselves and in partnership with our academic partners on just that very question; what is limiting – and I'm using limiting here in kind of an ecological science sense – recruitment to the fishery.

Is it the number of recruits arriving on our shores or is it post recruit processes? There have been a lot of changes in the Florida Keys over the years. Nutrient and water quality has changed; all this other kind of stuff has changed. I can't say that we have really answered that question. It is, for lobsters, a very difficult question, especially because this lorencia settlement habitat is very, very dense, very, very ephemeral.

We can't effectively sample lobsters in it because you get this big, large kind of ball of algae from myself to Gregg, and we can't really get the lobsters out of there. We can only go to the next stage. From a pure habitat standpoint, meaning daytime shelter, I think the daytime shelter habitat in the Florida Keys is probably not that different and probably a minor factor.

I'm not going to say the same necessarily on some of the broader changes in the ecosystem related to water quality and other kinds of issues. Again, we're going to have a little bit of speculation on this in the next portion of our talk, and I would bet we'll have a lot of questions then.

MR. ROBSON: Yes, and I don't want to stifle any questions because I want everybody to make sure we all understand some of this life history and science and management. Robert.

MR. GAITANIS: You spoke earlier that the infected and uninfected, that they shunned each other; is it that the infected one shunned both the uninfected or is it vice versa only?

MR. HUNT: The healthy lobsters shun, if you will, the infected lobsters.

MR. GAITANIS: But not vice versa?

MR. HUNT: And not vice versa. It was a combination from the observation in the field and the laboratory experiments that actually tested it. The infected lobsters, we actually had observations – this is the anecdotal side – when an infected lobster would move into a den in the lab with a healthy lobster, the healthy lobster would leave and go to the other end of the tank type of a thing.

MR. GAITANIS: Given that, do we have any idea or estimate of what percentage of loss we have because of the disease to the fishery, and are we aware of any practices that we as humans and fishermen do that either could reduce the effect of the virus or do we enhance the effect of the virus from some of the practices that we do?

MR. HUNT: We will be talking about some of that in the very next talk.

MR. ROBSON: I want to go ahead and try to move into that next – yes, Jim.

MR. ATACK: The only question I had was post larval collectors. Are you planning on putting any up around North Carolina and South Carolina and Northern Florida; and do you think would it be helpful with determining recruitment from the Keys or parts of Florida?

MR. HUNT: I don't know what it would do in terms of recruitment to the Keys. It is something that we could certainly do, but you have to have someone that can figure out where they should go and pull them on Day 6, 7 or 8 of every single lunar month for the next 20 years. I think that is what we're looking at.

The staff of our laboratory has out of our state funds made this one of our major commitments to create a long-term data base. If it is for that purpose, you need that. On the other hand, if it is part of a coordinated study – and we are talking about trying to do a coordinated study – then they probably would be useful even for a short term. I know you're interested, Jim, so we'll keep in touch on that.

MR. ROBSON: John, why don't you and Bill go ahead and proceed into the next section of the discussion, and we will again have opportunity for questions.

MR. HUNT: Okay, I'll be giving this portion of it as well. Bill is going to be giving the allocation portion of it. We're going to be talking fishery landings now, but we're going to be talking about them in light of the origin of Florida's lobster stock and the virus, and we're going to be presenting our viewpoints on what is most important and from purely a John Hunt and Bill Sharp personal scientific opinion.

This is one of those things I guess when you put the disclaimer out, we don't know if our agency agrees with us or not, but I will have to ask Mark that question. Once again, it has been a long time since this group has been here, and especially with the council members you haven't been thinking about this, so we're going to do a rough overview of a broad-based overview of kind of how this fishery works. For many of you this will be old hat.

But, at any rate, the commercial spiny lobster fishery has three mechanisms of harvesting lobsters; traps, diving and bully netting. Bully netting is a time-honored tradition. It is really a very small portion of the overall fishery. In the Florida Keys using traps is the primary method of harvesting lobsters, but there is also a significant diving component there.

Once you get north of Dade County, by far most of the lobsters are caught by commercial divers. All the landings are reported to Florida's Trip Ticket Program; and to the extent that information is accurate it has been recorded for an extended time period and produces a very good, useful, long-term data base.

Ninety percent of the landings of this fishery occur or approximately 90 percent of the landings from the commercial fishery occur in the Florida Keys themselves. What we're not going to talk about are the details of Florida's management system, which is an input control system through the trap certificate program. There are a large number of details there. I'll just put in a broad overview.

At the point that the certificate program began, there were a whole wide range of estimates for the actual number of traps out there, but between the certificate program and the Lobster Appeals Board that we ran at that point in time, we issued 825,000 certificates, all told. Each certificate corresponds to the permission to fish one trap. That doesn't mean that all those certificates had a trap in the water necessarily. Today, through a very long and detailed process that we won't need to talk about attempting to reduce effort in the fishery, there are now 480,000, approximately 470,000 certificates in the fishery, and that is where we are in that program.

In Florida's recreational spiny lobster fishery you're required to have a license. You're required first to have a regular saltwater fishing license, and you're required to have a separate crawfish stamp in order to fish for lobsters. The state of Florida also has a variety of five-year licenses and other kinds of licenses that have their crawfish stamp in it.

Recreational lobster fishers are not allowed to use traps, so they either dive them up or bully net. Bully netting is very popular early in the season amongst the recreational folks, especially

amongst local folks in the Florida Keys that will go out in the evening and do that for fun. There is a two-day sport dive season for the recreational sector, which is the last Wednesday and Thursday in July. It has been around for quite a long time.

Then the regular season opens back up concurrent with the commercial season, and so the regular lobster season is August 6-March 31. We have been estimating recreational landings using mail surveys of the recreational lobster fishers. Bill has been the primary person that has developed and been responsible for this on and off during the years.

Recently we have shifted to an e-mail and internet-based survey while having done a couple of years of doing both to make sure that we were not creating some dramatic difference in the landings simply related to the method of surveying, and the short answer to that question is that we're not creating any new biases.

Our surveys are focused during the early part of the recreational season. They don't include the entire fishing season, but they do include the bulk of time when most folks fish recreationally in the Florida Keys. Two things happen; lobsters become a lot less abundant and Labor Day happens, and Labor Day is a special holiday after which school starts, et cetera, and people's vacation patterns change.

We working on that whole longer season but it is a very difficult proposition because what happens with people – and we all know this – you know, I'm getting close to 60 now and for me every day is a brand new de novo day, and I forget what I did yesterday, people forget what they did. If you ask them a question in January and say did you fish for lobsters in September, they have no clue.

We haven't figured out how to effectively do the full-season efforts yet, but we think this is a good proxy for the recreational harvest. Those are the ways people fish and how they work. This figure right here is the total spiny lobster landings from 1993-2009. We stop in 1993 because that is when the certificate program began.

That is also when data in the trip ticket program started getting better with fewer unknowns, meaning an unknown harvest method, and so for our purposes we stop in 1993. We won't go back through history anymore. We don't think it is particularly relevant to the management issues of today.

A couple of technical points; this red diamond right here in 2004-2005 reflects the big hurricane year in Florida where Hurricane Dennis came through, Hurricane Charlie came through, Frances, Jean, et cetera, and what it really did – it didn't do so much damage to the Florida Keys, per se, or our fishery, per se, in Florida, but it had the impact of us not being able to survey the recreational fishers because they weren't responding or they didn't get our mail, so that number does not reflect the recreational harvest.

As you will see in Bill's talk, we don't try to do allocations for that year either. 2009-2010 is that red circle is just the fact that in the commercial arena there is still incomplete data, but it's getting close. What you see in this figure -- and the obvious that I'm sure all of you have seen –

is that during 1990s total landings, recreational and commercial combined, were quite high, and in fact – actually, it doesn't have it – the commercial landings from 1993 to the year 2000 averaged about 6.7 million pounds, and the commercial landings from 2001 through 2009 have averaged 4 million pounds.

There was essentially this. We had harvests like this and it went up and down and now we have harvests like this, landings like this, and it goes up and down. It dropped and it has been flat at both ends. The other important thing to note here is that the recreational harvest has followed essentially and almost exactly the same trend. A good year in the commercial fishery – and I'm going to turn it back around – a good year in the recreational fishery, which is all occurring at the early part of the season, meant a good year in the commercial fishery and vice versa.

The fact that harvest levels have dropped, it is not related to changes in fishery management or changes in competition between the different sectors, and so we can kind of rule that out in our minds right away. The question becomes why, and it is not that easy of a question to answer the question why when you have population that is spread across the entire Caribbean, et cetera.

At the time we did our last stock assessment – and I know that there is a stock assessment coming up – it was done in 2005, we had very little data on this new trend. The update assessment that is going on right now will have a longer time series of low harvest, so we will see what comes out.

DR. CRABTREE: Is the extent of this low landings' period long enough now that there seems to be just a fundamental shift in the overall productivity of the stock? Is this a regime shift into a lower productivity period?

MR. HUNT: I think so. That is my personal opinion that it is a regime shift to lower harvest.

DR. CRABTREE: So when the assessment estimates MSY or develops whatever yields correspond to the proxy that is selected, it should be based on this lower productivity period?

MR. HUNT: You would have to talk to Bob about that.

MR. ROBSON: John, we have a couple of more questions while you're on this subject.

MR. PERRET: John, if you put one more line on that graph, the total landings in the Caribbean Fishery, would it follow that trend?

MR. HUNT: Not entirely, and we have that figure coming up.

MR. TEEHAN: Much as I hate to say it, Corky asked my question.

MR. GEIGER: It would help me follow if I knew this, and Bill perhaps is the guy to answer that question; you mentioned earlier that your recreational data is collected during the short season plus the first month of the open season. Does it carry on or are the landings that were received

and we're talking about here reflective of an entire recreational period or just the beginning of the seasons, as you referenced?

MR. HUNT: The red line on this graph reflects our recreational mail surveys, so it is the sum of the two-day sport dive season and August 6th through Labor Day of every fishing season. It does not reflect anything after that. We have made the assumption that what happens after that is consistent year to year to year, and effort is very low or it drops off, but we make the assumption – and it is implicit in everything we say – is that whatever happens in that first month time period would be reflected later on in the season.

Our ability to actually survey that, because there is no recreational trip ticket program, is limited, because you start dealing with, as I said, memory, bias and all over these kind of survey things that make it so that we're working to try to figure that out, but we are not comfortable with anything that we produced so far and no one will ever see it except for inside my laboratory.

MR. GEIGER: Thank you, and would you characterize this as a survey and not a census, so not every recreational person is part of the census or the survey?

MR. HUNT: This is a survey. This is like the Gallup Poll. The Gallup Poll predicts presidential candidates hours beforehand. It is a survey. It has statistical rigor, high statistical rigor; and if you want all the details, we've written some stuff up, and Bill can tell you every detail of the rigor that we use and how we use it to actually estimate landings. We have a whole variety of questions that lead to that. We do have people that tell us that they catch more than the legal limit. We have a lot of information. We've worked on this and we're very comfortable with these numbers.

MR. SANSOM: Bill, you have confused me a little bit with some of your answers relative to the recreational. I know what yellow is; yellow is trip ticket landings. Is red the numbers you obtained from your survey and then projected what the landings would be in total for the recreational sector or does the red reflect what the people you talked to or e-mailed told you they caught, and that number only reflects that portion of the recreational landings? It is kind of like you said a minute ago, this was like a Gallup Poll. Well, they talk to real people and then they project.

MR. SHARP: The short answer is, yes, we project. What we have is a sub-sample of recreational license holders and then we project to the full population in the model.

MR. SANSOM: Okay, so this doesn't just reflect through a certain period time that you contact people or do the survey. This is a full-year projection?

MR. SHARP: No, it is not. It only projects the landings of that particular period of time; the two-day season and the first month of the regular season, but we take the catch estimates we get from the sub-sample we take of the full population and expand it to that full population for that time period.

MR. SANSOM: Okay, we should read this, though, the red number reflects the recreational landings during a certain period of time during these years and not the full year's landings?

MR. SHARP: Correct.

MR. HUNT: So when we get to allocations, their actual harvest is higher. We don't know exactly how much higher, but we assume on a year-to-year basis that percentage higher business is going to be about the same given that recreational effort drops off a lot faster than commercial effort.

MR. SANSOM: I understand, but in reading this graph the yellow is what you think the commercial fishermen actually caught based on trip ticket landings. The red is what your survey people caught. Then the total number is somewhat higher.

MR. HUNT: No, the red is what the survey people caught and then using that information estimating what the full population of recreational fishers caught from the two-day sport dive season through Labor Day.

MR. SANSOM: Right, but it is not the full year's landings like the yellow number is?

MR. HUNT: No, it is not.

MR. TEEHAN: Just real quick, John or Bill – I think I know the answer to this question – does the recreational survey discern whether these fish are caught in federal or state waters? There isn't an area caught category?

MR. HUNT: It does not.

MS. MERRITT: Two questions; earlier on you mentioned the reduction in the number of certificates given for trapping. Over what period of time did that number drop to nearly – wasn't it about almost half in the drop?

MR. HUNT: Well, we issued 825,000 certificates in toto and we're now down to about 470,000 certificates, so whatever that calculation is, it is.

MS. MERRITT: I'm looking at the time period.

MR. HUNT: Well, it started in 1993 and it is still going on in a very small way, but the bulk of the reductions occurred in the nineties. Is that correct, guys? I'm trying to just use my memory here.

MR. SANSOM: Mr. Chairman, let me see if I can add a little bit, but it's important to know that 875,000 initial certificates –

MR. HUNT: 825,000, Jerry.

MR. SANSOM: Including the appeals?

MR. HUNT: Including the appeals.

MR. SANSOM: Okay, either way –

MR. HUNT: I lived it.

MR. SANSOM: I understand. The 825,000 initial allocation, because first it was 750 and then we added 75,000 through the appeal, it is important to note that in and of itself was a reduction from the earlier estimates of what was in the fishery before the certificate program, which a number of people were involved in – there were some surveys – somewhere over a million is what appeared to be in the fishery in the late eighties.

When we developed this program in the early nineties, the first actual allocation of certificates was this 825,000 certificates. Before that there was no limit on the number of traps an individual could fish, and the various estimates, whether you counted them in the backyards, whether NMFS estimated based on conversations, was somewhere over a million; and so over roughly about a 12-year period, because there has not been reduction in the last five years, was about from a million down to a little in excess of half a million. So without trying to get more precise than that, because I don't think it does any good to get more precise, we're roughly fishing half the gear than we did when it was unlimited.

MS. MERRITT: And the other question has to do with the correlation with weather events, the ocean events of any kind. You did mention the one around '04 I think is what you said. Was there any other correlation? Particularly what struck me is with some of these big dips, they appear to be or at least from my perspective about a year later than when we've had some pretty major hurricane seasons.

MR. HUNT: Well, let's look at the details. First of all, I'm going to answer one question and I'm going to do it as bluntly as I possibly can. Is the decline in landings related to the fact that there are fewer traps now than there were in the past? The answer to that is unequivocally no. I'll say it again; unequivocally no. Why do I know that? I know that because the recreational landings have experienced exactly the same declines.

If fewer traps were the cause, then the recreational landings – that would say the population of lobsters is still high and the trappers are catching fewer lobsters, but the fact that the beginning of the season landings in the recreational season are percentage-wise essentially the same downturn very clearly tells us that the change in landings is due to the change in the spiny lobster population in the Florida Keys and not any aspect of lower numbers of traps or any other kind of management action.. I want to be real on that one for everybody in the room.

Now, within these later-year landings, the two big stories, I guess if you want to say that, would be the year 2001-2002 and the years 2005-2006; 2001-2002 was just a shockingly low year. There was nothing special about it. I don't have any good reasons, but 2005-2006 would have been higher especially in the commercial sector because that was the year of Hurricane Wilma.

Hurricane Wilma, from a Florida Keys perspective, was extremely damaging to the fishery during the month of October because it came right through some of the prime fishing areas and had a large impact on the lobster traps in those areas. It also, of course, had a large impact on land for us from the storm surge so that diverted a lot of people's energy. So that 2005-2006 very low drop, I don't know, would be higher, but it wouldn't be high in the sense of the nineties. It would have been maybe another million pounds or something. Can we go on?

MR. TEEHAN: One real quick comment; to Rita's point about the trap reduction program, it is the agency – and the agency being the FWC – it is the intent of the agency to stop the reduction at 400,000 traps so we're almost there.

DR. CRABTREE: Bill, could you tell us what the basis for the choice of 400,000 traps is?

MR. TEEHAN: The short answer is no. It was a decision by the executive director.

MR. STAFFORD: Yes, just one personal comment I would like to make here that I noticed on the graph there that three years after our two major hurricane events in '88 and '89 with Hurricane George, three years later we had a really bad year; the same thing after Hurricane Wilma, 05-'06, there was another low year. Is that reflecting possibly a loss of juveniles that got swept away in Florida Bay, something like that? I mean, three years after a storm event, it seems like the pits.

MR. HUNT: These might be causal factors within the cycles of either high or low. I wouldn't dispute that, but I don't know the answer to that question. I would say it is not related to the actual recruitment of post larvae because the high pulses of recruitment of post larvae in the Florida Keys tend to be in the spring.

MR. STAFFORD: Yes, I know; I would think it was more like the damage to the already recruited small larvae.

MR. HUNT: I wouldn't be surprised on that, but that is within that cycle or within that cycle. It is not related to going from here to here.

MR. STAFFORD: Except George could have been the beginning of it or something. Three years after George we ended up with a significant loss.

MR. HUNT: Yes, but George didn't kind of decimate the entire juvenile habitat of the Florida Keys, so I do not buy into the hurricanes or the changes in the frequency of hurricanes as being the causal factors for the reduction of the lobster population in the Florida Keys. I will tell you what I do buy into once we get there.

MR. SIMPSON: Periods covered by trip tickets, any major changes during this timeframe on trip tickets, for example, better coverage, administrative changes to trip tickets, anything along those lines?

MR. HUNT: No.

MR. SANSOM: Roy, I would like to try to answer your question. That 400,000 was determined; it wasn't random. The law that authorized and directed the trap certificate program directs the agency to reduce the number of traps to the lowest level that can still generate the harvest. Over a period of time and looking at historical levels of traps and historical levels of landings, the industry and the agency came to an agreement that 400,000 was probably it and was the target that we should try to go to and then operate at that level and see how it worked.

That is how we got to that number. It was agreed to over ten years ago that should be the target and so the agency's rulemaking as well as the legislative directive on the program was to get to some minimal level that still provided enough traps in the waters to generate the optimal amount of landings. That is how we got to that 400,000 level baseline; that when we reached that, the reduction stops.

DR. CRABTREE: Well, I think that would be useful if we could get the analysis that shows that for the council to look at. I think that would be helpful.

MR. SANSOM: Yes, this was done back in the old marine fisheries commission days as well as in some of the early days of the new FWC and looking at that rule analysis and discussion – I mean, I can tell you it wasn't as complicated as your stock assessments are these days or the other things that we do. It was more look at the numbers, look at the systems, talk to the people and come to an agreement as to where you think you ought to go with it.

MR. GAITANIS: Revisiting the number of traps that actually have been reduced or were in the fishery, in the late eighties when the fishery realized that it was going to be reduced some way or another, a limited entry or a reduction in traps or something, many of the fishermen felt that it would be based on the number of traps that they claimed to fish.

On your application for your commercial permit, you put on that how many traps you fished, either stone crab, lobster, blue crab, a lot of information. In the late eighties, '86 or '87, the number of traps claimed in the fishery spiked from less than 600,000 to above 900,000. That was based simply on thinking that in the future your ability to fish would be based on how many traps you claimed to have.

The actual number of traps in the water that were actually fished were probably less than that when we started out, because in '92 is when the actual number of traps for certificates were issued, but five or six years before that the industry knew it was coming and they were hedging their bets.

MR. ROBSON: Let's get on with the discussion for the rest of this background information.

MR. HUNT: Before I move on, I want to say that inside the Division of Marine Fisheries Management Section of the FWC Website there is a section on the various advisory boards. For the Lobster Advisory Board there is a whole suite of staff-written documents that were provided to the Spiny Lobster Advisory Board that go through in considerable detail the fishery history and different aspects that was presented to that board. I would encourage you, if you want to

explore this area, to go to that site and see for yourselves. Bill and I will figure out what that link is and give it later on today.

Okay, we have been hinting around causes and talking, as a group here, about a variety of reasons why people might think that there would be decreases in Florida spiny lobster landings. The one answer I gave to you is that we are convinced that it is a change in the level of recruitment to Florida's spiny lobster fishery. Now by recruitment I mean there are fewer three-inch carapace length lobsters now than there were in the nineties.

The question becomes why, and to a certain extent, as you talk about ACLs and such, the reason why may be important or it may not be important, but we felt that it was important to at least offer our views. The two options that you really fall back on are the two that I spoke about in the life history section; that being the virus or regional overfishing.

I'm going to go through both of them and then at the end we're going to talk about our views as to which one is more likely to be more important in the Florida Keys. The virus prevalence also impacts the act of fishing. Don did do a study by placing traps – having a small study in a variety of locations where they placed healthy lobsters in traps and they placed virus lobsters in traps. Hang on, I have to remember this slide.

Actually, this is not that slide; the slide is the next slide; I got ahead of myself. In surveys they found using PCR, in this case a much more sensitive piece of information than the visual information, they were able to determine that there are lobsters that are legal-sized lobsters in traps – just using traps as a collecting gear here – that larger lobsters do have a prevalence of this virus.

The difference is we find no late-stage virus lobsters that are large, and so there are some questions here. We sense that there is something – there are either some lobsters that kind of become carriers, maybe, or lobsters that have fought it off, that we don't understand why, or perhaps they get infected and simply because of their size the virus never really takes over.

The prevalence of this virus in the fishery itself, really meaning larger lobsters, is about 11 percent. Interestingly, we found – they found, I should say. This was not any of the commission's work – they found that traps baited with healthy lobsters – and what they did is they took the lobster actually put it inside a cage so they could absolutely guarantee that the exact same lobster was in there as the attractant lobster during the time period of the study, whether it was healthy or infected.

But those traps that were baited with diseased lobsters on average during their seven-day soak study, highly refined study, tended to catch one lobster and the ones with healthy lobsters tended to catch a little bit more than two lobsters. Now, there is no way for a fisherman to know which lobster is diseased because it is not something that is visual, so it's possible that the interplay between the disease and trapping could be having part of an effect on the overall harvest here just by reducing your efficiency, if you will, of being able to capture lobsters.

Now, we have the whole question of regional overfishing. Corky, you asked this question as questions were coming up. This next information and figures are going to come from a series of work done by Nelson Ehrhardt. Nelson has had a MARFIN grant where he did some modeling efforts, and he has also done a lot of effort in the Caribbean.

He has been producing these figures that we have stolen from him and we will comment on them as we go along, but right now I'm going to present them just as is. Caribbean-wide you can see that there has been a landings' decrease since the mid-1990s, so it is a little different than what we experienced.

What we have experienced was very high landings in the 1990s and then essentially a phase shift, if you will a drop to a new level. Now, they are using annual landings here, calendar year annual landings. We're using fishing season landings, but that wouldn't be the cause for the difference. There has been a long-term trend of lower landings in the Caribbean.

But, again, it is different from the details of what we have experienced. Nelson has taken our puerulus information, our post-larval collector information and used our data base to make the case for regional overfishing, so I'm going to describe what he has done, and I'm going to do it without comment for now.

What he has done is he has taken our post-larval collector data and put it through whatever it is he does, and we're trying to still figure that out. I have my most quantitative person working on that, Rod Bertelsen. If you look at this with the open circles, Nelson is saying that the number of post-larval recruits coming to our collectors, coming to the Florida Keys, using that as an index, has been steadily going down with a bunch of peaks and valleys.

That is the important information on this. He has also done a correlation with a female mature stock in the Florida Keys, which is just a spawning stock abundance for three-year-old lobsters and above. It is right now being published in Fisheries Oceanography, and it is based upon his MARFIN grant work.

Nelson uses this and he provided a lot more information in a recent meeting where some of us were there to make the case for regional overfishing and recruitment-driven fisheries. However, when Bob Muller takes our same data and puts it into the indices that we are using in the SEDAR, you see that there is no decline, and in fact they are essentially flat.

When we take the same data sets, we have an index that says recruitment has essentially stayed the same in the Florida Keys; at the level, Corky, of those post larvae arriving in the Florida Keys. We thought about just showing our data, but I think it's important for you to see Nelson's stuff because it is out there and you're going to hear more about it. Our conclusion is that settlement has been variable but without trend.

Now, Rod Bertelsen has been working hard to try to recreate Nelson's index. I think we're coming to the conclusion that he has misunderstood some of our variables and probably used it incorrectly. We're trying to research that and clearly we're going to have to figure this all out, but that is kind of where we are. What we think is that the actual index is a flat trend.

MR. PERRET: John, my old eyes can't see, but what stands out, I guess, is an exceptional year when the total was over 10 million pounds, and that is 1999-2000. Where is 1999-2000 on that graph?

MR. HUNT: 1999-2000 is right there, but the recruitment for 1999-2000 would have been prior to that – would have been 1998-1999, which would have been this peak. We're not talking about growth today, but some of our recent growth rates suggest that growth rates have been a little bit faster than we thought in the past. This fishery fishes more one year olds than we thought in the past, so there is an anecdotal correlation there, Corky, but I'm not going to take it any further.

DR. CRABTREE: John, looking at the upper figure there, at least for Long Key it does look to me like there is a decline since about 2000; and except for that one high point, it looks to me like there is a decline in the Big Pine Key Index, too. I mean I'm just eyeballing it but –

MR. HUNT: You're just eyeballing it, and maybe there is a slight decline during that time period, but it's not a huge decline. Secondly, if we compare that to this, he has a decline starting back in the eighties. We're pretty convinced that he has used our data in a way that we don't agree with. We don't know, but we're all going to get together and hash this out at some point because it is an important distinction, and essentially it is based upon – there is no doubt that landings – well, we'll talk about conclusions, but there is no doubt that landings are down Caribbean-wide.

All I can say is that Bob's quote is settlement is variable but without trend, and the bottom figure here is the combination of the two locations. Nelson only used the Big Pine Key location, actually, for that figure, and these are some details that may be important. Go on, Mark.

MR. ROBSON: Go ahead, John.

MR. HUNT: If we look at a summary of Florida spiny lobster landings, fishery landings in the nineties were overall, recreational plus commercial, averaged about 9 million pounds; and since 2001 they have been about 5 million pounds, so there is your percent decline. One possible cause is the virus. The virus causes high mortality among small juvenile lobsters.

Infected lobsters suffer higher predation rates so there is the reason for higher mortality, and also the lobster trap catchability is affected by the presence of virus-infected lobsters in traps even though those lobsters are not likely to die at that size. Regional overfishing is the other possible cause and landings no doubt have declined in other areas of the Caribbean, so you would logically kind of conclude just from that that recruitment to other areas are likely to be down from that.

At the same time we had this conflict here in the Florida Keys Indices, and so we're saying that the trends in post-larval recruitment here need close evaluation, but we're pretty comfortable with what we've done. According to Rod, my comfort level has become higher recently. What do I conclude?

What I conclude and browbeat Bill into agreeing with me – not really – is that we believe that the virus is the greatest contributor to the decrease in spiny lobster landings here in Florida. What that means is that those post settlement processes probably not related to habitat but related to the virus itself is the biggest factor here, but we're left with speculation.

This is purely a John Hunt scientific opinion, and I speculate that either the virus mutated at about the time of its discovery and became more virulent; and that's how we discovered it because there were enough of them so we saw them or perhaps cumulative environmental changes in the Keys have reduced the lobster population's resistance to the virus.

We know of all the multitudinous different types of changes that have occurred in the Florida Keys, but we cannot entirely discount regional overfishing, and we will be looking into that more. I guess the take-home message here, though, is that regardless of cause the low landings period has now persisted a decade, so, Roy, this addresses your question. This appears to us – we have no evidence in any of our data where we would forward look to suggest that this trend will change, and so our best view is that this is a long-term change in the population size of recruited lobsters in the Florida Keys, and we see nothing that is going to suggest that it's going to bounce back anytime soon.

MR. ROBSON: Okay, we probably have several questions.

MR. HUNT: That completes this section and now we're ready for questions, Mark.

MR. ROBSON: Okay, good. Here is what we're going to do. We'll take some questions related to this very important information that he just presented and then we'll probably take a short break and resume the discussion.

MR. TEEHAN: John, the virus; you and I have talked about this over the years. I think you said earlier in your presentation when you focused on the virus that it has probably been a background presence for longer than we've been looking at this fishery. Why now is it suddenly possibly bubbling to the top of the list of contributors to a decline in the landings?

MR. HUNT: Well, I speculated that essentially in the last slide that the virus itself either mutated – and we know that viruses mutate like crazy. If we just look at our medical world, we now have MERSA, we have all these other viruses that have largely mutated as they have evolved through our medicines. There is certainly reason to expect that this kind of virus could potentially mutate and change virulence or something of that nature.

The fact that if it occurred in the late nineties, you can account for that essentially drop and it is that kind of singular drop and a leveling at a new kind of sea change, if you will, of landings that tells me that there was a dramatic event as opposed to a long-term trend of reducing recruitment, and so I come to that conclusion in part from that. Then it is just speculation at that point whether it was a mutation or simply the lobster population resistance became less because of environmental factors. I mean that's really what you're left with.

MR. ATACK: I wonder, when you're looking at the data, the effort in Key West is a certain amount of area has been fished. In the Caribbean, as time went by and you see your landings, has more area been fished as those landings went down? In other words, have they expanded their territory therefore taking more of the population?

You know, as their areas get fished out, then they go further and further in the Caribbean knocking down the total population; could that be a factor? The other is what about like average size of females? The smaller females would actually – you know, a lot less larva out per year per mating, and is there any data on that?

MR. HUNT: Okay, I'll answer your second first. There is a lot of information on the size of females and also the size of males and the relationship between the two in determining fecundity of females and fecundity of populations. There is no doubt, first of all, larger females spawn multiple times per season. We keep revising that number as we learn more, but suffice to say multiple and smaller females tend to spawn once, maybe twice, so there is no doubt there is a fecundity difference there.

I don't really know much about expansions to different areas in the Caribbean. I would expect that they're probably happening. It is kind of a combination of that and the fact that landings are down that we're saying that regional overfishing cannot be discounted, but again what we have experienced in the Florida Keys was essentially across one or two years the fishery went from being normal or a high normal to a new normal, which is very low, and it happened as an immediate event.

Given that we don't have in the spiny lobster population the same kind of strong spawner-recruit relationships at a relatively small scale that you have in other situations, and we have four or five different genetic populations, we have a goulash out there, we have multiple different sources, it is very hard for me to put in the standard fishery kind of population crashes that we talk about into the lobster population.

From what we're experiencing here, which did not happen until the year 2000 or so, but it has been happening over a longer, slower timeframe in the Caribbean, and so consequently every time I go through this thought process – and I'm trying to say it a slightly different way – I kind of end back up in my mind with the virus is – something changed with the virus. There is no doubt in our minds that the virus is part of the evolutionary history of *Panulirus argus*.

That behavior that we talked about suggests that. The fact that it is fairly widespread – I mean, in St. Croix we only have two individuals. That just happened because when we were working at Buck Island, we had already started the virus work here in Florida; and while we were diving that, someone said this looks like a virus lobster, we'll freeze it and take it home with us.

We don't know the extent of the population anywhere else except Mexico in Quintana Roo where the incidence of the virus is very similar to what it is in Florida. I come back to the virus. Every thought process I go through brings me back to the virus.

DR. CRABTREE: John, we appear to be as some lower productivity regime now than we have been in the past, and Jerry alluded to estimates that have been done to look at what the optimal number of traps would be. I know you all have done those kinds of things, but would that be affected by the productivity regime or is it independent of that?

MR. HUNT: You mean a decision on the number of traps?

DR. CRABTREE: Yes, I think there have been analyses done to look at how many traps are needed in order to maintain harvest levels. At least I think that is what Jerry was talking about. If the productivity of the stock is down so the harvests are anticipated to be lower now; would that affect the number of traps? Would you need more traps in the water or would you need fewer traps or is it independent?

MR. HUNT: I have no idea what the answer to that question is, Roy. Since we've hit the point of settling on the 400,000 trap figure, it has not been anything that we have continued to do analyses on, and so it is a good question to take a look at that again over time, but I'm not sure that is something needed immediately for what the council process is going to be. You can tell me if I'm wrong, but I'm not sure that's a critical information need for the council process. I don't have the sense that at this level of traps – I mean I used the term “unequivocally no” earlier, that I don't think the number of traps is related to this. It is a change in the population; and if the number of traps is part of it, it is a little teeny tiny proportion.

DR. CRABTREE: No, it is just that the council is going to have to deal with other concerns like Acropora and corals and those are directly related to the numbers of traps, and so I think in the sense of this amendment we going to have to deal with some of those kinds of things. It's obvious there has been a very dramatic change in the fishery, but what is not at all clear to me is whether that would or would not change what the views are on the number of traps that are out there, because it seems that the 400,000, however that number came about, it came about before we realized that the productivity had fallen off, and so I think it may be something worth looking at.

MR. HUNT: Okay, and let me give you just a little bit of information that was not part of today's plan. My laboratory, Tom Matthews in particular, is working in very close partnership with the Florida Keys Commercial Fishermen's Association with both a core group, some of the folks are here, and with the board to try to develop traps that move less, and we have had some success on that.

Some of the work done on that was funded by NOAA Protected Species folks; in fact, the Acropora folks. We have had some success on that. We're not ready to report final results, but we're going to be continuing to work on that; and if we lucky, we might be able to come to the management agencies and say we have some traps that move a little less and they still catch just fine, and so that also can be part of that solution or help that issue.

DR. CRABTREE: Yes, I agree and that would be a good thing if we had something like that.

MR. LESSARD: John, in 1995 and 1996, that is when we had that cyanobacteria bloom in the eastern Gulf and Florida Bay. For those of you that aren't aware, it killed off every single sponge in Florida Bay except for one species that is about the size of a tennis ball. It also killed them all the way down to Bullard Bank six miles north of Marathon.

This is the main habitat for a lot of these juvenile lobster, the size that gets this Pav-1 virus. Part of what I'm wondering is with the loss of habitat it may have forced more of these juveniles to become closer together and become infected to increase the amount of this virus. Since they discovered the virus in 1998, maybe this is part of the main transport for this virus into our stock. My question to you is do you think that change in habitat is also part of what has had the major affect on our decline in our fisheries?

MR. HUNT: I had not thought about it from the standpoint of perhaps increasing some interaction between lobsters, so that could certainly be the case. The 1992 algal bloom from a pure habitat perspective, a pure shelter perspective for juvenile lobsters, it was in a much smaller proportion of the overall nursery area than a lot of people think.

I'm not sure that – I can't completely discount that, but I don't know that it had a huge impact; and if it did, in the years following that we had some of the highest landing years we have ever had. Essentially what we're doing at that point in time is we're all taking different pieces of information and trying to put together a story that I'm not sure that we can really put together, and so we're left with kind of the cumulative change in the Florida Keys Region, and parsing which one is most important I think is never going to be possible, Karl, and everybody can speculate their own opinions.

MR. LESSARD: I love speculation, John.

MR. HUNT: I never knew that.

MR. O'BRYAN: Three quick questions, John; one, has anybody looked at comparing the virus – genetically comparing it to the virus here in Florida compared to the one found off Mexico or anywhere else where our lobster could be recruiting from?

MR. HUNT: Mark and Don have an NSF proposal in the works to do just that right now.

MR. O'BRYAN: Okay, my next question is I know there are thousands of these illegal habitats strewn about in the Keys. Have you tried to factor in how many pounds are taken illegally that would affect the landing data?

MR. HUNT: It is our impression at least for a while that most of those landings were probably reported; so whether they were illegal or not, they were reported. That may be less so now. It is hard to know, but the bottom line is you have to use the trip ticket data base as your source of information and everything else is just kind of speculation. Where the use of casitas has changed things, is it has changed – especially changed who is getting the lobsters in the region where the casitas are heavily fished.

MR. O'BRYAN: Okay, the third question; have you looked at any biological factors and in particular the restriction on harvesting of Goliath grouper? I don't have it here but I have seen a chart where it tracked the landings of Goliath grouper. As they increased over time, the landings of lobster increased; and then when the take ban went effect, the landings of Goliath grouper drooped and the landings of lobster dropped as well.

Just anecdotally, I know when I dive off of Vero, if I find a ledge with a Goliath on it, there is generally no lobster there. I don't know if he ate him or scared him off, but they seem to displace them in areas they would normally be. Have you factored that in at all?

MR. HUNT: Peter, I get a call every single day – well, not anymore because all I get are oil calls, but I used to get a call every single day with exactly the same thing you're saying. I have a stock response, but I sure would love it if the National Marine Fisheries Service made a high priority of the interaction between spiny lobster and Goliath grouper in their MARFIN Program, and I would happily submit a proposal to that topic.

Once the National Marine Fisheries Service makes that as a sufficiently high priority, I think there are a suite of researches in the Florida Keys that could do that research very effectively. I won't name any names, but one is wearing a red shirt and the other one is wearing a green shirt. With that being said, this is a commonly held view among people that are fishing.

When I walk my dog in the morning, I have neighbors sometimes, if they've been out fishing in the ledges north of the Lower Keys, it takes my normal 20-minute walk and it is an hour and a half walk and I show up late for work and try to claim it for time worked. I'm kind of joking about this kind of stuff at a certain level, because we honestly don't know all the answers on those interactions.

Here is what I will say on just this interaction alone and leave all the other Goliath grouper issues alone. Back in the day, there were a gazillion Goliath groupers in the Florida Keys, and there was a very good harvest in the Florida Keys. How to tease apart what kind of a natural predatory relationship or maybe just a displacement relationship has on change in what people catch is not an easy question.

I take all of that and I take it – I think it is a very interesting science that could be done. I think it could be important science that could be done, but I also still circle back around even with that argument and you can't explain the kind of dramatic change that has occurred in the landings that I stuck back up here on a predator/prey relationship because they don't usually cause those kinds of dramatic changes in a big, huge area like the Florida Keys.

They might when you have small certain kinds of enclosed populations that don't have all the other dynamics, so I'll just kind of leave it at that. I'm not going to totally discount that, but I would tend to think it is not the single most important factor, but I sure would love to do some work on it, and I know I hear every single day in the Florida Keys as a huge overarching reason.

MR. ROBSON: Okay, we need to kind of keep moving along with some of these questions.

MR. STAFFORD: Let me see if I've got this right. You're saying that the post-larval recruitment has stayed fairly constant throughout the nineties and 2000s. We're seeing big increases in landings through the nineties in the Caribbean and a drop-off as we have experienced.

You're saying that because the level in recruitment stayed the same, that is why you want to put the onus on the virus rather than regional overfishing, and that is what Nelson Ehrhardt is saying he is seeing a drop-off in the landings of – I mean, the recruitment tied in with the drop-off in the Caribbean landings. That is his idea, but you're saying it stayed the same; therefore, it must be the other factor of the virus or other environmental concerns, global warming, even, right, or whatever you could add into the mix?

MR. HUNT: I would say that is a pretty good summary, and that we think that his index doesn't reflect the actual data, and we need to work on that.

MR. STAFFORD: Yes, I think we need to get those –

MR. HUNT: But I didn't really know that much about it until just the other day at that workshop, although I knew that he has been talking about regional overfishing for a long time.

MR. STAFFORD: Yes, it seems like we need to work on those figures, for sure.

MR. HUNT: We've gotten hold of his MARFIN Report, trying to look at the details of how he has calculated things so that we can educate ourselves before we have some kind of a group meeting or something.

MR. STAFFORD: We need some quants in the organization, right?

MR. HUNT: What?

MR. STAFFORD: We need some more quants in the organization to get the models right, right?

MR. HUNT: Well, that is why I have Rod Bertelsen who is my statistics geek, and, of course, Bob Muller and Nelson himself. I think those are going to be the people that have to work this out and I'll facilitate because it will be fun, real fun.

MR. KELLY: My question was already asked in part here, but, John, I'm very concerned about as to whether there is any relevance in these enormous poaching operations and the law enforcement action that was taken recently and over the past couple of years in the Florida Keys where we've seen literally thousands of thousands of lobster that have been going into a black market and knowing that there is roughly 50,000 casitas out in Florida Bay holding I believe on average about 46 lobster per casita; isn't there enormous potential and a great deal of evidence that would substantiate a lot of lobster being taken or harvested illegally and could contribute a major portion of that decline?

MR. HUNT: I'll let you make your assertions, and I'm not going to comment or respond to those assertions, but here is what I will say. If you look at this figure very carefully, as we have, the decline in the commercial harvest has been roughly the same as the decline in the recreational harvest during those time periods.

Consequently, that tells me that the change in harvest or the change in landings is related to a change in the population of *Panulires argus* recruiting at three inches carapace length in the Florida Keys, and so the ratios are staying the same. If those ratios are staying the same, then any kind of poaching non-reporting from any source, whether it is commercial or recreational, is on an overall broad scheme a relatively minor part for the change in these landings. That is something I'm very comfortable saying. Once you go past that into all the social and other issues, I have to stop and kind of draw the line. That is what these figures and these data tell me very clearly.

MR. KELLY: All right, and I can understand that if there were illegally harvested lobsters, it would impact both commercial and recreational harvest as well, and so I understand that. I'm just wondering when we're talking numbers – for example, a recent law enforcement operation netted 6,000 lobster tails. Are these numbers that in your scientific opinion, because they're harvested throughout the season; are they enough to have a significant impact on the lobster population if these were continuing criminal enterprises?

MR. HUNT: You're asking me a question that I'm really not willing to answer, Bill. I mean, you're just getting into a whole region of this that is beyond the science that we do. You're getting into all the social stuff. We don't know all the answers there, so you're just asking a question, Bill, that is just beyond my job duties to answer and beyond my ability to answer because we're now in a mode of kind of speculating a whole lot about a large cumulative effect that we really don't have any information on. I think I have to only answer it the same way by talking about the changes in landings over time related to the population.

MR. ROBSON: Let's leave that answer at that and I think what you're asking is a discussion and a debate that the members of the AP do need to have later in the day in terms of what is the cause of this change in landings. The question kind of goes beyond what his data is able to tell us.

MR. KELLY: Well, if I simplified it, it was in John's opinion – I mean, this harvest of lobster that is being taken illegally in a yes or no kind of format; do you think that is enough to impact this decline?

MR. PERRET: Mark, could I ask Bill a question?

MR. ROBSON: Well, hold on just a second. I think, John, you said you're kind of uncomfortable trying to answer that question, is that correct, with the information you have? A key to the answer to this question is whether or not that illegal activity is somehow different in this later period of time than it has been historically and we don't have the answer to that either.

MR. HUNT: I think the other key to it is whether unreporting – and let's talk about unreporting – is dramatically different today than it was in the nineties. My answer to that question, based upon our data and our data alone, not talking about law enforcement actions and not talking about anything else, special enforcement issues, but my answer is based upon the ratios between the recreational and commercial sector and the fact that they both declined and the fact that you're going to see in Bill's talk coming up in a few minutes, very small shifts in allocations over time that unreported landings are not dramatically different today in 2010 than they were during the 1990s. I'm answering your question using our data as opposed to using enforcement actions, which is outside of our purview in the research business.

MR. ROBSON: Corky, you had a question to this point?

MR. PERRET: I think that's the second time this morning we've heard this number of 50,000 illegal casitas out there. Where did the 50,000 come from? Who made that study?

MR. LESSARD: I can answer that. That came out at a Florida Keys National Marine Sanctuary meeting from their law enforcement agent down in the Keys.

MR. PERRET: So I assume the Keys enforcement personnel did some kind of transect study, got a number, and then extrapolated; is that how it was done?

MR. LESSARD: Well, from the one individual they arrested with 1,500 illegal tails the day before the season, he had over 5,000 things entered into his GPS on casitas. John's group has towed a side-scan sonar and so has NOAA towed a side-scan sonar out in that zone.

MR. HUNT: In fact, we have a grant from the National Marine Fisheries Service, a cooperative fisheries grant, on that topic where we are towing side-scan sonar. We can separate casitas from coral heads, from traps. We're pulling that side-scan sonar around. The Nancy Foster, I don't know, some NOAA ship is coming in that area soon doing side-scan sonar. We will have some overlap so we will have some ability to use that information to try to come up with a separate independent estimate based upon transect surveys to try to estimate the number of casitas out there. It is part of an ongoing project that is going to take a while. It is pretty far offshore, so we have limited times that we do stuff, but we're out there probably today doing that.

MR. IRWIN: John, I didn't see in your presentation when lobsters catch the virus; is it only from lobster to lobster; is it in the water column like an airborne virus would be?

MR. HUNT: It is in the water, but it has a very short life in the water – I don't remember that exact time – so it does take proximity. Touching probably does it, too, so it is a combination of that gregarious behavior in proximity.

MR. IRWIN: And one other question; isn't it true, I believe, in the early days of when we first learned about the virus and the studies on it, that they get it when they're very young; and by the time they get to – because I've seen you had catchability on traps as maybe one of the factors in declining landings. Isn't it true that the lobsters die; they get it young and they die before they really become a viable attractant size?

MR. HUNT: Well, those lobsters die, yes, but what is also true is that – and I showed that figure – 11 percent in the study that they did just catching lobsters at that larger size – and I did it all with traps with some of your colleagues, just fished and did the PCR, so they used the PCR, you know, which is a chemical molecular technique, and can detect the virus much earlier than we can detect it from the visual survey method.

So they used the PCR and found that 11 percent of those lobsters had been infected with the virus. The other thing that has been done, though, is that we've held those larger lobsters for extended time periods and they don't die. Yes, in the larger sizes and certainly the sizes that you would preferentially choose to use as attractants in your traps, ballpark, 10 percent, 11 percent of them are – I'll use the term right here – carriers

I don't if it is an exact right term, but they have the virus and you can't detect it visually, and so you're sticking that lobster in there and have no way – you know, there is nothing really you can do as a professional fisherman to change your fishing behavior to change that impact.

MR. SANSOM: A couple of questions and thanks for pulling this one back up. Do you all still believe that we, meaning the recreational and commercial fishermen, are basically harvesting all of the available legal-sized lobsters by the end of the season?

MR. HUNT: Well, all in a fishery sense because we know there are some that are left over, but, yes.

MR. SANSOM: I understand. That has sort of been an ongoing baseline for our belief that by the end of the season all of those that are accessible have been gotten?

MR. HUNT: Yes, and in fact the little bit of evidence that we have from it right now, which I felt was outside of the presentation here today so I don't have those figures, but we've been developing new techniques of aging using fat in the eyes called lipofuscin. It is a relative new procedure for crustaceans, still learning how good it is through all the ages, but I think it is pretty good for the younger lobsters and is used extensively in blue crabs.

It looks like in our fishery we have many more one year olds caught than we used to think. If you look at kind of a random grab from the fishery, if you will, and put a bar using lipofuscin and ignore size and put it to age, you have one year olds, two year olds and three year olds, so that confirms what you just said. I think we catch everything we can possibly catch.

MR. SANSOM: Okay, so having said that, then these landings here, these curves would tend to reflect availability and abundance in Florida in the habitat, so something around 2000 to 2002 changed the abundance of lobsters that can be harvested both for recreational and commercial fishermen. In my mind that kind of knocks out anything related to gear. It just reflects their being there and then folks subsequently reducing them to possession; is that kind of correct?

MR. HUNT: I think you've listened to what I've said very well and come to the same conclusion that I have.

MR. SANSOM: Okay, let's go down the road here a little bit to the one showing overall landings in the Caribbean. Starting in 1990 down to 2000 you see a beginning drop. I'm just having trouble understanding why that doesn't have something to do in a significant way with the reduced availability in Florida.

I just can't imagine that at some point in there, based on everything we've always talked about in management that at some point with that peak of harvest to some top level, the fishery expanded to all of the places in the Caribbean where you could get lobsters, and we tended to go from the easy-gets to hard-gets, and that top level reflected everything circling, okay, sort of like in Florida, in the year 1990 they circled up all the available lobsters they were able to harvest and located them and nailed them out; and from that point forward, it has had an impact.

I'm just having a little trouble figuring out how that is not a – at some point in that it probably got down to a minimum level or a critical of biomass to, you know, some kind of SPR in there that then started having an impact on larval availability out there and larval recruitment everywhere.

While there is no critical two-year dump like there is back on us, then I'm just having trouble how we go beyond the macro and somehow we want to focus on the virus as being the key factor that kicked it over. I mean to me I think we went 80 miles an hour beyond the obvious and we're looking for what is left out there. That's just my observations.

MR. HUNT: Well, that means you would agree with Nelson. As I said, we're not discounting regional overfishing, which would mean kind of a regional reduction and sufficient regional reduction in spawners out there across the Caribbean to reduce larval recruitment enough, and it would be the recruitment to the Florida Keys that would be the biggest factor causing the decline. That is what Nelson is essentially saying, and we're not totally discounting it.

I'm only saying that within our science we have a pretty dramatic disagreement in what has been happening in the recruitment trends here in the Florida Keys at the post-larval level on our collectors, and Nelson is showing something that happened a long time ago. If it started happening a long time ago and – I mean even if he is right, if it started happening a long time ago, why didn't it get reflected in reduced harvest during the years of the 1990s if it was the pre-settlement processes affecting the change in our recruits to the fishery?

It didn't happen and that's one more reason why I circle back to the micro, as you say, essentially saying that it is post settlement processes, kind of like brown shrimp as Corky was saying earlier, and the one post settlement process that in our view the most likely difference is this virus.

MR. SANSOM: And to go back to the question that was asked earlier, do we know any difference between this virus here and in those other places in the Caribbean where it has been found as to whether it is having impacts somewhere; do we know anything about that at all?

MR. HUNT: Well, we're the ones that found the virus, and every virus work that has been done has been done subsequent to that, and so there is a lot that we don't know. Hopefully, between

this NSF Grant that I alluded to and our thinking about combining – essentially the plan is to take – well, it is a long answer so we're trying to pursue some of those kinds of questions.

That is why, though, we end up with that key take-home message in our presentation, which is maybe where we should leave it, which is really kind of what Roy has talked about, is regardless of cause we've have been in a long-term trend of lower landings and there is nothing about any information that we produced that suggests that is going to change; and so from a business model perspective for commercial fishermen, I guess I would say you should be planning that as part of your business model, however you want to respond to it.

MR. SANSOM: I don't necessarily disagree that we should plan on dealing with where we are. I'm also wondering, though, if there is some kind of fundamental difference between your work and Nelson's work, if there is not something in there kind of like when we sent the first Mars Rover that one-half of the shop was using metric and the other half of the shop was using English; and when they deployed the last part, it was going a little fast when it came in for a landing.

MR. HUNT: Rod Bertelsen has attempted to recreate Nelson's index and the only way that he has been able to recreate it so far is in a way that we think doesn't work; and so if that's the case, then that would suggest that he made a quantitative mistake; not on purpose, don't get me wrong, not on purpose but just by not adequately understanding our data base.

MR. SANSOM: I've often found flying somebody else's plane is a little tougher than flying your own.

MR. HUNT: Exactly, and so –

MR. SANSOM: But the other guy does it very well.

MR. HUNT: Yes, and so we need to figure out exactly what happened and we literally – I saw these figures for the first time at that Lobster Workshop that we just held in Marathon just a week or so ago, and so I don't want to completely discount anything but still offer our viewpoints.

MR. SANSOM: Okay, to the best of my knowledge Nelson hadn't died so why don't we get him to help us fix it or explain it?

MR. ROBSON: Let's move on. We've blown completely through any break, and I think we're coming up close to lunch break, and we still want to get through the presentation on allocation. If it is all right with everybody, let's go ahead move on to that. Do you need to take a break? All right, let's try to take a very quick break.

MR. ROBSON: Let's try to get settled in and get back to the remainder of the staff presentation. I'm go ahead and let Bill Sharp finish out the staff presentation of information on allocation and landings by allocation.

MR. SHARP: The last part of our presentation is very quick. We want to present our most recent estimates on landing allocation, specifically the sector-specific landings' allocations. In your briefing booklet, Amendment 10 has several allocation scenarios that were presented that came out of some earlier work.

What we have done is very recently reworked some of those with some of the most recent information we had. You heard John talk earlier regarding our recreational survey methods, the mail survey and how we've recently gone to e-mail surveys and how over the past several years the agency has also expanded the type of permits that allow the take of recreational lobsters.

What we have done is did a retrospective analysis on some of our allocation work to come up with a new allocation timeline, and we simply want to present that today as just a little more information for the council to consider. Again, these are total landings that we've talked about already quite a bit today.

What I'm going to show you first is this is those landings from 1993 through 2003/2004. These are expressed as a percentage of total landings between the commercial and the recreational fishery. We've gone over where the commercial fishery comes from -- that is the Florida trip ticket landings -- and the recreational fishery from our mail surveys.

This particular timeline is what was presented to the Spiny Lobster Advisory Board that was convened a couple of years ago and from which the recommendations in Amendment 10 came from as far as your different allocation scenarios. Just to familiarize you with what we have here, if you look at the bottom three -- we'll start here in '93-94.

In red is the proportion of trap landings. In the blue we have the commercial dive sector; and what you can't see because it is a very, very small proportion and we hope it comes up as purple -- and we have these little numbers above it -- that is the bully net proportion of landings. The yellow is the portion of landings estimated from our mail surveys, and then we have the unknown and other landings up top.

We're just showing you this as a reference. Again, this is what the Spiny Lobster Advisory Board looked at to develop their recommendations. Again, what we have done with that is we have gone back and done another analysis. This will differ a little bit from what you have -- I think it is Page 27 -- in your Amendment 10 or it is Table 4, I believe. What we have done, just to explain this very quickly, it updates it through the 2009-2010 fishing year, so we span from the 1993-1994 fishing year season to 2009 and 2010.

Again, we see a blank here. You heard John mention earlier that it was a hurricane year, and we don't try and estimate allocations during that year because the recreational survey was not completed. What we've also done is hand out a table that looks quite a bit like Table 4 in your briefing document and updates some of the numbers.

Specifically, what we have done is we've gone back and looked at landings in the recreational sector mail surveys from 2000 onward to 2009. We talked very briefly on what our method was,

and that survey focuses on a nice target group of those in Florida that purchased the Florida Lobster Stamp or lobster license that allow people to fish recreational lobsters.

Florida does offer a few other licenses that also allow the holder to fish lobsters amongst other resources. Early on those weren't included in the model; it is something that is called lifetime license. It began right around in the late nineties. There weren't that many permit holders at time, but as we went through time being a lifetime license, of course, that was cumulative, the number of people holding those licenses.

As we got into the 2000s Florida created a few more licenses that allow the holder to fish spiny lobsters. What we've done is done a retrospective analysis just to try and bring that group into the mail survey work. As we got into last year, 2008, we stated to use e-mails, which allowed us to bring those permit holders into our survey methodology, because obviously the e-mail survey is much less labor intensive, and so we can bring those into the survey.

So what we will see just very briefly is what has happened when we do that. These are our new allocation numbers. If you could refer back – I won't go through each one, but you'll see through time the recreational side has pretty much cycled around 20 to about – through the first part here it hasn't really changed – 20 through 25 percent. We've had a couple of years where it has reached as high as 29 percent.

What has really changed in this figure you're looking at and the table we presented to you today versus what is in your briefing booklet is right in here, and we've had a shift in overall landing allocations just about a couple of percent; in some years 4 percent is the increase in estimate of the recreational sector. Just one last thing, the highest years you're seeing here of 28 percent, I think our old estimate was 24, were in years of 2005-2006 and 2008-2009, which was a particularly, quote-unquote, low landings' years, sort of on par for what we saw back here in 2001 was a low landing year where the recreational allocation was a little higher.

Again, a very small shift toward the recreational sector with these new numbers; and to sort of quickly sum up, we're just showing you this as another potential allocation scenario. This is what we feel is now our best numbers available. We've pulled all the best available data together, and this now represents our best estimate.

Just to quickly sum up, what we have here from 1993 to 2009, the commercial/recreational allocation averaged 76 percent on the commercial side and 24 percent. If we look at 1993-2000, before that landings downturn it was 77/23 percent, commercial/recreational respectively; and since that time, from 2001 onward, it is 75/25 percent. Since that lower landings time series we're in, since 2001 we've seen a shift of about 2 percent between the commercial and recreational fishery. That is really all we had on this last section.

MR. ROWE: If you put that back up, when you look at the red there are no divers in there that is commercial diving?

MR. SHARP: No, it is trapping only in red. The commercial diving is in the dark blue.

MR. ROWE: Okay, I just wanted to get it clear because I don't the recreational is as big as that, and I guess I figured from my area that most of the trap people – or now the younger generation that is doing most of the diving, and I thought that would probably be – the yellow would be what is the percentage that is really being caught in our area probably because a lot of them are commercial.

MR. SHARP: I'm not sure I followed your question. Are you referring to the yellow portion of the panel or the blue?

MR. ROWE: Well, it is just from your mail-in that you've got that much poundage from the commercial and only that much that is divers is the blue is commercial?

MR. SHARP: Correct.

MR. ROWE: Okay, it looks like it should be the other way. I figured there was more commercial divers now than there used to be 20 years now.

MR. SHARP: Yes, and recall that the commercial diving here, that is overall. That is Keys and up through the east coast. That's statewide.

MR. ROWE: So your blue doesn't get any larger as you come out in time?

MR. ROBSON: If I could, the state of Florida also implemented a commercial dive endorsement program which tended to put a cap on effort. The commercial dive endorsement was put into place about 2005 or 2006.

MR. TEEHAN: And that has got a 250 lobster trip limit south of Dade County.

MR. ROBSON: So that tended to keep the commercial dive component of the fishery from growing and that is reflected there, I think.

MS. SMIT-BRUNELLO: Just so I understand, so Florida has got some of those kinds of restrictions on what you just mentioned with the divers and then you've got trap – I guess a limitation on how many total traps. Are there specific allocations between sectors from commercial? I didn't think there were but I just wanted to make sure.

MR. ROBSON: That is a good point, Monica, and I wanted to stress that point. We're using the term "allocation" in these graphs but they're really reflecting just proportional landings. We don't have a formal allocation setup in our programs.

MR. TEEHAN: These graphs were developed by Bill Sharp during our Lobster Advisory Board period to kind of indicate, when they were getting into a discussion of allocation and possibly to set up an allocation, this was giving them an indication of how things might actually fall out.

MR. GAITANIS: Bill, earlier on in the presentation you said that you cut off the allocation or the surveys after Labor Day, so it is safe to say that there actually probably is a little higher catch from that point of view throughout the end of the year.

MR. SHARP: I think that is safe to say, yes.

MR. GAITANIS: Let me ask you this. Regretfully, I only got one of these surveys a year ago. It is the first time since the beginning. Have you taken into account the exempt folks, those that are 16 years of age, those that are over 65 years of age, those that don't have to have a license because they're on the public dole?

I read oftentimes an estimate after the two-day sport season given by the papers and all based on commercial trappers who are out during this sport season collecting, assumedly for sport purposes, and it is my understanding that blue card holders do not have to have a recreational license in Florida, that their commercial fishing license allows them to fish under the recreational bag limit species and whatever without benefit of a license; and one would assume that if those are recreationally used as they theoretically should be, it might be a pretty good chunk of lobsters because obviously they're fairly familiar where they need to go and when they go and how to go. There are a lot of them in the Keys area. I guess my question is do you have an idea of how much all of these folks who haven't been counted in the recreational end would increase the catch for the recreational fishery?

MR. SHARP: Well, the answer to your first of the question, you had mentioned those folks who are exempt, and we do take that into account. In fact, the questionnaires ask certain questions to that effect that allow us to account for that sector. If a commercial fisherman was fishing in the two-day season, he is under the bag limit, but you are correct, he has a "C" and we can't account for that in the model.

MR. GAITANIS: I have had a lifetime license since before the – I think it was in '91 or '92 and, quite truthfully, lobster regulations is what has pushed me into buying the lifetime license. Having the lifetime license and then having these lobster license, you know, I have accessed the fishery for years; and like I say, the first time I was ever queried about how many I caught was a year ago. I'm sure that there are – I think there were 500 of those recreational folks. I don't know how many of them had a lifetime license and therefore were not in the group that would be surveyed, but there would be a few.

MR. SHARP: Well, over the past few years they are. The survey includes all license types that allow the recreational take of lobster. Again, when I presented these new numbers, that is why they have changed a little bit going back in time is that we've back-calculated to include the fishing effort of those permit holders like yourself.

MR. GEIGER: Bill, what are the PSEs surrounding your recreational survey, your collection sampling error; do you have any idea? It sounds like we're very confident in the type of data that we gather as being very good. I was just wondering if there are –

MR. SHARP: Yes, we do. Not to get too into the weeds on that, but, yes, we generate an error estimate around every annual harvest estimate. Really, the best thing at this level to go back to is to look at how it mirrors the commercial fishery, and what we have talked about is that is a good proxy for overall abundance, and they track each other pretty well.

MR. BURTON: It is my understanding that for anyone to dive the two-day recreational season, they must have a Florida fishing license with a lobster stamp; is that not correct?

MR. SHARP: Well, there are other licenses that allow recreational take of lobsters. As Bob mentioned, if you have a Florida lifetime license, it doesn't require you to buy the stamp. There are a few others. There is what we call the gold sportsman, and it allows you to take a full suite of resources of which one is lobster. There are a few other licenses in addition to the lobster stamp now that allows you fish the two-day season and the regular season, and that is what we have now incorporated within this newest model.

MR. BURTON: Are our commercial lobster trappers required to have a Florida fishing license and crawfish endorsement to fish the two-day season?

MR. SHARP: Actually if I could turn that over to one of our managers who may be more familiar with that rule.

MR. ROBSON: You're saying if you have a commercial license can you harvest recreationally?

MR. BURTON: Without having a Florida fishing license and crawfish stamp, correct.

MR. TEEHAN: To harvest during the regular season, if you have a saltwater products license, which is the commercial license – and I'm looking to Bruce for a sign or any of the other commercial guys here – you can catch the recreational bag limit. I'm not sure if that pertains to the two-day season or not, which I think is specifically what your question was, right?

MR. BURTON: Yes, it was and the two-day season only. I do understand during the regular August 6th season –

MR. TEEHAN: We have law enforcement here, Major Buckson – you're nodding your head – do you have the answer to that?

MR. SANSOM: The premise is if you have to have a license, you have to have the stickers. If you're required to have a license, then when there is a special stamp you have to have the stamp, too. If you're exempted from having a license, then you're exempted from having a stamp. That is how the system is set up because you can't put a stamp on a license you don't have.

MR. BURTON: I quite understand. My question was specifically regarding the two-day season.

MR. TEEHAN: This is Colonel Bruce Buckson from FWC Law Enforcement and he has got the answer for you.

COLONEL BUCKSON: Actually, Jerry had the answer. It was very accurate, Jerry. Over the years that's exactly what we've done. If you do not have to have a license, then you do not have to have the stamp; so in this case your commercial license covers you, and the two dollars is not that important as far as the license fees go.

MR. BURTON: And that is applicable during the two-day season?

COLONEL BUCKSON: Yes.

MR. BURTON: So your whole family can go with you under your commercial license?

COLONEL BUCKSON: No, that license would simply cover the holder of the license. It covers one person, the commercial license.

MR. BURTON: Okay, fair enough. Second and last question, for years there was a special endorsement for recreational lobster divers where they could catch an extra 25 or 50, and we were phasing those out – oh, is that correct?

MR. SHARP: That was called the special recreational license that initially, when it was brought on board in '94, allowed the holder to catch 50 lobsters per day. Over the past several years, it is being grandfathered out with a bag limit reduction of five lobsters per year. I think as of next season, I believe, that it is basically – you know, it has been grandfathered out and the bag limit would not allow you to catch anymore than the regular lobster license would, so that will sunset next season, I believe.

MR. ROBSON: All right, we just past 12:00 noon. We're going to go ahead and break for lunch. I'm sorry, Corky, you were on the list; go ahead.

MR. PERRET: I may be getting ahead of myself, but in some of the documents we got there was a discussion about proactive management. Your two systems of getting landings' information from the commercial trip tickets and from the recreational surveys that you do; how quickly are you able to get that data? Can you get it during the season for management actions that might have to take place?

MR. SHARP: I can speak toward the recreational sector there is our ability to generate landings' estimates now that we're using an e-mail-based survey, an internet-based survey, has improved or is now quite quicker. With the mail survey, it would generally take us six to eight months to turn that around, but now it will be quite a bit shorter. This is our second year of doing an internet-based survey so we're still learning a lot, but suffice to say the turnaround time to generating a landings' estimate is much, much shorter.

MR. ROBSON: All right, are there any other quick questions for Bill or John regarding this allotment? All right, we're going to break for lunch. We're going to reconvene at 1:30.

The Joint Meeting of the Spiny Lobster Committee and the Spiny Lobster Advisory Panel of the South Atlantic Fishery Management Council and the Spiny Lobster Committee and Spiny

Lobster Advisory Panel of the Gulf of Mexico Fishery Management Council reconvened in the Ballroom of the Renaissance Orlando Airport Hotel, Orlando, Florida, Monday afternoon, June 7, 2010, and was called to order at 1:30 o'clock a.m. by Chairman Mark Robson.

MR. ROBSON: The next item on the agenda that we wanted to make we covered with everybody was a discussion of the Fish and Wildlife Conservation Commission's deliberations, I guess, about where we would support having certain levels of management delegated to us or if the federal fishery management plan would be eliminated for spiny lobster.

In advance of this particular workshop we had prepared an agenda item for our Fish and Wildlife Conversation Commission Meeting, which is in two weeks. This has already been presented in the agenda books to the commissioners and it's posted on our web. We have to submit all this information well in advance of the commission meeting, but we felt it was important for you all to see kind of where we are right now.

As you will see in your packets, the Gulf of Mexico Fishery Management Council also sent a letter to the Fish and Wildlife Commission asking about their interest in having certain fisheries, including spiny lobster, delegated to the state of Florida. That Gulf Council letter also went beyond that a little bit and talked about in the alternative possibly delegating some of those fisheries just to the South Atlantic Fishery Management Council.

I want to just focus on the Fish and Wildlife Commission's review of this and how we're presenting it to the Fish and Wildlife Commission in two weeks. We tried to understand as best we could what delegation of authority to Florida means, and there were a couple of different options that apparently are being discussed.

One is an out-and-out repeal of the federal management plan or basically eliminating an existing federal management plan in which case Florida would then control management of that species in federal waters off of our coastline. The other type of option that is being discussed is what we call partial delegation, and we're going to see that in some of the actions and alternatives today to discuss where there is an interest in maybe delegating partial authority for management of spiny lobster to Florida.

We would establish regulations for species and then NOAA Fisheries Service, through the councils, would adopt consistent regulations for federal waters, so in effect we would take the lead on regulations that would apply to state waters and the federal management system would adopt consistent regulations in federal waters.

First, the repeal of a federal fishery management plan; again, in this case talking about lobster right now, the FWC would have full control of regulations in state and federal waters off of Florida only, and that is a significant point. Also, as best we understand it, in federal waters regulations would apply only to those vessels that are registered in Florida or for vessels that are landing their catch in Florida. If there was no federal management plan under that situation, the Florida regulations would apply, but they would apply in our standard rule-making process and we would not be following or be required to follow provisions of the federal Magnuson-Stevens Act requirements.

Partial delegation; FWC in this case would establish regulations, some subset or all of the basic management regulations related to seasons or bag limits or size limits. We would do that. The councils and NOAA Fisheries Service would then consider consistent regulations for federal waters. In partial delegation the regulations would apply in state waters and all federal waters managed by the councils.

In other words, we would take the lead and basically again the NOAA Fisheries Service would have to adopt consistent regulations to cover the federal waters. In this case, partial delegation means we basically would be managing under the provisions of the Magnuson-Stevens Act. We would in effect, as we understand it, as a state agency be serving more or less as the proxy to the fishery management councils in adopting management plans and alternatives and actions for things like seasons or bag limits or allocation and so forth and make those recommendations.

We might go ahead and adopt those rules in state waters and then there would be follow-along rules for federal waters. We would be in a partial delegation mode potentially looking at dealing with things like allocations, ACLs, accountability measures and all of the time deadlines that are laid out in the current Magnuson provisions for those kinds of regulations.

In the case of the Spiny Lobster Fishery Management Plan and delegating that to Florida, really the current situation right now is that this is obviously a jointly managed fishery and really why we're all here today in this room. It is jointly managed under a federal plan by both the South Atlantic and the Gulf of Mexico Fishery Management Councils.

The NOAA Fisheries Service implements the regulations and the Fish and Wildlife Commission regulations and manages aspects of the fishery in state waters. In many cases the federal regulations already do, to some extent, a follow-along really the lead of some of the management strategies that have been put in effect for the fishery in Florida.

There are proposals to delegate some or all federal management plan requirement responsibilities to Florida. One of the problems with not having a federal plan and why we're talking about maybe only partial delegation is if there is not a federal plan it has been determined that we would be unable, as a state, to deal with the possible undersized import of lobsters into other states of the union, which under the federal regulations and under the provisions of the Magnuson Act that can be done now as a federally managed species.

If there is not a federal management plan, that was one of the real critical problems for eliminating the management plan and letting Florida basically take over full management of the fishery. Of course, if we had partial delegation Florida regulations could extend into federal waters, but once again we would not be able to enforce state regulations on vessels registered to another state, so it presents some problem as far as we can determine.

Now, the letter that I mentioned from the Gulf of Mexico Fishery Management Council to the Fish and Wildlife Commission included lobster among several other species for possible delegation of management authority or in some cases potentially removing the federal management plan, and these species included the ones you see here, and, again, in addition to spiny lobster.

Looking at that letter, right now the Fish and Wildlife Commission's staff recommendation in two weeks to our commissioners, understanding again that they knew we were going to have this workshop today, and we've tried to couch that in those terms, but our recommendation, we need to get off dead center on this and try to make it clear where we're standing right now.

At this point staff is not recommending that we consider assuming partial management delegation of spiny lobster. This is based primarily on a concern for the state agency having to take an assumed responsibility for management actions and strategies and planning basically under the federal Magnuson-Stevens Act requirements.

Staff at this point does recommend supporting the out-and-out repeal of the federal management plan for stone crab – that was part of that letter – because it is really a Florida fishery and the issue of imports doesn't seem to be as critical although I think we still need to understand all the nuances of these things.

Right now we are recommending kind of provisional support for looking at a repeal of federal management plans for these other finfish species. One of the concerns again is that without a federal management plan Florida may have a limited ability to regulate harvest particularly of finfish in federal waters by vessels from outside of Florida; and unless those catches are landed in Florida, we might not be able to basically have regulations that could apply to out-of-state vessels working in federal waters.

It is a bit of a concern and we think we need to do some more work to figure out if that can be addressed if a management plan is withdrawn for some of those species. That is kind of where we are. Again, we also are telling our commissioners that these recommendations were going to be modified if warranted based on any new information or discussions resulting from the joint meeting that is occurring right here today, but as of now that is kind of where we are. That's the end of that discussion.

We're kind of running into a time schedule here, and the delegation issue is obviously one of the actions and alternatives that everybody is going to be discussing. I would be happy to answer any basic questions about that, but it is also something that we can get into in a little more detail with the AP discussions. Peter.

MR. O'BRYAN: Mark, I don't know if we have any attorneys here in the room, but we recently were looking at the State of Florida Constitution. In there the state of Florida draws its territorial boundary – its eastern boundary is either three miles from shore or the western edge of the Gulf Stream is considered state waters according to the Constitution.

I don't know if that impacts – you know, if the feds can overrule our Constitution and say, no, it's from three miles only, but the Constitution does say three miles or the western edge of the Gulf Stream, whichever is greater. So, from Central Florida to North Florida when the Gulf Stream bends out, the state is still claiming ownership all the way out.

MR. ROBSON: Monica, can you address that?

MS. SMIT-BRUNELLO: I can't speak to the state constitution. I'm not sure what it says.

MR. O'BRYAN: It does say that under the definition of the boundary of the state of Florida.

MR. SMIT-BRUNELLO: We can certainly look into that.

MR. ROBSON: Yes, this has come up before and I believe there was an answer to that that indicated that it really was still pretty much the three-mile limit on the Atlantic side, but let me check on that on a break with our legal office in Tallahassee and see if we can come up with an answer. You're correct also – and everybody knows this, I know, but in the Gulf of Mexico state waters goes out to nine nautical miles or nine miles, so it is nine on the Gulf and three on the Atlantic.

MR. O'BRYAN: Right, and just technically it says three leagues, and a league is about three miles.

MS. SMIT-BRUNELLO: I maybe misheard something because I want to make sure that you're clear and that maybe we're all clear; that the state can regulate a fishing vessel outside the boundary of your state. For example, Florida, you can regulate fishing vessels outside the boundary of Florida if you were to get a delegation under the Magnuson Act. I think maybe you said that, but I wasn't sure maybe if I read that correctly.

MR. ROBSON: I don't believe so. I thought what we had determined was that we were only able to impose our regulations in federal waters on vessels that are registered from Florida or if they're going to land in Florida.

MS. SMIT-BRUNELLO: I think that might be true if there was no fishery management plan at all, but since under the idea of delegation there would be a fishery management plan that would remain, then Florida would then be delegated part of that fishery management plan to manage and then you could regulate vessels outside the boundaries of Florida.

MR. ROBSON: Yes, that's correct, Monica. The issue of our ability to not enforce regulations on out-of-state vessels was tied directly to not having a federal plan and the concern about our ability to do that. Bob.

MR. ROWE: The other advisory panel west of us; does that go all the way to Texas, their boundaries?

MR. ROBSON: Are you speaking of the Gulf of Mexico?

MR. ROWE: Yes.

MR. ROBSON: Yes, it includes all five states including Texas.

MR. ROWE: I guess that is what my question was.

MR. ROBSON: If there are no other questions, I think maybe it is time for us to kind of move into the amendment. That is the meat of what we really need to get going on. I know that staff is going to present you with some information about the actions and the alternatives under each of those actions, so let's go ahead get started with that. Gregg, do you want to start out.

MR. WAUGH: What we're going to do is go through what is shown on the agenda. Attachment 2 is the Joint Spiny Lobster Amendment 10 document. If you will pull that up, I'll give you the PDF page numbers as we go through. We're going to use Section 2, so the first action in terms of delegation is on PDF Page 27. I will also be projecting that.

As shown on the agenda, Carrie, Gulf Council staff, is going to go through several action items, and I'll give you the page numbers or I'll tell her and she'll give you the page numbers. Then Sue Gerhart is going to do Action 7, and then I'll finish up. We want to get any questions answered and then we'll come back and have the AP give their recommendations.

MS. SIMMONS: If you would turn to Page 12, Action 1 begins – and Mark has already gone through a lot of the background information on this particular action, but I just wanted to reemphasize that a majority of the commercial and recreational landings of Caribbean spiny lobster occur in the waters off of Florida. You can see that from Table 2.1.2, which is on Page 14.

I contacted all the Gulf states, Alabama, Mississippi, Louisiana and Texas, and I asked them for commercial landings, and they did not have any commercial landings for Caribbean spiny lobster. I also contacted the South Atlantic states, Georgia, South Carolina and North Carolina. Georgia had no commercial landings; South Carolina had a sum of about 15 pounds from 1999-2008; and North Carolina had an average of about a hundred pounds per year, I believe, from 1999-2008. Those were in federal waters during those years.

MR. ATACK: On the North Carolina landings, part of the reason the landings I don't think are as low as they are is they're not on the trip ticket system. When people go to sell them, they're not on the trip ticket; so if the fish house will write down "spiny lobster" and then put the weights, that is where you're getting your landings. I think the numbers may not really reflect reality. The trip ticket should be changed to have that as a category.

MS. SIMMONS: Okay, thank you, and again I don't have any recreational landings because the state of Florida is the only state that documents recreational landings of Caribbean spiny lobster. Okay, I just want to point out from this table again for you to look at the breakdown of Gulf federal, Atlantic federal, and Florida state waters; you get 6 percent in Gulf federal waters, 35 percent in Atlantic federal waters and 59 percent in state waters, and that is on both coasts. That's commercial landings from the state of Florida during 1999-2008.

If we could back to the alternatives and actions, I will just read through them quickly. Alternative 1 is no action. Alternative 2 explores delegation of all management to Florida FWC with the help of the councils and NOAA establishing ACLs, annual catch limits and accountability measures.

Then Alternative 3 explores delegating only certain management criteria to Florida FWC. There is a whole list of those criteria under Alternative 3. It includes size limits, bag limits, commercial trip limits, permit endorsements, fishing seasons, closed areas, et cetera. Mr. Chairman, should I take questions now or are we going to talk about this later?

MR. ROBSON: Yes, we can take questions now. Roy.

DR. CRABTREE: Well, it sounds like to me given that the state of Florida is not interesting in pursuing this, that we should probably remove this action to the considered but rejected section. Would agree with that, Mark?

MR. ROBSON: Yes, I think I would.

DR. CRABTREE: Just as a point of order, how are we making motions, et cetera?

MR. ROBSON: Well, we didn't get into that. We probably need to go back and revisit the process a little bit. Gregg.

MR. WAUGH: Given the time constraints, if you want to change how we were going to do it, we were going to have the advisory panels give their recommendations on all the actions and then come back and have the committees – and the committees would then make motions and vote separately; but given the time constraints, if you want to have staff go through the action and then get the AP input and then the committee vote right then and the committees vote separately, we can handle it like that.

MR. ROBSON: We've got a couple of comments maybe to this point or questions. Corky.

MR. PERRET: Well, I don't want to confuse the issue, but I certainly, as a council member from the Gulf, would feel better having the input of two advisory panels. These are the experts that are advising us rather than us discuss these things first and then hearing what these experts have to say. Now, saying that, I agree with Roy.

Teehan and Mark are in a heck of a position here and I'm glad it's them and not me. I could commit for my state on what position they took, but knowing how state regulatory boards handle things, there could be something that comes back six months from now and they might change their position for good rationale. I think Florida is in a tenuous position there.

Saying that, and I was probably the only one around back then – Larry was there – but I'm looking at the average landings –

MR. SIMPSON: If you had listened to me back then, we wouldn't be in this mess.

MR. PERRET: Maybe so, but I'm looking at average landings and I'm wondering how the heck we ever got into a spiny lobster plan when more lobsters are taken in state waters than in federal waters, but that is for another day. I'd just like to hear the AP input prior to the council discussion.

MR. ROBSON: Well, that was the original intent was to go through the actions and alternatives and allow the AP members to discuss and make any recommendations, so why don't we go ahead and proceed along those lines.

MR. BURTON: Bob Rowe has been chosen to be our chairman this afternoon, so, Bob, the state of Florida doesn't want full control of lobsters at this point. Would you go ahead and make a motion for the South Atlantic Advisory Panel to agree with that position?

MR. ROWE: I haven't really gotten with the AP from the Gulf coast to see what they want to do. I think the majority of it is in the Keys, like you said, which is state waters. Would the motion be to go with what we're saying or do we want to discuss it.

MR. BURTON: Bob, the state of Florida at this point is not in the position to take full control of the lobster fishery due to several reasons enunciated previously, so I for one tend to agree with that and we can quickly make a motion to accede to their wishes and move on, if you're prepared.

MR. ROWE: Okay, I guess there are issues in other states north of us. If we turn it over to the state and they don't honor beyond the three-mile limit up in the – where there are maybe not too many lobsters left up there, but maybe if the state is controlling them what they do or don't do, that could affect North Carolina on down; is that what the council is asking not have control of that?

MR. WAUGH: If I can make a suggestion and bring us back to the actual action we're considering is Action 1, which is whether we delegate management of the Spiny Lobster FMP to Florida Fish and Wildlife Commission. You have heard what they have said. The way to deal with this, if you agree with that, would be something worded similar to what is up there now is to move Action 1 to the considered but rejected appendix. That would take it out of the list of actions that we're considering in this amendment. It goes into an appendix; it just keeps track of all the different actions and alternatives that we've considered.

O'BRYAN: Peter O'Bryan, member of the South Atlantic Advisory Panel. **I would like to make a motion that we recommend Alternative 1 under Action 1.**

MR. ROWE: Is there a second?

MR. MANSFIELD: I second that motion.

MR. ROWE: **Discussion. Okay, can we show of hands of all in favor. All right, so moved**

MR. ROBSON: Now, Gregg, at this point this is where we knew we would have some complications. Do we want to have the Gulf AP take this issue up at this time?

MR. WAUGH: Yes.

MR. LESSARD: **We've all talked about this while they were making their motion and we support Alternative 1.**

MR. ROBSON: Is that a motion: We need a motion and a second.

MR. SANSOM: Second.

MR. LESSARD: We have already discussed it.

MR. ROBSON: Well, for the record do you want to find out if there is – if there is no discussion, then you can call the vote.

MR. LESSARD: No discussion; we'll call the vote. All in favor aye; all opposed.

MR. ROBSON: **Karl, if you would repeat the motion for the record. Unanimous vote.**

MR. LESSARD: Okay, the motion was to turn over management to the state of Florida. Alternative 1 is what we recommended, no action, to continue the current state and federal management system and set an ACL and accountability measures determined in actions later in this amendment.

MR. SANSOM: Second by Jerry Sansom.

MR. ROBSON: Bill, did you have a question?

MR. TEEHAN: And this would be for Monica. Would it be cleaner for the document to do what Roy suggested earlier was just remove this and put it in the considered but rejected category as opposed to accepting Alternative 1, Action 1, or Action 1, Alternative 1?

MS. SMIT-BRUNELLO: I actually think if that is the way everybody wants to go and that delegation is not going to be considered, you could simply move it to considered but rejected. I think that would be great, and then there should be some explanation as to why the councils or committees and APs have decided that is the best way to go.

MR. LESSARD: I would like to say why this committee wanted to go there. We think it would be unfair for the state of Florida to take over an unfunded mandate.

MR. ROBSON: It has been suggested that we maybe need to go ahead and after the AP discussion of each action, go ahead and have the council committees discuss these actions just to try to keep things moving before we forget. Roy.

DR. CRABTREE: Would you like a motion? On behalf of the South Atlantic Committee I move that we move this action to the considered but rejected section.

MR. GEIGER: Second.

MR. ROBSON: Okay, there is a motion and a second – this is the South Atlantic Council Committee – to take Action 1 and move it to the considered by rejected category. Is there discussion about that motion? Is there any objection to the motion? Seeing none, the motion passes. Would the Gulf Council Committee like to take up that issue?

MR. TEEHAN: The Gulf Council Committee is all here. You've heard the discussion of the two APs and the South Atlantic Committee. What would your pleasure be? Do we have a motion? Mr. Sapp.

MR. SAPP: I would like to make a motion on behalf of the Gulf of Mexico Fishery Management Council that we move Action 1 to considered but rejected.

MR. TEEHAN: We have a motion; do we have a second? Corky Perret seconds the motion. Any discussion on the motion? Hearing none, the motion is approved.

DR. CRABTREE: And just for the record, the rationale for why we're doing this is based on statements by the state of Florida that they're interested in having delegation at this time, so it's not really workable unless all parties are in agreement.

MR. PERRET: Well, I didn't get that they weren't interested, Roy. I got that they were interested; however, they didn't feel like they had the necessary capability and funding and personnel and all that good stuff at this time, but I'm sure they're interested.

MR. TEEHAN: That is not exactly it, Corky. We've got the funding and the personnel. We do all the stock assessments, we do most of the enforcement and so forth. It's other issues.

MR. ROBSON: All right, Gregg, do we want to move on to Action 2, please.

MS. SIMMONS: We'll move on to Action 2, other species in the Spiny Lobster Fishery Management Plan, and that begins on Page 16.

MR. WAUGH: PDF Page 31.

MS. SIMMONS: We have no action; leave these other species in the current fishery management plan, but don't establish annual catch limits and accountability measures, which we would not meet our National Standards and Magnuson Guidelines under Alternative 1. Alternative 2 explores using historical landings to set annual catch limits and accountability measures for these species, and that includes two species of spiny lobster, the smoothtail and the spotted spiny lobster; and two species of slipper lobster, the Spanish slipper lobster and the ridged slipper lobster.

We currently do not have any historical landings' information for the two species of spiny lobster, and that is the smoothtail and the spotted so keep that in mind. Alternative 3 we're looking at is listing these species as ecosystem component species, and Alternative 4 explores removing these species from the Joint Fishery Management Plan.

We do have some landings for slipper lobster, some from bycatch from the shrimp trawl fishery. If you want to turn to Page 19, Table 2.2.2, it shows that those numbers both in the Gulf and the South Atlantic are very low. Some are identified to the species level, either Spanish or ridged, but not always.

I think they're also bycatch in the Caribbean spiny lobster fishery in the Florida Keys and that was primarily the ridged slipper lobster based on information and discussion with Sharp and John Hunt. The other issue is the commercial landings for slipper lobsters are not divided into the species level so they would be lumped together if you were to use historical landings. Again, those are very low, and that is on Page 17. I'll try to answer any questions.

MS. SMIT-BRUNELLO: I'm a little confused, and I just want to ask a couple of questions. When the no action alternative is leave species other than Caribbean spiny lobster in the Spiny Lobster FMP; do you mean we're discussing species – we're not discussing the Caribbean spiny lobster; we're discussing the species other than Caribbean spiny lobster that are in the FMP;?

MS. SIMMONS: Yes, that is correct. It is my understanding that we have to do something with these other species that are in the fishery management plan by 2011, and that would be either setting annual catch limits and accountability measures for them, removing them or potentially designating them as ecosystem component species, which they meet all those criteria.

MS. SMIT-BRUNELLO: That is what I was thinking. I was just reading that sentence a different way. Okay, so we're certain that smoothtail spiny lobster, spotted spiny lobster, ridged spiny lobster, all those are currently in the FMP and they're discussed in the FMU?

MS. SIMMONS: Yes, that's my understanding that they are in there.

MS. SMIT-BRUNELLO: Okay, and they're all specifically named that way and they're all in there, because normally we just are thinking I think that *Panulires argus* or whatever is the one that is normally discussed, so this was in the original –

MS. SIMMONS: I think it is in Amendment 1 or the original fishery management plan. Let me look at that really quickly.

MR. ROBSON: Gregg, did you have a clarification?

MR. WAUGH: Yes, the IPT is recommending that we use the common name for *Panulires argus* as it occurs in the South Atlantic and Gulf Councils area of jurisdiction use the common name Caribbean spiny lobster. That is not meant to imply any inclusion of the same species *Panulires argus* in the Caribbean Council's area of jurisdiction. When you see Caribbean spiny lobster, we're talking about *Panulires argus*, the same spiny lobster, the crawfish, in the federal and state waters of the South Atlantic and Gulf area.

DR. CRABTREE: And these species are taken incidentally in shrimp trawls; is that correct, generally?

MS. SIMMONS: The slipper lobsters are, and I guess there are some low landings in traps and from commercial divers, and there is a percent breakdown in the Florida Keys for the ridged slipper lobster.

DR. CRABTREE: Okay, are there any regulations or anything in the regulations specific to these species or are they in the FMP but otherwise unregulated?

MS. SMIT-BRUNELLO: The only thing that I have found in the regulations concerns slipper, Spanish lobster and spiny lobster, *Panulires argus*, so I'm guessing the other ones are in there for data collection purposes.

MS. SIMMONS: I'm assuming so. On Page 2 it lists current regulations for Caribbean spiny lobster, *Panulires argus*, off the Gulf of Mexico and the South Atlantic; and *scyllarides nodifer*, which is the correct name of the ridged slipper lobster; and that is how we're kind of getting hung up on our common names and scientific names is some of the issues that have happened in the past when the regulations were codified, there was a little bit of an issue with whether it was – I think Bill has something to say – whether it was the Spanish or the ridged.

MR. ROBSON: I was just going to clarify that the state of Florida – this is not federal waters, but the state of Florida recently changed regulations to include the egg-bearing lobsters for which – was it all of these species?

MR. SHARP: We included all of the *scyllaridae*, which would be *scyllarides nodifer* and *aequinoctialis* and another species which hasn't come up, which is *Parribacus antarcticus*, and then there is a four species of a different family; the *Synaxid*, which is the copper lobster, which would be *Palinurellus gundlachi*.

DR. CRABTREE: And the landings of these species have been Florida in both council's jurisdiction; is almost all of it in Florida?

MS. SIMMONS: If Gregg would pull up the map, as far as commercial landings that we have for the slipper lobster species, both the ridged and Spanish, are from Florida, but the bycatch is from the Gulf of Mexico off of Texas, it looks like primarily, and off the west coast of Florida. That's on Page 20, Figure 2.2.2. Then it looks on the east coast like it is primarily off the state of Florida. We do have regulations for egg-bearing females for the slipper lobster, the ridged slipper lobster, and again those are on Page 2 for the current regulations.

DR. CRABTREE: That shows where the location is, but it doesn't show the amount of it. What I'm trying to get at is it sounds like to me Florida is managing this species, and I think we need to determine is there a need for federal management of these species or not. It seems to me we have one regulation for – is it slipper lobster, Monica.

MS. SMIT-BRUNELLO: For berried.

DR. CRABTREE: That you can't have a berried slipper lobster, which Florida also has, and so it's not clear to me that there is a real need for management of these by the federal government, but it's hard for me to say unless we have somewhere that shows where they're all coming from.

MR. LESSARD: We were able to talk to members of both SSCs regarding this issue in the last week or so, and what the SSC recommended to us as members of the AP is Alternative 3, that we keep it as an ecosystem component. **The Gulf AP would like to take the time to make the motion of Alternative 3 for this action as an ecosystem component.**

MR. STAFFORD: I'll second that.

MR. LESSARD: I'd like to call this vote unless there is any discussion on this. I think we've done our homework. All in favor aye; all opposed. **The motion passes unanimously.**

MS. SIMMONS: Could I get a point of clarification on your motion, Karl. Was that for just the slipper lobster species or that was for all species?

MR. LESSARD: That was for all species; Option A, B, C and D under Alternative 3.

MR. GILL: Mr. Chairman, I guess I'd ask the question on what we're trying to accomplish here. Are we trying to pick preferreds or are we trying to flesh out this document and tailor it to what we think ought to be represented for ultimate public hearings. If it is the latter, then what we're trying to do is get rid of the things that don't matter and make sure the things that are added in do matter are included. If it is going to preferreds, that is a whole different kettle of fish. Could you clarify it, please.

MR. ROBSON: Gregg, do you want to try to address that?

MR. WAUGH: Well, it would certainly help your staff and the IPT that is putting this together if there are alternatives that can be moved out of the document, we definitely want to move them out. If you can give us some guidance at this early stage on likely preferred alternatives, that would certainly help us how we structure the document. Then you will see it again with the full analysis; and if you want to change your preferreds, you certainly can do that. Any time we can get an indication of your preferred approach, that would help in terms of how the document is structured and analyses are conducted.

MR. ROBSON: So right now we have the Gulf Council AP – the basic motion; was that essentially recommending Alternative 3 as a preferred alternative in this action?

MR. LESSARD: If my understanding is correct, we as AP members cannot make recommendations that something be preferred. That is up to the councils to do. All we can do is make our recommendations to you unless the procedure has changed under the new Magnuson-Stevens Act.

MR. ROBSON: No, that is correct, but I just want to make sure the intent of that motion was to say that this was the alternative that you prefer.

MR. LESSARD: This is the alternative that the AP prefers, but I'd love to have it be the alternative that the council prefers.

MR. O'BRYAN: Could staff just clarify for us exactly what is being named as an ecosystem component; what does that do for the listed species, please?

MS. SIMMONS: It just leaves them in for data collection purposes and we do not have to set annual catch limits and accountability measures for those species. My understanding is there is no guarantee that additional information will in fact be collected on those species, so I'm not sure of the complete advantages at this time.

MR. O'BRYAN: Okay, is there a clear distinction, then, between Alternative 1 and Alternative 3?

DR. CRABTREE: Yes, Alternative 1 doesn't comply with the Magnuson Act.

MR. O'BRYAN: Okay, that's good enough. **Mr. Chairman, as a member of the South Atlantic Advisory Panel, I would like to make a motion that our preferred alternative under Action 2 is Alternative 3, including Options A, B, C and D.**

MR. BURTON: Bob Burton seconds that.

MR. ROWE: Is there discussion on the motion?

MR. ATACK: I just want to make the comment that there are landings in North Carolina and there are commercial sales in North Carolina for your data. If you put it on the trip ticket as an item, then those things would be recorded.

MS. SIMMONS: Could you specify for all those species, sir, or just the slipper lobster species?

MR. ATACK: Just the red slipper lobster.

MR. MANSFIELD: Question about your statement about accountability; if they're moved into this category of Alternative 3 in the ecosystem will statements pertaining to berried lobsters stay intact or will that open them up to exploitation possibly? I don't know what that document says.

MS. SMIT-BRUNELLO: That's a good question and I'm thinking about it. I'm not sure. I would think that you would be able to retain the prohibition on berried lobsters even if they were designated as an ecosystem species, but I will look into that because that's a very good point.

MR. ROWE: Anymore discussion? **All those opposed to the motion raise your hand; those in favor of it raise your hand. The motion is passed.**

MR. ROBSON: All right, so we have gotten two recommendations, one from each council. I would like to take up this discussion for Action 2 from the South Atlantic Council Committee.

MR. GEIGER: I would like to make a motion that we select Alternative 3 as the committee's preferred option.

MR. ROBSON: Is there a second to that motion from the South Atlantic Council Committee member? Second from Ben Hartig. Is there any discussion of that motion? Any objection to the motion. The motion passes by the South Atlantic Council Committee. George.

MR. GEIGER: Mr. Chairman, can we also make a subsequent motion to move Alternative 4 to the considered but rejected column? It seems to me that's the opposite.

MR. ROBSON: Are you making that motion?

MR. GEIGER: Yes, I'll make that motion.

MR. ROBSON: Is there a second to that motion? Again, this is the South Atlantic Council Committee. Ben Hartig seconds the motion. Roy.

DR. CRABTREE: I would speak against it because my fear is if we go through the analysis and we determine that these don't qualify as ecosystem species, then that leaves us stuck with doing ACLs and AMs. I think if we decide they don't qualify as ecosystem species we might want to reconsider removing them from the plan at that point, and then we'd end up having to pull this back out. I think I'd rather go through the analysis and see if that's going to work out and if the attorneys are going to be satisfied with it rather than taking it out now.

MR. GEIGER: Yes, I agree; I'll withdraw the motion.

MR. ROBSON: All right, there has been a request to withdraw the second motion to remove Alternative 4 to the considered but rejected. The request by the motion maker and seconder is to withdraw that motion. Is there any objection to that from the council committee? Seeing none, that motion is withdrawn. For the South Atlantic Council Committee members, is there any other discussion or motions? Seeing none, Bill, I'll turn it over to your Gulf Council Committee.

MR. TEEHAN: Gulf Council Spiny Lobster Committee, you've heard the discussions and the motions by both of the APs and the South Atlantic Committee. Do we have any discussion on Action 2? Ed

MR. SAPP: Just some discussion about Alternative 3 naming the four as ecosystem components; and I don't know if this is something that Monica will address now or if it is something that gets addressed later, but when you read in here the definition for ecosystem components to be considered for possible classification as an ecosystem component the species should – and one of them is be a non-target species and another one of the options is to not be generally retained for sale or personal use.

I know that in the case of one of the slipper lobsters – and I couldn't tell you which – is actually sought, targeted and retained. I guess there has got to be a question to what extent is that widespread. I've never done it myself, but I know people that do it, diving off of the Panhandle in a hundred feet of water or so, and it's done to the extent that there was an article in the Florida Sportsman Magazine one time about where to do it and how to do it, so there is some use and retention.

MR. TEEHAN: Yes, Ed,. I believe you're referring to scyllarides nodifer, and that is the one that initially started out as a shrimp trawl bycatch for the most part, and then that Florida Sportsman Article did come out and that became a very popular recreational. It is not a trap-oriented species. When hard TEDs were put into shrimp trawls, those landings went down some, but it has become very popular. To be quite honest with you, I prefer them to argus myself.

MR. GILL: Well, Ed stole one point I was going to make because I was going to make the same thing. In the interest of thinning down alternatives and options, et cetera, it seems to me one thing that we might consider is moving Alternative 2, Options A and B, to the considered but rejected. They've got virtually no landings. The basis for determining an ACL/AM is virtually non-existent. It would also leave Alternative 3 and 4 as ways to handle the other spiny lobsters. I guess I would ask for comments from other members of the committee, but I would be inclined to make such a motion.

MR. TEEHAN: Any discussion of Bob's suggestion?

MR. SAPP: I would be inclined to second it.

MR. TEEHAN: I didn't hear a motion.

MR. GILL: **In that case I move that Alternative 2, Option A and Option B be moved to considered but rejected.**

MR. TEEHAN: Okay, we have a motion for Action 2, Alternative 2, Options A and B to removed to the considered but rejected section. Do we have a second?

MR. SAPP: Sapp seconds.

MR. TEEHAN: Mr. Sapp seconds. Is there any committee discussion on the motion? Roy.

DR. CRABTREE: Well, I'm not on your committee but I am a member of your council. If you remove those from Alternative 2, then that means you have to select Alternative 3 or 4 for those, right, so you're either going to remove them from the FMP or make them ecosystem species.

MR. TEEHAN: **All right, we have a motion on the board. We've heard Dr. Crabtree's comments. We'll call the question. All in favor of Mr. Gill's please signify by saying aye; all opposed same sign. The motion carries.** Monica.

MS. SMIT-BRUNELLO: I would ask just for clarification on the record maybe to help staff if you could just, Bob, maybe give a quick paragraph as to why you want it into the considered but rejected.

MR. GILL: The background material on the alternatives indicates that there are virtually no landings whatsoever, so we know they're not targeted. We know they're not considered a valuable species whatsoever, and there are no landings from which to make a rational determination. We could go through that exercise and it would be fundamentally for naught. Rather than go through that exercise, I'll have a follow-on motion when I get there how I think we ought to handle that.

MR. TEEHAN: Any further discussion on Action 2? It sounds like Mr. Gill is ruminating on another motion, perhaps.

MR. GILL: For the points mentioned by Ed previously relative to the viability of slipper lobsters as ecosystem component species, I would be reluctant to support Alternative 3 as a preferred alternative, and therefore I move that our preferred will be Alternative 3, Options A and B.

MR. TEEHAN: **Okay, we have a motion by Mr. Gill under Action 2 for Alternative 3, Options A and B be the preferred options. Do we have a second on that?**

MR. SAPP: Sapp seconds.

MR. TEEHAN: Mr. Sapp seconds. Is there some committee discussion on the motion. Mr. Simpson.

MR. SIMPSON: I totally agree with them on this, but is there a threshold level that you have to achieve to be considered an ecosystem component species? I mean, for crying out loud, one of them is sought. That is not enough to put them in that category for me – just as a consideration.

MR. GILL: I had a bit of this discussion at our last meeting, but it seems to me that from the standpoint of the council, we could easily argue that we don't have to have all four requirements for ecosystem specie components, but we could have, say, three of the four and then provide the rationale as to why that is justifiable justification in and of itself to be an ecosystem component.

The way the guidelines are written that is not clear. They tend to imply that you have to have them all. I'm not sure I would buy off on that. It seems to me it is a species and species and probably no level; it all depends on how they're being prosecuted in the fishery.

MR. TEEHAN: We've had a lively discussion on Action 2. Is there any other committee recommendation or comment on this? **We have a motion to make the preferred Alternative 3, Option A and B. All in favor signify by saying aye; all opposed same sign. The motion carries.** All right, any further discussion on Action 2? Mr. Chairman, I'll turn it back over to you.

MR. ROBSON: All right, we're going to ahead. The agenda kind of skips around a little bit on the actions, but I think it is reasonable enough to stay in order, so we'll go right now to Action 3.

MR. WAUGH: On your PDF document it is Page 38. Action 3 has several sub-actions in it. The first is MSY. The two councils each have slightly different definitions of MSY. Alternative 2 would have the Gulf Council adopting the South Atlantic definition. The third alternative is sort of where we've been heading with our new amendments.

That would have MSY equal the yield produced by fishing mortality at maximum sustainable yield or the proxy for Fmsy. MSY will be defined by the most recent SEDAR and Joint Scientific and Statistical process. We will have hopefully recommendations addressing MSY come out of the new stock assessment. Without those, I would suggest that we just make sure we've got the full range of alternatives included.

MR. ROBSON: Any discussion or maybe questions about this particular action and its alternatives from the AP members? Corky.

MR. PERRET: The new stock assessment is this fall; when do we get that?

MR. WAUGH: We will have the results available in late November and presented to the South Atlantic Council at our December council meeting and to the Gulf in February.

MR. O'BRYAN: Gregg, did I hear you correctly; you would prefer to have all three alternatives available at this point in time?

MR. WAUGH: Well, there is an ongoing consensus that we need to have at least three alternatives. If we get down to two, we run into NEPA issues, so I would suggest we at least leave three in.

MR. O'BRYAN: Okay, then as a point of order do we need a motion to that effect or does take no action in the three alternatives move ahead.

MR. ROBSON: If there is a consensus among both APs to move ahead and not take any specific action or leave these three as they are, I don't think a motion is needed.

MR. LESSARD: I believe that we would like to see the stock assessment before this changes and send this out with the three, and I would like to call the question for discussion.

MR. SANSOM: I would like to make sure that any action we take today doesn't imply that, if you will, we're supporting anything until we see the stock assessment and the SEDAR. We're not suggesting that we want to go in any particular direction. Is that what your motion says, Karl; not that we're staying with, but that we don't have a recommendation until –

MR. ROBSON: Well, Karl, if your AP wants to make that in the form of a motion that would be acceptable, I think.

MR. SANSOM: Okay, I would like to make the motion that we have no recommendations as an AP until we see the stock assessment and the SEDAR.

MR. ROBSON: And just for clarification, we're talking now just about the MSY alternatives?

MR. SANSOM: I think we'll look at all of them because they all relate to the same thing and we can't make a decision until we see those or a recommendation. Otherwise, we don't know what we're asking ourselves to be subject to in the future because everything seems to relate to something else in these three motions that haven't been determined yet. It is kind of like the state agreeing to future federal regulations.

MR. WAUGH: Jerry, you're talking about for the three items under Action 3, for MSY, OY – actually four – overfishing threshold and overfished threshold?

MR. SANSOM: That's my understanding, yes.

MR. ROBSON: All right, Karl, for our benefit maybe we can restate the motion just so it's clear.

MR. LESSARD: The motion is that we address the current definition of MSY, optimum yield, overfishing threshold and overfished threshold after the stock assessment comes out and the SEDAR Report. Jerry made the motion; does someone want to second that?

MR. STAFFORD: Yes, I will second it.

MR. LESSARD: Any discussion? Let's call the vote. All in favor; all opposed. The motion passes.

MR. BURTON: I would like to make the identical motion so very well put by Karl and ask for a second.

MR. O'BRYAN: I'll second.

MR. ROWE: Discussion from the South Atlantic. All in favor. So passed.

MR. ROBSON: All right, council committees, discussion on these criteria. I guess we'll start with the South Atlantic Council. Roy.

DR. CRABTREE: Well, I tend to agree with the AP that we're not going to make a great deal of headway on this until we see what comes out of the recommendations, but I do think in terms of MSY now it is probably not a sufficient range of alternatives because the only proxy it puts out is 20 percent SPR.

If they're not able to estimate MSY directly, we're going to have to look at a wider range of proxies than just 20 percent SPR. I would think we would need to look at 30 percent SPR or Fmax. I don't know what else, but we ought to get some recommendations that come out of the

assessment group at that point. I'm okay with leaving it that until we get that information and revisit and see what kinds of recommendations we have.

MR. WAUGH: The intent here with Alternative 3 would be to consider whatever proxy comes out of the SEDAR process for MSY, so it's not just the 20 percent SPR, but if they come up with some other proxy that they think based on the best available information we should use, that is what would be recommended here under Alternative 3. We've done this on some of our other amendments like Snapper Grouper Amendment 16.

DR. CRABTREE: And that's fine; it is just hard to make much progress because we don't know what that proxy is and they may come up with a couple of different proxy choices; we don't know. I don't know that we can do much with this until after we see what they come up with.

MR. ROBSON: Karl, this was the council committee discussion; did you have a specific question for the committee?

MR. LESSARD: I would like to ask this because this seems like a very pertinent question. If we're looking at all our recruitment coming from other parts of the Caribbean, why do we have to even address an SPR?

DR. CRABTREE: Well, because the basis of the Magnuson Act is managing towards the maximum sustainable yield, and so we're going to have to come up with – if we can't estimate maximum sustainable yield directly, we will have to come up with some sort of proxy that serves as the basis for maximum sustainable yield.

It may be that 20 percent is fine, but I haven't seen any analysis on that. It has been the proxy for the whole time I've been involved with the council process, which has been over ten years now. I don't know how hard anyone has actually looked at that number. It may or may not be the best proxy for it.

We've had a lot of recommendations of late from our SSC towards going towards more conservative proxies. I don't know what will come out of this, but you have to have some basis. It will have to be changed – I mean you won't be able just to say the proxy is 20 percent SPR. You'll have to actually put an estimate of how many pounds that equates to in terms of the maximum sustainable yield, but it is a required component of FMPs.

MR. ROBSON: All right, we're still on South Atlantic Council discussion; is there –

MR. SANSOM: Mr. Chairman, could I ask him a question? As a member of the AP, I'm just trying to understand. Roy, how does an SPR on a Caribbean-wide stock that we have no management control over the SPR of as it results to our fishery and our landings – how does our establishment of an SPR have anything to do with our management? I'm struggling to understand. I know you say that the Act requires it, but how can the Act require something of a series of foreign governments?

DR. CRABTREE: Well, because it will become the basis for the ceiling for the overfishing and overfished definitions. If we maintain 20 percent or 30 percent SPR, whatever SPR it turns out to be as the proxy for MSY, then that would then be the basis for the fishing mortality rate that would determine overfishing; or, if we decide to estimate an overfishing level, then it would be the yield you would expect if you fished at that fishing mortality rate, and that would then be the level of which overfishing is determined, and that also then becomes the basis for what the ACL is going to be. It will also be the basis for determining what the overfished threshold for the stock is.

MR. SANSOM: I understand all of that definitional stuff, but as it applies to this fishery, where we basically indicated that nothing we do in the United States is going to have an impact on the resource or our landings, how does that relate?

DR. CRABTREE: I don't think anyone has determined that. You've got the potential that recruitment to the Keys is being compromised by things going on in other parts of the Caribbean, and that may or may not be the case; but if the fishing mortality rates in the Keys are too high, it would reduce the yields that you're able to get from the fishery, and that is not allowed under the Magnuson Act. Now, I'm not saying that is happening or is going to happen, but it could happen.

MR. SANSOM: Okay, if we're talking about – then that's not related to SPR.

DR. CRABTREE: No, it is related because SPR would be then the fishing mortality rate. Remember, SPR, as talked about here, is the fishing mortality rate essentially, and that would become the fishing mortality rate and it would be the basis for overfishing. If it is higher than that, you're overfishing; if it is below that, you're okay.

It also would be the basis for determining the yields and the overfishing limit that would be the basis for the ACL, so this is a fundamental choice that will have to be made here at some point, and this will be the choice that will basically drive what the ACLs are going to be. I'm assuming that those will come out of the stock assessment and that we won't end up using something like average landings. If we use average landings or something like that, then that's a whole different ballgame, but I don't believe that will be the case in this fishery. But whatever is chosen for this proxy here will be fundamental to the whole management of the fishery and what the magnitude of the ACL is.

MR. SANSOM: I understand that. I'm just trying to make sure we have something to do with it.

DR. CRABTREE: Well, it is something you have to do with because you're going to end up setting quotas and catch levels that you will have to manage the fisheries with.

MR. SANSOM: Roy, I didn't mean something the council can do with. I'm talking about something we as managers can have something to do with that is related to something in reality that if we do this it will have that impact.

DR. CRABTREE: It is because it is not contingent upon what level of recruitment is coming into the fishery. This is a per-recruit measure that is independent of how much recruitment is coming in the fishery. Whether or not recruitment has declined as the result of various things or has not declined with it, the SPR is independent of that.

MR. WAUGH: I certainly don't want to get into prejudging what is going to come out of the assessment, but the previous SEDAR assessment did not yield any biomass-based values because of this issue of it being a Caribbean-wide stock and the need for a Caribbean-wide assessment. Certainly, based on the results that were presented this morning, there is nothing there to indicate that has changed, so I would suspect coming out of SEDAR we will only get fishing mortality rate estimates and not any biomass-based estimates. It will be up to the SSC and councils to come up with proxies for our biomass-based values like MSY.

MR. ROBSON: All right, for the South Atlantic Committee there was a suggestion that we may need to look at whether there is a sufficient range of alternatives. Is that something that the council staffs can look at in terms of following through on that concern?

MR. WAUGH: Well, what you have before you is a product of the two staffs working with the NMFS regional staff on the IPT, so this is our collective recommendations not just for this action but for each action as a sufficient range and an appropriate range of alternatives. Certainly, Carrie is here and Sue is here representing their respective staffs; and if there is any disagreement with that, they can clarify it.

MR. ROBSON: Roy, you had brought up that issue; do you want to make a motion?

DR. CRABTREE: Well, it depends on what comes out of the assessment. If we end up saying it is status quo or 20 percent SPR, then I'm likely going to tell you that is a not a sufficient range and that is adequate and you're going to have to come back and do it. If what comes out of SEDAR is two or three other options for proxies, then I think you're fine.

I don't know what is going to come out of SEDAR, but I don't think you can say that no action is a 20 percent SPR and Alternative 2 is a 20 percent SPR and say that is adequate. Until I know what comes out of the assessment recommendations, I don't know what Alternative 3 means. It is, as written, ambiguous. I understand what the intent of it is, but as a practical matter it doesn't convey any information at all to me as to what the actual proxy is; so until I see that, I don't know.

MR. ROBSON: Well, given that, is it the consensus of the Atlantic Committee to leave these in place and make no recommendations at this point? Is there anybody who would want to make a motion to the contrary? Seeing none, I'm going to see if the Gulf Council Committee has any discussion on Action 3.

MR. TEEHAN: Being tail-end Charlie isn't all that bad, is it, guys. You've heard the discussion of the APs; you've heard the discussion of the South Atlantic Council to not take any actions on Action 3 and the suite of alternatives dealing with MSY, OY and overfishing threshold; any

discussion; any thoughts. Do I take that to mean that you agree with the discussions that we've had so far? Mr. Chairman, I'll turn it back to you.

MR. ROBSON: All right, staff can walk us through Action 4, please.

MR. WAUGH: This is on PDF Page 42 in Attachment 2, the draft amendment, and right now –

DR. CRABTREE: Mark, can we back up a minute, I'm sorry. The overfished thresholds I believe –

MR. ROBSON: Well, all the discussions heretofore have been sort of covering all of the management –

DR. CRABTREE: Well, this one is a little different and I have a couple of questions. Alternative 2 says adopt the Gulf Council overfished threshold for the South Atlantic, which would mean we're going to set an MSST of 15 percent transitional SPR, and then it says "with the additional modification to static SPR". I don't know what that means.

MR. ROBSON: Gregg, can you or Carrie clarify it, please.

MS. SIMMONS: These still need a little bit more work as far as what was approved in 1999 for the Gulf Council, so I have to go back. I got some clarification from Shep and I guess maybe Monica knows about that, too. Because the biomass estimates weren't originally approved that are written in here, only the overfishing threshold was, so what we were trying to say here is that the minimum stock size threshold of 15 percent transitional SPR, which is a spawning stock biomass per recruit, was not approved because it was a biomass estimate because it was based on SPR. The difference is it's on a per-recruit basis.

But then the South Atlantic's definition was approved for static SPR, so we were just basing it on the original – what was originally written in the Gulf proxy and saying that you would modify it to static, which is an equilibrium spawning potential ratio and is used more traditionally in stock assessments and projections into the future.

DR. CRABTREE: Yes, but not for overfished; and I can just tell you if you submit a static SPR for MSST, it is going to be disapproved because you can't use that for an overfished threshold. I suspect if you submit a transitional SPR as an overfished threshold, there is a good chance that won't fly either, but we'll have to check on it.

I think the best way to treat the overfished thresholds for spiny lobster right now is that they're undefined because I don't think anything that was really submitted for a minimum stock size threshold would comply for the guidelines for either council. I don't think the agency is going to approve SPR as a minimum stock size threshold. You could potentially make an argument for transitional SPR but my suspicion is that neither one of those SPRs is going to be judged to be adequate for a minimum stock size threshold, but certainly not static SPR.

MR. WAUGH: So the suggestion there would then remove Alternative 2 to the considered but rejected appendix.

DR. CRABTREE: Yes.

MR. WAUGH: And that would just leave us with two alternatives; is that all right or do we need to come up with another one?

DR. CRABTREE: Well, I think we're going to have to come up with some other ones, but I'm not sure we're going to get very far on that until we have something from the assessment. **I would go ahead and move that Alternative 2 be moved to considered but rejected.**

MR. ROBSON: **All right, we have a motion on the South Atlantic Committee to move Alternative 2 for the overfished threshold to the considered but rejected category. Is there a second? Ben Hartig seconds. Is there any discussion on that motion? Show that motion of the South Atlantic Council Committee approved.**

DR. CRABTREE: Mark, I think the best you could do now in terms of erecting some alternatives, in almost all of our amendments we have come at MSST, put alternatives of 85 percent Bmsy, 75, 65 – I think you can put something like that in there. Now, if Gregg is correct and we can't estimate any biomass for anything, then we're going to have to rethink what we're going to do with it. Maybe it has to stay undefined at that point, but at least for now I think you could erect something like that; and then if they can come up with a biomass estimate, at least we'll have something.

MR. ROBSON: Unless the Gulf Council Committee wants to address that or if this is adequate for direction to staff, we will move on.

MR. TEEHAN: It appears that the majority of my committee has bailed out for cookies, Mr. Chairman, so the remaining members, do you concur with the chairman's remarks?

MR. ROBSON: All right, I think we can move on. We have direction to staff based on that motion from the South Atlantic Committee. Now we're moving on to Action 4. Gregg or Carrie, if you can walk us through that.

MR. WAUGH: Okay, Action 4 is on PDF Page 42. The current position is that we do not have sector allocations in our spiny lobster management plan. We're basing these alternatives on the alternatives that were developed by the State of Florida Spiny Lobster Advisory Board. Alternative 2 is an allocation that is based on the better year, which is the 1998-1999 fishing year. Some of this detailed rationale and discussion is shown on PDF Page 44.

Alternative 3 is using the ten-year average from the 1993-1994 fishing year up to the 2002-2003 fishing year. You can see that these allocations changed slightly from Alternative 2 to some of the others, but three through six are not huge differences. Alternative 4, those allocations are based on using 1993-1994 as the first year for the baseline. That was approved by three of the fourteen advisory board members. Alternative 5 represents the consensus recommendation of

the advisory board, and that is to allocate the ACL 72 percent to the commercial trap fishery, 5 percent to the commercial dive fishery, 1 percent to the commercial bully net fishery and 22 percent to the recreational fishery.

This is action on average of Alternatives 2 and 3 and that was approved by 11 of 14 advisory board members. Alternative 6 is an average of Alternatives 2, 3 and 4 and was approved by 5 of the 14 advisory board members. Now we got an update to landings that adds a year and changes several of the earlier years, so that may change some of these percentages slightly.

But, again, these are the alternatives that were discussed and recommended by the advisory board; and thus far we've had discussions that given allocation is such a hot issue, the fact that the state went through several years of work, we have their administrative record, we have all their reports, and we've presented some of that information to you in the past, so the alternatives that you see before you here are based on the recommendations of the advisory board.

Now the APs should discuss whether they want us to update the numbers in these alternatives based on the revised landings that we got or just go with these as your alternatives. That would be something for the committee to give us guidance on as well. Certainly, we will analyze the impacts of these once we get some idea of what the values are that are going to come out of this SEDAR assessment, but right now we would like to get an idea of the range of alternatives that you all want us to analyze.

MR. STAFFORD: Having added this 2009-2010 landings to the mix, I would say that this commercial dive percentage is probably more accurate. The whole casita illegal diving situation was alleviated by two major busts in the Florida Keys by the feds, I guess, on casita divers. I think 2009-2010 reflects many of those guys not going fishing, not taking illegal lobster. It goes back closer to the 1992-1993 situation or 1993-1994 percentage for commercial diving before the introduction of accurate GPS machines. **I would like to add an Alternative 7 of commercial trap 73 percent; commercial dive, 3 percent; bully netting, 1 percent; and recreational, 24 percent.**

MR. SANSOM: I will second that for discussion.

MR. ROBSON: Karl, I think you have a motion and a second on your AP.

MR. LESSARD: Yes, I do, and Bob would like to speak on this issue.

MR. STAFFORD: And that's more reflective of the figures we're given of –

MR. LESSARD: For those of us from the Keys, that's real good math.

MR. STAFFORD: Well, we'll go to 72 on the commercial trap.

MR. GAITANIS: Myself, I would like to go with Alternative 1, no action, and I base on the fact that it is my understanding – correct me if I'm wrong – but Florida Fish and Wildlife has not accepted this and created a rule which has delegated any percentages to any user group as yet. I

would think it would be a little presumptuous for us to do it when the original reason for the meeting was to turn over the entire fishery to them. I also question using these percentages which came out of the South Florida Fishery primarily, the Keys Fishery, and applying it to all of the states from Texas up through North Carolina, I think it is.

One would assume that most of that fishery is recreational; and if those numbers have not been added in, then it skews away from the recreational fishery. As I had earlier said, I think that some of the numbers that should be attributed to the recreational fishery through those folks who are not license purchasers has not been included in this. My basis is we do this like we did the one former, we put it off until we have a better handle and at least until Florida and Fish and Wildlife accepts this parameter of setting percentages for the user groups.

MR. ROBSON: We've got a motion –

MR. LESSARD: We have a motion on the floor.

MR. ROBSON: – from the Gulf AP.

MR. LESSARD: Is there any further discussion? Do you want to call this question? We'll have to call this question for a vote. All in favor aye; one opposed. The motion passes with one opposed.

MR. ROBSON: Is there discussion on the South Atlantic AP side?

MR. ATACK: The way I understand the numbers, if we go with that and the recreational catch is caught within the first month, right, because their percentage take was through the first month, right; so if we with that type of alternative, come September 1st they will have caught their limit, right?

MR. O'BRYAN: I kind of follow that same – well, first of all, we heard earlier today from Bill that the average ratio between total commercial and recreational was 76 to 24 percent, and then since 2001 it is 75 to 25 so it seems pretty stable so I don't really see a need to try to regulate this. I don't think the state has the money to be chasing around doing all this. I don't see how you're going to enforce it.

I agree with what the other gentleman said, but by the time you get the data to determine if you've met your allocation or not the season is basically over. By the time you guys do your survey and everything, they're done, so I'm not sure how you're going to enforce this. From my point of view, I think Alternative 1, no action, is appropriate.

MR. ROWE: Is there a motion on the floor?

MR. ATACK: Well, either that or you have to give the recreational a much higher percentage than what historically they got according to the data because the data doesn't really account for the whole year. It only accounts for the first month; unless you're going to catch the ACL as only monitoring the first month and not worry about the rest of the year.

MR. O'BRYAN: I just don't know how you're going to enforce this. If you send out a survey and say how many lobster did you catch, and by the way if you answer more than 12 we're going to shut you down, nobody is going to send that survey in again. I don't see any point to this. **As a member of the South Atlantic Advisory Panel, I'll make a motion for Alternative 1 to take no action on allocations.**

MR. ROWE: Is there a second?

MR. BURTON: Dr. Crabtree, is it required of the AP today to choose an alternative other than Alternative 1 at this time?

DR. CRABTREE: If you mean is there a legal requirement that you do that today, the answer is no. That is up to you to give advice to the council.

MR. BURTON: Regarding the Magnuson Act –

DR. CRABTREE: Well, the Magnuson Act requires annual catch limits for fisheries. It doesn't require that they be broken up by sectors, so that's up to you. I think that you do need to think about is this workable. For example, I assume if you break these up by sectors you're going to set ACLs for each of these sectors; and to take 1 percent of whatever the commercial ACL is and have a bully fishery quota, which is what it is going to amount to, and try to monitor that I think would be impractical and it is not clear to me what benefit comes from it.

Frankly, I'm not sure we'll be able to accurately monitor the 4 percent commercial dive quota. I think you need to think about how this is going to be done. Trip tickets, which are what you now have, are not going to be used to monitor these if we set up quotas. We'll have to set up a quota monitoring program or Florida will, but normally it has been NMFS that does the quota monitoring and that is usually based on dealer reports.

I think there are a lot of things you need to look at in terms of how this is going. I can see with the recreational fishery in the vast majority of cases all we can do with the recreational fishery is look back after the fact and say did they go over or not and then make adjustments accordingly. I don't think with what I know about the survey that they have, that in-season monitoring is something that could be done with that, so you're talking a look back after the fishery is over and see did the recreational fishery go over or did they not?

If they go over then their season the next year would likely be shortened in order to keep them from going over again. With the commercial fishery, it is very likely that you'll have a quota and it will be monitored as in other commercial fisheries; and once that quota is reached, the fishery would be closed in the EEZ. Then I think some discussion about the likelihood of whether Florida is going to recognize these quotas and how that is going to work out is in order because this could get real messy depending on how this goes jurisdictionally.

MR. BURTON: Very good; I believe that more than answers my question. I would like to second the motion on the table from the South Atlantic AP as to supporting Alternative 1.

MR. IRWIN: The rationale for – I believe it was Alternative 5 was the state's recommendation, the lobster board. The reason that was done – the rationale for it was because historically those were the averages over many years. With no control over how many licenses recreational and the diving was blowing up at the time, they would get more of a percentage, those numbers were set to kind of keep in check all the historical balance of the fishery.

MR. MANSFIELD: I think all my questions have actually been answered. What I'm hearing is we have no real requirement to do this, and I'm not sure what the advantage would be if we did get into something that we're required to do other than busy work. Should we pursue this or drop it, and I would say we should probably drop it. I agree with the conversation that we were hearing.

DR. CRABTREE: Bear in mind, though, if you go with a single ACL, if, for example, the recreational sector exceeds their, if their catches are too high one year, then if there is only one ACL, the accountability measure for the next year is going to affect everyone; or the vice versa, if the commercial fishery exceeds their catches, which if the council puts in place a quota, it is not likely to be very much. But remember if you have a single ACL and whichever sector goes over, then the payback is going to be shared by everybody, so that's what you're thinking about.

MR. MANSFIELD: I do understand that and basically I fit the world on a Bell Curve. I'm sure that's where your polls go; what is the error within your poll and can you find that bully net allocation within that error? I would question whether it would even show up as real.

MR. ATACK: Would there be an advantage then to just lump the trap commercial with the bully and the divers, just lump all the commercial together so you're not tracking three different quotas and then just leave the recreational as separate like a lot of other fisheries?

MR. ROWE: I guess, if I could make a comment to this motion, I agree that we take no action. The reason I say that is that it is going to be hard to control like everybody seems to be thinking. We've got things coming over the hill that may disrupt and we go real low due to, say, this oil thing; so as long as they stay under, everybody is happy, I guess. It just looks like it is another exercise and I don't know what the enforcement of it can do relative to the timing. The year is over with before they probably get all the data in.

MR. IRWIN: I could vote for no action today, but in the long run I think the fishery needs to be allocated because of what Roy said. When one sector goes over, when you have no control over recreational licenses, they could go up – and there was a trend prior to our lobster board, when we met, there was a trend going up very steeply with recreational licenses being issued.

With no control on that, you could eventually affect the commercial guys. If the recreational sector went way over the next year, especially if it was year after year, and they continued to go over, you could affect the commercial guys who are heavily invested in this fishery.

MR. ROWE: I'm a recreational diver and we don't turn in anything, so you never know how much the recreational really catches.

MR. IRWIN: Well, I would agree with that, Mr. Chairman, but they're pretty confident in their numbers on recreational catches. It only makes sense that if recreational licenses would go up, that their landings would go up.

MR. ROWE: Anymore comments? I'll call for a vote. What was the motion?

MR. O'BRYAN: Mr. Chairman, the motion was basically to recommend Alternative 1, which was no allocation.

MR. ROWE: Okay, we're going to take a vote on that motion. **All in favor raise your hand; all those opposed. We've got two opposed and the balance was for. The motion carried.**

MR. ROBSON: All right, for either chairs of the APs, are there any other discussions regarding Action 4? Roy.

DR. CRABTREE: The bully net fishery, I've fished for lobsters with bully nets. It has got a handle and a flat net. It's all in state waters, right; isn't the bully net fishery only in state waters? You would have to have a long pole for a bully net, so that is strictly just the state water fishery, which we would have no ability to close or regulate, anyway.

MR. ROBSON: All right, if there is no other AP discussion regarding Action 4, Bob Gill.

MR. GILL: Mr. Chairman, I just want to clarify that the Gulf AP added an alternative that gave no preferred; whereas the South Atlantic AP gave a preferred; is that correct?

MR. LESSARD: The Gulf AP recommended Alternative 7, which we added and we've made that our support of that alternative.

MR. ROBSON: All right, it is time for some council committee discussion. We'll let the Gulf Council lead off any discussions on Action 4 related to allocations.

MR. TEEHAN: Before we get into any discussion, I just want to make a couple of comments. I think there has been some good discussion from the APs about the pros and cons of this. A couple of observations that I heard over and over again was as far as getting down to these low percentages, they're going to be difficult to monitor if not impossible.

The standard errors on some of these things will be greater than what the percentage that we're allowing the fishery to catch. Commercial monitoring would be fairly easy, as it is in any other commercial quota system. I think in-season closures are possible, but they're totally out of the consideration in my opinion for the recreational sector.

I think Peter on the AP mentioned, and his point is well taken, that if you start regulating their allocation by FWI's recreational survey, you're going to get some very, very bizarre responses, if any, to that survey, and I think that particular mechanism of monitoring a fishery will go out the window. Having said that, would you like to have a little discussion on Action 4, which would be the establishment of allocations? Mr. Gill.

MR. GILL: I have two thoughts. One is a procedural question. I know it is getting a little long in the tooth today to ask this, but back I think it was Action 2 we had a difference between the committees of each council. The question I would ask staff or the chair of the joint committees is whether it helps staff to have the first committee that went revisit, having heard what the second committee did, just so that they have a better sense of direction and perhaps see if we can't coalesce on a common theme, which I would think would be easier for staff to deal with.

MR. WAUGH: Well, it's always easier if we have a clear definition, but at least we've got it narrowed down to two and we've got a bunch of actions that we don't have anything on yet. My preference would be to get guidance on the other actions before we run out of time today.

MR. GILL: It seems to me that this action has an undue number of alternatives as far as an awful lot of analysis with precious little to be gained. In one case the preferred alternative was no action, which is going to be there anyway. The other case of the AP was yet a seventh alternative. **I would move that we grant staff editorial license to shrink the number of alternatives to a maximum of three, including the preferred alternative of the Gulf AP.**

MR. TEEHAN: All right, we have a motion on the board. Gregg, go ahead.

MR. WAUGH: With all due respect, allocations are very controversial. I don't think it is appropriate to ask the staffs and the IPT team to whittle down allocation alternatives. If you direct us to, we certainly will, but I know speaking for myself I'd certainly prefer that not be delegated to staff.

MR. TEEHAN: Not having had a second but however having had some discussion, do you want to consider Gregg's comments?

MR. GILL: Well, it dies if we get no second, but I'll withdraw the motion.

MR. TEEHAN: You will withdraw the motion or do you want to look for a second?

MR. GILL: **I withdraw the motion.**

MR. TEEHAN: All right, is there any other further discussion on allocation from the Gulf Committee? No discussion; no recommendations, so I guess I'll turn it back over to you. Mr. Sapp.

MR. SAPP: It occurs to me that if we get an ACL that requires us to go in and consider reductions in the harvest of the recreational sector and the commercial sector and in fact we have to make allocation decisions, I know that our council within the last year passed principles and guidelines for how we deal with that allocation.

It gives us a list of alternatives that we can choose or some combination of those alternatives. Everything that we're talking about here is based on historical perspectives, and that's just one of the alternatives that we have to consider at the point that we talk about allocation. It makes all of this discussion about allocations to me seem like they're at best inappropriate at this point.

It seems to me like the logical thing to do is wait and see what we get out of the stock assessment; and if the stock assessment requires us to come in and do it, that we consider how and in what proportions then. It is going to be difficult when we're dealing with two different councils that have got two different methodologies for determining that allocation. I hate to think that we would define what that allocation would be at this point in time.

MR. TEEHAN: Do I hear a motion somewhere in there, Mr. Sapp?

MR. SAPP: No.

MR. TEEHAN: All right, any other discussion on this action? Mr. Gill.

MR. GILL: Following up on Ed's comments, I agree with that; and I think short of something unusual coming out of the assessment and the SSC where this is going to wind up as Alternative 1. That was the whole point of my previous motion was we're going through an awful lot of work and splitting hairs here in terms of percentages and making presumptions about what allocations might or might be, and those questions are not easily answered.

I suspect if we get to the point where we have to consider something other than Alternative 1 we're going to see a number of different alternatives than 2 through 7. That was the driving force behind my previous motion, but I completely agree, although probably not for exactly the same reasons as Ed, with his comments.

MR. TEEHAN: Not to belabor this issue but if your original desire was to whittle down the alternatives, you could pick three or four of them and make a motion or we could just let it lie. All right, any further discussion? Bob.

MR. ROWE: Before lunch I heard something on the floor that was talking like at the end of the season have you caught all of the legal lobster; everything from there on would be juveniles; that sets what you catch. If they're undersized, if that's a real statement, you're going to run out of legal lobsters at the end of the season; and no matter what you set, that determines it.

MR. TEEHAN: I think you did hear a phrase – and John Hunt can correct me if I speak out of turn, but I believe in a nutshell by the end of season most of the legal lobsters have been caught. I'm getting a thumbs up from John.

MR. GILL: I agree but depending on what we get for an ABC from our SSCs, if that bar is set low, then we get into the question about whether or not we need to do allocations. That is why Ed is exactly right; depending on what they come up with, if we leave the ceiling above where we're catching, we don't need to go down that road. I would agree with that, but if they do set it low, then we'll have to get into that mode in some portion, but this laundry list here of all these alternatives in my opinion is premature.

MR. TEEHAN: Okay, I think we've tromped this one around quite a bit. I'm going to go ahead and turn this back over to Chairman Robson and let the South Atlantic Council discuss it.

MR. ROBSON: I'll lead off a little bit of the discussion for the Atlantic Committee. I did hear some comments from AP members and from council committee members about concerns regarding tracking landings by such narrowly defined allocations. I'm wondering if we want as a committee to consider an additional alternative that would actually lump some of the commercial allocations into one commercial allocation. Roy.

DR. CRABTREE: **That was a motion I was going to make, which would be to add another alternative which would be to not subdivide the commercial allocation. If that was then selected, that would mean you're going to have a recreational sector and a commercial sector allocation and that's it.**

MR. ROBSON: Okay, there is a motion on the floor; is there a second? Seconded by Rita.

DR. CRABTREE: And my rationale is just that the bully net fishery is completely a state water fishery; and if we have an overall – landings, Bill, have been, what, on the order of 3 million pounds in recent years, 4 million, 5 million?

MR. TEEHAN: Total landings have been between three and five, somewhere in there.

DR. CRABTREE: So you're talking about a 30 or 40,000 pound quota that is going to only be in state waters, so I just don't see that there is any point in having a bully net quota. I suppose we could manage dive quota of 4 or 5 percent. It would be in the couple hundred thousand pound neighborhood. We've done that before, but I think most of the dive fishery is in state waters, isn't it, Bill?

MR. TEEHAN: I'm getting a no from John. My thoughts are that – and it gets into that touchy word "casita", but a lot of that is occurring in federal waters for the Gulf.

DR. CRABTREE: But most of the fishery is in state waters, period, correct?

MR. TEEHAN: Well, I don't think most of the fishery is an accurate statement. I think more than half in state waters is accurate, and I'm looking to John and Bill, but I'm thinking about 40 percent in federal.

DR. CRABTREE: But at any rate, I think there will be reasons to want to have a recreational ACL and a commercial ACL, but I think at least going to the bully net level of breaking this down is going too far.

MR. ROBSON: Rita, did you have a question to that point? Okay, John, can you enlighten us?

MR. HUNT: Well, yes, I can, Mark. First of all, you have to think of the dive fishery beyond the Keys because the larger part of the dive fishery, if you remove the casita fishery, does occur on the Florida east coast, and almost all of that fishery is in federal waters. I would say the casitas, based upon the work we've done so far, is largely – they're probably kind of half and half north of the Lower Keys.

DR. CRABTREE: And most of that dive fishery is Florida east coast, right? Is that included in your recreational survey or is your recreational survey just down in the Keys?

MR. HUNT: I thought we were talking about the commercial fishery? I was responding to a commercial question. Now, recreationally those estimates; that's a state-wide estimate.

DR. CRABTREE: Statewide, okay.

MR. HUNT: It includes state and federal waters but we don't distinguish between state and federal waters in the survey questions.

MS. MERRITT: I agree with Roy in that I think it simplifies matters to have just the two allocations, commercial and recreational, because of prior conversations we've had regarding splitting recreational into more than one allocation where we have charter differences in the landings' information that we had. In addition to that, I'd like to ask Carrie to what degree would these numbers be affected by those areas where the recreational bag limit sales are counted as commercial landings.

MR. WAUGH: I can take a stab at answering that, but if they're sold they're counted as commercial.

MS. MERRITT: Well, I know in North Carolina we have such a small amount that it probably wouldn't make a big difference in some of the percentages that are proposed here, but in some of the other states it may be very significant. Is your recreational percentage in Florida separated from your commercial?

DR. CRABTREE: Can they sell the recreational bag limit in Florida?

MR. TEEHAN: No.

MR. ROBSON: Is there any other discussion on the motion? Ben.

MR. HARTIG: Bruce, can I ask you a question. As we've been going through this section, I wondered about the dive component. I know you guys have got a limited entry into the dive component now and I wanted a trapper's opinion. Do you think that is going to keep that dive part of that fishery in line over time?

MR. IRWIN: Yes, I think there are sufficient laws now and law enforcement has stepped up enforcing the law now. I do and I think the recent arrests have really made a big difference, so, yes, I do think that the laws in place are going to be able to keep it under control. Does that answer your question, Ben?

MR. HARTIG: Yes, my only concern was an expanding dive fishery, and certainly in the last few years it has come back down to a reasonable percentage. If that continues, I see Roy's option working quite well in lumping all the commercial into one sector as long as one doesn't out-compete the other in time, and we can certainly address that.

MR. IRWIN: One comment; yes, I do agree it is that way now, but we should still keep a good monitoring system and see if it does grow we have to be able to come in and fix it right.

DR. CRABTREE: John, realistically, we're going to use your survey to gauge did the recreational go over their ACL or not and they're going to be accountability measures that will result from that. How much of a problem do you think that will be in terms of compliance with your survey? Do you think that will affect the outcome of your survey? I mean in the end if you think about it, all of our recreational surveys are self-reported and have that same issue with them.

MR. HUNT: Absolutely, and I have no idea what the recreational fishers' response would be, but it wouldn't be until after the first event happened, I wouldn't say that much.

DR. CRABTREE: Okay, that's a good answer.

MR. ROBSON: Okay, we have a motion on the floor for the Atlantic Committee. Is there any further discussion on the motion? Is there any opposition to this motion? The motion passes. Carrie.

MS. SIMMONS: Yes, just a point of clarification. Did you want to see the commercial allocation divided from the recreational allocation for each of these current alternatives or just –

DR. CRABTREE: Well, if we selected Alternative 1, then there would be just one ACL. Otherwise, we would select one of these alternatives and then also select this one, which would mean there would just be the sum of the three commercial sectors and the recreational and they wouldn't be split. Do you follow me?

MS. SIMMONS: Yes, but which sum do you want me to use, the preferred?

DR. CRABTREE: Well, I don't think we have a preferred at this point, do we?

MS. SIMMONS: The Gulf AP selected a –

DR. CRABTREE: But the committee would have to select a preferred and the Gulf AP didn't select it, and I don't know that the South Atlantic is going to select one, so at that point you don't have a preferred.

MR. WAUGH: I would think how we would have to do it is under this new Alternative 7, it would have subalternatives. Subalternative A would deal with the allocations under Alternative 2, just adding all the commercial together. Subalternative B would be using Alternative 3 and we'd just have five alternatives subalternatives.

DR. CRABTREE: Well, the way I envision it you would have to choose two alternatives. If you chose this one, we would have to choose one of those other alternatives in addition, too.

MR. WAUGH: Exactly, but just to show it and analyze it we would have subalternatives under 7 that corresponded to – if you picked Alternative 2 and picked Alternative 7A, that would lump it.

DR. CRABTREE: Yes, but you'd have to pick this in conjunction with some other alternative.

MR. ROBSON: All right, is there any other discussion on Action 4 from the South Atlantic Committee? All right, we will proceed and, staff, if could run us through Action 5, please.

MR. WAUGH: Action 5 begins on PDF Page 45, and we have got alternatives here, the no alternative. Alternative 2 would be to establish the ABC based on the South Atlantic Council's SSC Data-Poor ABC Control Rule, which is being presented to the council today. Basically, that is using ten years of landings.

Alternative 3 would be to establish an ABC Control Rule where ABC equals the OFL, which is the overfishing level. Alternative 4 would establish an ABC Control Rule where ABC equals some percentage of the OFL ranging from 65, 75 and 85. Alternative 5 would be an ABC Control Rule where ABC equals a percentage of the yield at the maximum fishing mortality threshold; and again at 65, 75 and 85 percent of the maximum fishing mortality threshold. Alternative 6 would be to establish an ABC Control Rule where ABC equals a percentage of the OFL, the overfishing level.

The percentage would be based on a risk of overfishing that for our other species has come from a P-star analysis, which is a probability analysis that is done during the stock assessment, and that range for a P-star of 0.2, 0.3, 0.4 and 0.5. This range of alternatives is being analyzed – this same list of alternatives will come up under mackerel tomorrow and then for all our species in the Comprehensive ACL Amendment as well.

DR. CRABTREE: When are we going to have the SSC's data-poor control rule explained? Is it going to be explained to the joint committees?

MR. WAUGH: Not today; it will be explained at the Snapper Grouper Committee Session of the Council as a Whole, which starts tomorrow afternoon.

DR. CRABTREE: Okay, can you explain to me – it is not clear to me how Alternatives 4 and 5 differ. It seems to me that the OFL is basically the yield at the MFMT.

MR. WAUGH: Yes, that is correct. I guess we put this in here just to make sure we had all the bases covered in case the maximum fishing mortality threshold was specified different from the overfishing level.

DR. CRABTREE: It seems that would only happen if you couldn't estimate F in a data-poor situation and you had to use some other – okay.

MR. PERRET: Gregg, refresh my memory why are we starting the ABC at 35 percent or higher; what is so special about 35 percent?

MR. WAUGH: Nothing; these are just ranges that certainly as our committees and councils have looked at it that we've used sort of as standard, 65, 75 and 85 percent.

MR. PERRET: But is the standard for a crustacean the same as for finfish?

MR. WAUGH: It certainly wouldn't have to be, no.

MR. ROBSON: Members of each AP, do have any questions or discussion regarding this issue or maybe more in the line of questions than discussion?

MR. O'BRYAN: This seems like a fairly heavy statistical number crunching; and if they're not going to explain the SSC Data-Poor Control Rule until a future meeting, I don't know if we have enough information to make a recommendation now or is technology sufficient to make an accurate recommendation. I would just kind of say we go ahead and kick this up to the councils.

MR. ROBSON: Is that the consensus of AP members before we launch off into a discussion with the APs? Do you want to defer on this one a little bit?

MR. O'BRYAN: Yes, please.

MR. LESSARD: Mr. Chairman, the Gulf Advisory Panel would like to make a motion that the ACL be set equal to the ABC, which is Alternative 4, Option A. Do I have a second?

MR. SANSOM: Wait a minute, you don't mean that option. It's Alternative 3.

MR. LESSARD: Excuse me, mine paper has changed. Mine was the one that was sent out in the beginning rather than the new one that is on the disk.

MR. ROBSON: Could you repeat the motion?

MR. LESSARD: **I'm going to have to remake it. The motion is establish an ABC Control Rule where ABC equals OFL; OFL can be set at the highest observed catch in a ten period, if my understanding of the Magnuson-Stevens Act is correct. Okay, the motion is establish an ABC Control Rule where ABC equals OFL; OFL can be set at the highest observed catch for the last ten-year period.**

MR. SANSOM: We believe that is Alternative 3, if we're reading the right paper.

MR. LESSARD: With a little thing thrown in there on what OFL equals.

MR. ROBSON: Did you have a second to that motion?

MR. SANSOM: Second.

MR. LESSARD: Is there any discussion from the committee, and the ten-year period we would like to use for setting the highest observed catch is from 1999-2009 seasons. Roy, I just want to let you know where we were setting OFL at.

MR. ROBSON: Are there any questions from council committee members of the AP motion?

DR. CRABTREE: Just so you understand, though, in the end the OFL is going to be what comes out of SEDAR and the SSC.

MR. LESSARD: Well, that's true but OFL can be set at that; and if the SSC says that it can, then it will.

MR. TEEHAN: Karl, if I understood your timeframe correctly, you're starting in 1999, which includes the highest year of catch that is on this table from '91 to 2010 of 10 million pounds; is that correct.

MR. LESSARD: That's correct. Any further discussion by the AP? **All in favor of the motion; opposed. The motion passes.**

MR. ROBSON: Are there any other motions or recommendations or questions of AP members? Seeing none, South Atlantic Council Committee, discussion on Action 5. We have move on to council committees. Did the AP still have some discussion?

MR. IRWIN: Should we vote on their motion or make our own motion?

MR. ROBSON: I think that is up to you.

MR. IRWIN: I'm good with the Gulf's motion.

MR. ROBSON: Does the South Atlantic Council AP wish to make a motion related to the motion that was just made by the Gulf Council AP?

MR. ROWE: The South Atlantic doesn't have any motion to make.

MR. IRWIN: I would like to make a motion to accept the Gulf's action motion. I can't read the motion from here.

MR. WAUGH: I'll read it for you if you can't read it, Bruce. **The South Atlantic AP's motion would be to establish an ABC Control Rule where ABC equals the OFL; OFL be set at the highest observed catch over the last ten-year period, and that ten-period is the 1999-2009 fishing year.**

MR. ROWE: Do we have a second?

MR. LESSARD: I'm a member of the South Atlantic Council AP, also, so I would like to second Bruce's motion.

MR. ROWE: Any discussion? **Okay, all those in favor say aye; opposed. It carries.**

MR. ROBSON: We were going to jump to council discussion of Action 5, so let's go ahead and do that. South Atlantic Council Committee, we're discussion of Action 5. We've heard the recommendations of the two APs. Is there any discussion regarding the ABC Control Rule?

DR. CRABTREE: Well, if I could, Mark, I think staff needs to look very carefully at Alternatives 4 and 5 and see if those really should be collapsed into one. I think they are effectively the same. Then I guess we'll come back in Full Council to the SSC's data-poor rule after it has been explained to us in a subsequent committee meeting. Until someone explains it, I don't think we have a basis for deciding whether we want that in here or not.

MR. ROBSON: Is that adequate direction for staff, Gregg? Ben.

MR. HARTIG: One more thing; I think Corky had an excellent idea on what may be appropriate for crustaceans. Instead of spitting out the 65, 75 and 85, as we go through this process and as the rest of the councils in the United States go through this process, we may find that those levels will be different for crustaceans depending on a one-year crustacean versus a multiyear-lived crustacean versus a deep-water lived crustacean. You've got red crab in the northeast, you've got other lobster species in California and such that are going to be managed under these same rules, so I guess in the longer term we could look at some different numbers and maybe fine tune them much better.

MR. ROBSON: So, no motions and we have some direction to staff to work on these alternatives from the Atlantic Council. Bill, anything from the Gulf Council Committee?

MR. TEEHAN: Okay, Gulf Council Committee, you've heard the discussion on the ABC and you've heard the motion that was made by the Gulf Advisory Panel to look at the highest year for ABC or overfishing level at 1999-2010. Any discussion on what has been previously discussed or any new thoughts? Mr. Gill.

MR. GILL: I guess I'd like to ask a question on why in Alternative 2 the data-poor ABC control rule was chosen. Is spiny lobster data poor; I would have thought differently?

MR. TEEHAN: I think I could agree with – I'm not quite sure why it would be considered data poor. Can Gregg answer that question or Carrie?

MR. WAUGH: Yes, the approach that the South Atlantic SSC has taken thus far is when they have – when they don't have biomass-based parameters, that is considered a data-poor species, and then it comes under the data-poor control rule. If you want a more detailed explanation, John Carmichael can come up and provide hopefully a little more input on that.

MR. TEEHAN: Mr. Gill, does that answer your question?

MR. GILL: No, but I'd like to follow on and that is as the action notes, the Gulf Council's SSC has not yet developed an ABC Control Rule, and Alternative 2 is, of course, relegated solely to

the South Atlantic's existing rule, so they may get another alternative arriving here given that the SSCs may not agree and may not come to one common ABC rule on spiny lobster. We may be seeing something totally different coming down the road and I couldn't tell you what that might be.

MR. TEEHAN: And would it be too much to assume that there is a motion there somewhere?

MR. GILL: Well, the only other option we'd put would be add an alternative to the establish an ABC based on the Gulf Council's SSC ABC Control Rule, but that seems kind of futile at this point in time to me.

MR. TEEHAN: All right, any further discussion on this particular suite of alternatives in Action 5? Seeing none and hearing none, I'll turn it back to the chairman.

MR. ROBSON: We're going to take a break.

MR. ROBSON: Let's have everybody try to get back to your seats. I think we need to go ahead and get started. Where we left off is we're still on Action 5, is that right, but we need to start now discussing setting the annual catch limit for Caribbean spiny lobster. It is 2.5.2; in the handout that was provided to everybody, it is the top of Page 6. Bob Gill.

MR. GILL: Mr. Chairman, my question is what is following the "and" back in the title of 2.5.2? It says "set ACLs and for Caribbean Spiny Lobster". I'm assuming it meant AMs, but there are on AMs, but perhaps delete the "and".

MR. ROBSON: Yes, I think it is just a typo. They have separated out the ACLs and AMs so it probably was a reference to both of those at one point. All right, are the members of either AP prepared to discuss this? It looks like a fair amount of the Atlantic AP is here. Do you have any comments, questions or concerns regarding ACLs? Again, these are alternatives that would go into the document.

MR. ATACK: I would assume in Florida they would not want to try and shorten the season, I'm guessing, because of the recreational. I don't know how you guys feel about how you would want to account for an average. Would you want to reduce bag limits or would you rather have a shorter season?

MR. ROBSON: Well, just to clarify right now, this particular alternative is just discussing the annual catch limits and not the accountability measures that would kick in to correct for those; just the annual catch limits. We're looking at just 2.5.2.

MR. MANSFIELD: I guess this would go to Gregg. Gregg, isn't this part of the mandate; doesn't the Magnuson Act require us to do this, set the ACL or not?

MR. WAUGH: Yes.

MR. MANSFIELD: Then that's the answer we have to pursue.

MR. WAUGH: This is on PDF Page 47 of your amendment document.

MR. ROWE: Karl, do you have, as a member of ours, have any questions?

MR. LESSARD: I as a member of the South Atlantic do not have any questions at this present time, Mr. Chairman.

MR. ROBSON: If there are no AP comments at this time, we can move on to council committees. Unless I hear something in the way of – is there anything specific regarding the ACLs from the AP?

MR. ROWE: I guess we could put Alternative 1 at this time.

MR. BURTON: Did the state panel consider this subject? If so, what was their preferred alternative?

MR. ROBSON: The Lobster Advisory Board that you're referring to did not take up the issue of ACLs or accountability measures. This is something that's required under the Magnuson Act. For the federal fishery management process, it has to be in place by 2011, but we did not discuss it at the state level.

MR. TEEHAN: Yes, the advisory board was prior to any ACL recommendations or requirements by the Act, so it was not appropriate for them to discuss something that wasn't on the table at the time.

MR. ROBSON: All right, I think what we need to do is move on in the absence of any specific AP –

MR. ROWE: The South Atlantic has no comments at this time on 2.5.2.

MR. ROBSON: All right, George, did you have a comment or were you just suggesting we move forward?

MR. GEIGER: **Well, for purposes of consistency, in Alternative we have again identified recreational and commercial diving, bully netting and commercial trapping. Why wouldn't we just have two ACLs, one for the commercial sector and one for the recreational sector? I'll make that as a motion.** In addition to that, Gregg, could we include taking Alternative 4 and calling the new motion Alternative 5 and moving Alternative 4 to the considered but rejected – obviously not.

MR. HARTIG: Second.

MR. WAUGH: Well, we've got allocation alternatives that would allocate to the recreational and commercial diving, bully net and commercial trapping, so we really need to keep this alternative here to match that.

MR. LESSARD: May I ask a question of a point of order, please? Since I only have three of my five members, will we be allowed to make a motion and vote with only three out of five? Yes. Okay, I was not sure of this or how to proceed; but now that I do have three, the Gulf AP would like to make a recommendation.

MR. GEIGER: Based on the staff's explanation, I understand and I'm ready to withdraw that motion with the seconder's approval.

MR. ROBSON: All right, thank you, George, I appreciate that. Karl, would you like to proceed?

MR. LESSARD: Okay, the Gulf AP would like to recommend Alternative 4, Option A, which sets an annual catch limit for each sector and gear type based on allocations from Action 4, and Option A is ACL is equal to ABC.

MR. STAFFORD: And I'll second it.

MR. LESSARD: Bob, would you like to discuss this option?

MR. GAITANIS: Well, the only question I have is would you lump the various commercial gear types into one like we did previously?

MR. LESSARD: **If my seconder will go along with it, I will be more than happy to modify my motion to the 76 percent commercial and 24 percent recreational.**

MR. STAFFORD: Just one question here and maybe Roy can answer it. Is there any way we can get away from ACLs? If you gave over management to Florida, does that do away with ACLs? If the Gulf Council and South Atlantic Council steps out of it altogether, can we get from ACLs?

MS. SMIT-BRUNELLO: If the councils withdrew the Spiny Lobster FMP, then the state of Florida wouldn't be required under the Magnuson Act to issue ACLs or establish ACLs.

MR. STAFFORD: They would be?

MS. SMIT-BRUNELLO: Would not because the state would be managing it and the federal law wouldn't be involved. If the idea was to delegate a portion of the plan to Florida to manage, you would still have to comply with all the requirements of the Magnuson Act, and the Magnuson Act requires that annual catch limits be established, so you would have to do it that way, too.

MR. STAFFORD: So it's all or nothing, right?

MS. SMIT-BRUNELLO: Right.

MR. STAFFORD: Okay, well, back to the other motion, I'll support that; that's fine to me.

MR. LESSARD: We already had the motion and I modified it. I'm like Bruce, I can't see that far.

MR. WAUGH: Do you want me to read it for you?

MR. LESSARD: **Recommend Alternative 4, Option A as our preferred, which is 76 percent commercial and 24 percent recreational. I guess I should call the vote. All in favor aye. The motion passes.**

MR. ROBSON: All right, thank you. If there is no further discussion from the APs, we will go back at this point to the South Atlantic Council Committee discussing ACLs. George, did you want to follow up on your motion that you withdrew?

MR. GEIGER: **Yes, I would like to make a motion that we have separate ACLs for the recreational and commercial sectors.**

DR. CRABTREE: If we select in the previous action to only have recreational and commercial sectors, then isn't that what Alternative 4 would do?

MR. WAUGH: Yes.

DR. CRABTREE: So it's not clear to me why we need to add another alternative unless I'm missing something, George, that I'm not thinking of.

MR. WAUGH: Mr. Chairman, I apologize, we didn't word this as clearly as it should have been. Alternative 4 will set the ACLs for each sector and gear type. If you read it without the parenthetical statement based on allocations determined in Action 4, what we gave as an example was recreational, commercial diving, bully netting and commercial trapping; but now that you've added another alternative that would just have two sectors, that two-sector alternative needs to be added in here. Whatever decision you make in your preferred alternative for Action 4, which is the allocations, that would translate into here. If it is just two sectors, it will just be two sectors.

MR. ROBSON: George, did you have any other questions about – is there a second to the motion? Rita seconds. Is there discussion on this motion? Roy.

DR. CRABTREE: Well, based on what Gregg said, I don't think we need it, so I guess we can just vote.

MR. GEIGER: Well, I guess I'm thickheaded today; explain it again, Gregg, I just don't understand how it equates to the same thing.

MR. WAUGH: Okay, the way we had Action 4 all the alternatives had the four sectors except Alternative 1. These are the recommendations that came out of the state advisory group, so they had four sectors. We just inserted those four sectors into the ACL alternative here where we said "that is" and listed them.

You've now added a new alternative that would only allocate to two sectors; so if you make that your preferred in Action 4 that you're just allocating to recreational and commercial, then Alternative 4 would track that.

Alternative 4, if you read it without the parenthetical statement, it just says based on your allocations as you determine in Action 4, that is how you're going to set the ACL for those sectors. If it's just two sectors, then you have two sectors here instead of the four. Maybe someone else could try explaining it.

MS. SIMMONS: Yes, we would just take "that is" out and base it on whatever the preferred alternative says in Action 4 that is selected by the councils. I think what is confusing is the "that is" currently.

MR. GEIGER: **Yes, okay. All right, so I withdraw that motion as well.**

MR. ROBSON: All right, the motion is withdrawn and the seconder concurs. Is there any other action regarding ACLs from the Atlantic Committee? Are we okay with what we've got here? All right, Bill.

MR. TEEHAN: Gulf Committee, you've heard the discussions previously from the APs and South Atlantic on ACLs. They have chosen a preferred. Any discussion or any comments?

MR. GILL: This fishery has been well managed for years. It is not in biological constraints or problems. It was pointed out by John this morning that basically with an unlimited amount available, we fish it out every year and it is still biologically okay.

The council is going to be constrained to whatever ABC comes out – and I shudder to think what that might be; but having said that it can go no higher than the ABC, so **I move that Alternative 2, Option A be our preferred.**

MR. TEEHAN: **So we have a second? Seconded by Mr. Perret. Any committee discussion on the motion? We have a motion for Action 5 to set Alternative 2, Option A as the preferred on the board. All in favor say aye; all opposed like sign. The motion passes.** Any other discussion on ACLs? I'll turn it back to Chairman Robson.

MR. ROBSON: Okay, moving on, our next section of alternatives deals with setting annual catch targets or ACTs for lobster. I will open the floor to AP discussion.

MR. ROWE: Anyone have a motion for the South Atlantic?

MR. ROBSON: It maybe would be helpful, too, Gregg, is you could just very quickly brief everyone on the ACL/ACT, whether we're required to set ACTs; could you give them a little of information?

MR. WAUGH: We are not required to set ACTs. This is optional to the council. This tries to get your implementation uncertainty. If you feel you can't track – for instance, if you were to go

with allocating the two sectors, the recreational and commercial, if you felt that you could adequately track the landings of those two sectors, then you would not necessarily need to set an ACT.

If you had concerns about one or both of the sectors in your ability to track the landings and not exceed your ACL, you might want to step down some and set an ACT, an annual catch target, so that you would ensure that you did not exceed your ACL and result in overfishing.

MR. ROBSON: Essentially it is recommending some form of a buffer to your catch limits.

MR. LESSARD: **The Gulf AP would like to make a motion of Alternative 1, no action; and I'm sure after we have a second, we will be able to explain why.**

MR. STAFFORD: I'll second it.

MR. LESSARD: After looking at the fact that this is not a required action under the Act, we feel at the present time that it is not something that is necessary to address. Any questions? Hearing none, we're going to call the vote. **All in favor aye; all opposed. The motion passes.**

MR. ROWE: South Atlantic, do we have a motion?

MR. ATACK: **Motion to make the same motion as the Gulf.**

MR. ROWE: Is that Alternative 1?

MR. ATACK: **Alternative 1, no action, do not set ACTs.**

MR. ROWE: That would be essentially Alternative 1. Is there a second?

MR. BURTON: Second.

MR. ROWE: **Is there discussion? All in favor. Okay, approved.**

MR. ROBSON: Thank you, APs. Bill Teehan will initiate discussion on the Gulf Council Committee.

MR. TEEHAN: All right, committee, we have the top of setting the annual catch targets. The APs have selected Alternative 1, no action, as their preferred. Mr. Gill.

MR. GILL: I reiterate my comments from the ACLs, so I move Alternative 1 be our preferred.

MR. TEEHAN: **We have a motion that Alternative 1 be the preferred; second from Mr. Perret. Larry, do you have a comment?**

MR. SIMPSON: Yes, what would be the disadvantage of selecting Alternative 2 since in the previous motion we set for the entire fishery? This just basically sets up and lays out the buffer.

I'm not sure, even though it is not required as some people say, that it wouldn't be advantageous to select Alternative 2.

MR. TEEHAN: Mr. Gill, do you want to supply some logic?

MR. GILL: Well, again, given a biologically sound stock that we have no limits on currently and is still doing well, why force the fishery to fish at lower levels when there is no driving need to do so. I would argue that there is not much uncertainty in terms of catching an appropriate amount of fish; in this case, lobsters.

MR. SIMPSON: Well, my thinking is, Mr. Gill, in the overall sense I agree with you but there are peaks and valleys, and our job as managers is to try to smooth that out, but I agree that the trend lines are like you said. That would be my thinking.

DR. CRABTREE: I would be a little careful when you talk about no problems with the stock. If you look at the last stock assessment – and which I'm looking at a summary now – in fact the stock was below 20 percent SPR more years than it was above 20 percent SPR. Historically, the stock has undergone overfishing about half of the time.

It shows in the last assessment a real reduction in the fishing mortality rates in the final three years of the assessment, but those were the years when landings were falling off. If those really didn't necessarily reflect declines in fishing mortality rates, then this is a stock that has basically oscillated above and below the target level over time.

The advantage of having a target like that is it avoids triggering accountability measures. If you set your quotas and everything right at the annual catch limit and then you have overruns, you're going to be triggering accountability measures. You need to think about that because in all likelihood if you set the ACL and everything right there, you're going to end up with a hard quota and quota closures and things, which you may not want. You just need to think this through.

MR. TEEHAN: Any other discussion on the motion, which is to select Alternative 1, no action to setting ACTs, as the preferred? Any other discussion on that from the committee? All right, let's give it a vote. I have a feeling I'm going to have to weigh in on this one. **All those in favor of the motion say aye; all those opposed like sign. The motion passes.**

MR. ROBSON: South Atlantic Committee, any discussion or followup? Is there a question from staff?

MS. SIMMONS: Did Larry vote on the last motion?

MR. SIMPSON: No.

MR. ROBSON: All right, is there South Atlantic Council Committee discussion on ACTs?

MR. GEIGER: Mark, for all the reasons that Dr. Crabtree elucidated upon, my take from the presentation today was not a stock that is totally healthy. Again, accountability measures are those things that kick in that could preclude a fishery from even occurring in the following year if in fact a sector or sectors exceed their allowable catch.

For those purposes, I wouldn't support no action. I just think it's dangerous and the size of the ACT is variable. It doesn't have to be large, but it certainly should serve and act as a buffer to preclude us from having accountability measures kick in, which when we get down there can be quite severe for the following year's fishery. **I would support Alternative 4.**

MR. ROBSON: And that's in the form of a motion?

MR. GEIGER: Yes.

MR. ROBSON: You're supporting that as the preferred alternative?

MR. GEIGER: As the preferred, correct.

MR. ROBSON: Is there a second? I'll second the motion for discussion purposes. Ben.

MR. HARTIG: Well, frankly, after seeing what the SSC – what we've gone through before, I believe there is certainly going to be enough buffers with the ABC. I'm inclined to go along with what the Gulf did, but we'll see what happens.

MR. ROBSON: Any other discussion from the committee? George.

MR. GEIGER: Again, this is a document we're taking to public hearing and certainly preferreds can be changed at any time. From my perspective, it is always a lot easier to back off after you go to public comment than it is to add on after the fact. We've got a stock assessment coming. You don't know what the condition is. I just believe it is easier to back off than it is to add on after the fact.

MR. ROBSON: Well, another option is just simply not to select a preferred at this time.

MR. GEIGER: Well, you're right and we can take no action and do not set ACTs. The problem is this is a public hearing document and the public needs to know in which direction we're leaning. If you go to the public and you tell them we're not going to set ACTs, it doesn't say at this time; it says do not set ACTs. Again, you're going to have to back up from that.

MR. ROBSON: **All right, all supporting the motion raise your hand; all opposed. The motion is disapproved.** Is there further discussion on the ACT alternatives? Seeing none, we will move on.

MR. WAUGH: Accountability measures are Action 6. This begins on PDF Page 50. There is a note here that more than one alternative option or suboption may be chosen as the preferred

alternative. Alternative 1 is no action; do not set accountability measures or AMs. Alternative 2 covers the in-season AMs. Alternative 3 talks about the post season accountability measures.

Option A deals with the commercial fishery having a quota closure. Suboption 2 is to implement a commercial trip limit when 75 percent of the commercial ACL or ACT is projected to be met. Option 2B deals with the recreational; the same thing, a quota closure, reducing the bag. The second subalternative is reducing the bag limit when 75 percent of the recreational ACL or ACT is projected to be met.

Option 2C lumps recreational and commercial combined. Suboption 1 would prohibit both recreational and commercial harvest when the commercial ACL or ACT or combined ACL or ACT is projected to be met. Suboption 2 would reduce the recreational bag limit when 75 percent of the commercial ACL or ACT is projected to be met.

In terms of post season AMs, if you go over in a season how do you adjust that the following season? Option A under the commercial is an ACL payback in the fishing season following a previous year's ACL overage, so you deduct the amount of the overage off of the following season's quota.

Suboption 2 would adjust the length of the fishing season. Option 3 would implement a trip limit. Option 3B deals with the recreational sector. ACL is a payback the following year, so you deduct that amount from the following year's quota. Suboption 2 is to adjust the length of the fishing season in the following year for the recreational sector. Suboption 3 would adjust the bag limit.

Option C would lump recreational and commercial combined. Suboption 1 would adjust the season length for all harvest of spiny lobster in the fishing season following an ACL overage. Suboption 2, the recreational and commercial ACL payback in the fishing season following a previous year's ACL overage. If you choose a combined ACL, then you deduct the amount for the following year.

We had talked about adding an alternative in here that prohibits sale, but there was some at least confusion in my mind. I thought that was prohibited but, Monica, if you could clarify that, I think in the state of Florida that the recreational bag limit cannot be sold, but, for instance, north of Florida the harvest under the bag limit could be sold consistent with state law.

MS. SMIT-BRUNELLO: Yes, and I believe you need a federal permit to be able to sell that bag limit; but the bag limit in federal waters in the South Atlantic, other than Florida, so off of North Carolina, South Carolina and Georgia it is two per person per day. That's true recreational, but it's the commercial limit as well. I think in the Gulf I believe it's six per person per day; but it is the same thing; it's in effect the commercial and recreational limit are the same.

MR. PERRET: Gregg, I've got two questions. I don't know if you're the right person to answer the first one. Does the system or would the system have the capability of establishing in-season accountability measures at this time or when implemented? That's the first question.

MR. WAUGH: Well, we would have to specify within the FMP how those quotas would be tracked. Certainly, that has happened in other fisheries where the recreational catch has been tracked, for instance, using MRFSS landings. We obviously don't have MRFSS landings here, but there is a data collection system in place that could be used.

MR. PERRET: I'm not real comfortable with that answer, but I thought I heard this morning, when the presentation was made by the experts in Florida, that could be a real problem getting the feedback quick enough for those sort of in-season adjustments or did I misunderstand?

MR. ROBSON: John, can you address that issue of getting recreational data, the timeliness?

MR. HUNT: Our last recreational survey has been right after Labor Day; and now that we've shifted over to internet-based surveys, I would say we would have a harvest estimate by Thanksgiving time, so that is partially through the season. In the case of the trip ticket data, it is usually about three months, roughly about three months after the month that it was harvested in is when it is edited; is that right? It's about right. Probably two months, a month and a half it is unedited data; and then after another month and a half it is edited data and considered essentially final.

MR. ROBSON: It can be still considered preliminary, I think, for some time after that; but in terms of the recreational harvest if the recreational data survey information isn't available until November, what percentage of the recreational harvest occurs prior to that data as a proportion of the whole year?

MR. HUNT: We don't know because we do our surveys and we estimate the harvest up through Labor Day and after that we have no reliable information on recreational harvest. We are using that first month of the season as a proxy for the recreational harvest.

MR. TEEHAN: I don't comfortable – and, John and Bill, you could correct me later if you want to, but I don't feel comfortable with using your survey as quota management especially if there is going to be in-season closures. That is sort of like the criticism that we have gotten over using MRFSS for fisheries management. It wasn't intended for that.

I don't think your survey necessarily is intended to be the trigger to close a fishery down. We certainly do have in-season closures for recreational non-commercial on amberjack, for instance, in the Gulf. It can be done but I would – MRFSS doesn't cover spiny lobster. I don't know whether the MRIP system will or not. Those are just comments.

MR. ROBSON: That is a good point. I did have Bob Gill.

MR. GILL: John, to that point, an issue from your presentation this morning, the sheet you handed out have the annual landings; and if you compare the infamous chart that had the recreational and commercial landings that got so much discussion and just look on a broad scale, the numbers for recreational roughly approximated what is on this sheet. Now this sheet, as I understand it, is total annual landings estimated, but total and not just – Bill is shaking his head no.

MR. HUNT: Okay, the recreational landings in that table come from our surveys and reflect the two-day sport dive season and the regular fishing season up through Labor Day of each year. We use that as a proxy for the full season. As I said this morning, we make the explicit assumption that the proportion of recreational landings and Labor Day each fishing season is essentially the same proportional relationship year after year after year.

MR. ROBSON: Does that answer the question.

MR. GILL: Yes, I'm still confused; thank you, Mr. Chairman.

MR. ROBSON: I think we need to get that clear, though. The actual amounts for the recreational harvest; are they extrapolated from the survey to be considered annual harvest or –

MR. HUNT: No, they are the estimate for the harvest for the time period the surveys cover. The remaining time of the season, there is no recreational data.

MR. MANSFIELD: John has told us a couple of times today that basically all the legal lobsters are caught within a couple of percentage points every year in Florida. That being said, if you don't have an ACT so you don't have anything to meet, wouldn't catch limits just die off as opposed to exceeding any limit that we're talking about here? What am I missing?

MR. ROBSON: I don't know if I can answer that question.

MR. WAUGH: Well, my comment was going to be along those same lines. When the Act was reauthorized, it put a new requirement on the councils to set an annual catch limit. Any poundage above that annual catch limit would indicate that overfishing was taking place. There wasn't a concurrent requirement that we couldn't change our data collection programs or that we had to use the existing data collection programs.

The other part of it is if you have to set a poundage limit that can't be exceeded, you also have to set a data collection program to ensure that you don't exceed your ACL and result in overfishing. We just don't want to/don't have the money to develop the data collection programs to meet this new requirement, and so we've fallen back to use MRFSS where it exists, and here in spiny lobster we don't have a mechanism that operates through the whole fishing year.

That leaves us in a quandary of what do we use to track it, but it doesn't to me how do we ensure we're preventing overfishing if we don't track the landings. I think that's why you've seen initially there was a lot of discussion, well, we won't be using MRFSS to track and close fisheries; and then lo and behold we use MRFSS to track and close fisheries. It is a new requirement and I think we have to specify new data collection programs to achieve and ensure that we don't result in overfishing.

MR. PERRET: I guess to summarize all that up or the way I summarize it is for in-season adjustments it would be difficult with the current data system. My second question is I don't understand under Alternative 3, Option C, a combined AM. If one segment or the other were to

go over, why would we want to penalize, if you will, the other segment? What is the advantage of Option C; why is it even in there?

MR. WAUGH: I think when you lump the two together, it is in large part because you don't have a handle on the recreational and so you're tracking the commercial and using that as the trigger for the entire fishery.

MR. ROBSON: It presents management challenges. Bob Gill.

MR. GILL: Gregg, to that point, in Alternative 2 you wrote Option C precisely that way. You did not write it that way in Alternative 3, which would suggest to me that you had a different thought process in mind; am I correct on that?

MR. WAUGH: I don't know. I would ask if either Sue or Carrie have anything to add there because I can't recall, honestly.

MS. GERHART: It may be that we thought that by the time we got to post-season adjustments, that we would have that recreational data from FWC and so therefore we could do a combined rather than just the commercial.

MR. ROBSON: Bob, did that answer your question? Corky.

MR. PERRET: Well, if you're assuming the problem with the recreational data, why do you even have the Option B? We have three sub-options under B on recreational so I guess somewhere you're assuming you're going to have data to either shorten the season the following year, payback or bag limit. It is separated there. I just don't follow Option C at all.

MR. ROBSON: Well, this may be a discussion for the council committees to have and follow up on that in detail. Did we get through all of the alternatives in terms of description? I think we did. Are there questions or issues related to the accountability measures that the AP would like to take up? I'm going to turn to the two chairs. Rita.

MS. MERRITT: I just wanted to clarify something here. When we were talking earlier about the accountability measure for no sale of the bag limit, as I understand Monica's answer it was that because we don't have federal permits for it, we can't put in that as an accountability measure; is that a good summary of what you said?

MS. SMIT-BRUNELLO: Well, I don't think so, but I must not have been very clear. The way I read the regulations, in the EEZ, other than off Florida in the South Atlantic, North Carolina, South Carolina and Georgia, you're limited to two – whether you're commercial or recreational, you're limited to two lobsters per day.

You're allowed to sell those lobsters if you have applied for and get a federal permit, and then you can sell them. It is my understanding in the Gulf that is true as well, although I'm checking the regulations because Carrie said she thinks that might not be so, but in the Gulf I believe the

amount you're allowed to have is higher. You're allowed to have six whether it is recreational or commercial. That's everywhere except in the EEZ off Florida.

MS. MERRITT: Okay, I'm with you on that, but my concern goes back to why we can't put that in when you're using numbers that basically are skewed because the counting, the actual counting of the numbers of recreational fish versus the commercial fish are off. Are you following me on that one?

MS. SMIT-BRUNELLO: You mean because similar to some of the issues the South Atlantic has addressed in terms of double-counting and other things if you catch it under a recreational limit and then you sell it? I don't know whether that's true for spiny lobster. It kind of makes sense that it would be, but you have Jim Atack from North Carolina saying that, well, there is not a place when you sell lobster in North Carolina – unless you write it in on your trip ticket, it is not going to be picked up. I'm not sure how –

MS. MERRITT: Right, and hear again, this may be such a small amount that it is not even worth our time to have to try to put in an accountability measure, but I was thinking of it in terms of some consistency with our other FMPs because we have been putting that in and we have been recognizing that there is that potential problem of either double-counting or misrepresenting the numbers for the basis of setting ACLs. It could work for or against one sector versus the other either in getting a higher ACL or in a payback scenario. That's my concern.

MS. SIMMONS: Just keep in mind again that no other state other than the state of Florida is tracking those recreational landings, so you just have some commercial landings from those other states. They're not being tracked recreationally so at this time I would not think there would be an issue with double-counting. Maybe Mr. Atack would help us with that, but I don't believe that is an issue currently at least in the South Atlantic.

MR. GEIGER: I agree with Carrie's assessment of the double-counting, but I also agree and concur with Rita that philosophically we have decided I think within the South Atlantic Council to prohibit recreational bag sales based on the desire to professionalize the fishery and the position this council took a number of years ago with regard to professionalizing the fishery and ensuring that we have separation between commercial and true recreational bag limit landings.

Whether or not it is a bag limit of two for the commercial and the recreational sector is immaterial. I think it is a philosophical question and we should attack it as such and maintain consistency as Rita suggested and at least include it for purposes of this public hearing document.

MR. ROBSON: We've kind of gone through the accountability measures at this point. I'm looking for some input from the AP. Karl.

MR. LESSARD: **Our AP has discussed this and we've decided that the best thing would be Alternative 1, no action, until after the stock assessment.** We also have until 2011 to address this issue.

MR. STAFFORD: I will second that.

MR. LESSARD: Any discussion from the Gulf AP? **All in favor aye; all opposed. The motion passes.**

MR. ROWE: The South Atlantic; do we have any recommendations?

MR. MANSFIELD: **I would like to make a motion that we follow suit with the Gulf Council AP on no action and do not see AMs at this time.**

MR. ROWE: Do I have a second?

MR. IRWIN: I'll second that.

MR. ROWE: Any discussion?

MR. BURTON: You know, 2011 is right around the corner. Hopefully, we'll get this stock assessment before we're too deep into 2011, but we are going to have to make these decisions. From a personal point of view, if the recreational catch is gone over, it would be less painful to go ahead and stop it that year rather than affect the next year, but nobody else wants to vote on this right now, so I'll go with Alternative 1 as well.

MR. IRWIN: If I'm getting this right, the best way to deal with accountability measures would be to have basically real-time landings' data, and we just can't afford that so we have to kind of come up with the next best solution; is that correct?

MR. ROBSON: That is pretty correct.

MR. ATACK: Based on that statement, I guess it is really going to be hard to even do any kind of in season. Basically, you're going to be forced to make post seasons, I believe. You will have to do an AM. I don't think you can afford not to do an AM, so I think it is going to be a post season and then how do you best want to deal with that post season is what you've got to decide.

MR. IRWIN: I can't speak for the recreational, but they seem to have a faster turnaround on their data than the commercial guys. I asked John and it takes three months for trip tickets to be basically analyzed and logged in. I could see that three-month lag there running into several years of just a mess of the quota going way down. I see a lot of mess in that.

DR. CRABTREE: Bruce, we won't use the trip ticket system for quota monitoring purposes. We will set up a dealer reporting system that will require weekly or bi-weekly reports from dealers, and that will be used to close the fishery down.

MR. ROWE: **Any other discussion? All those in favor of the motion. It is carried.**

MR. ROBSON: If there is no further input from the two APs, we will start with the South Atlantic Council Committee. Any discussion how we will approach accountability measures with the alternatives and options we have here?

MR. HARTIG: Mark, can I ask Gregg something? This is going to put us in the weeds more, but I'm going to say it anyway. This whole thing is set up to be a penalty situation, and I don't know if the guidelines ever addressed what you do when you don't have an ACL that is not met. I would certainly like to see some consideration of that. Maybe NMFS has already done it in the guidelines; I don't know.

Certainly, when you don't have an ACL and if you don't want to give it back to them in a year, maybe hold it in reserve for three years where they could pay back an overage at some time or something, but I just can't see this continued penalty situation that we have seen from the SSC and then what we see in these ACLs and ACTs, the way things are set up, especially given the amount of buffers we're putting into the fisheries at least from what I've seen so far already. My only question is has there been any consideration of doing that, Roy, that you know of in the guidelines?

DR. CRABTREE: Well, it has been discussed a number of times and the problem would be is if you set your ACL close to the overfishing level, then you wouldn't be able to increase it in the following year unless you could increase the overfishing level. The difficulty, of course, is the reason in any given year that you don't catch the ACL could be a lot of things.

One of the things could be because you've got low stock abundance for that year particularly with spiny lobster where you're fishing on mostly I think one or maybe two year classes. It could be, though, that effort is down or market things and just nobody was going fishing. I think it is one of those difficult things to sort out.

I don't recall anything in the guidelines that explicitly prohibits that kind of thing, but biologically I think there are issues that would have to be addressed with doing it, but there may be some way to work through that.

MR. HARTIG: Yes, if you look at long-term Spanish mackerel where the recreational catch is 2 million pounds under the TAC every year, those kinds of things should be given some consideration, especially with the peaks and valleys of the way recreational data is collected.

DR. CRABTREE: Well, I agree with you that it ought to be given some consideration. I would just add that we haven't made any decisions right now about how much buffer. We've got an SSC report and some recommendations, but we've got a lot of work left to do on this. I think those are fair things to bring up and to discuss.

MR. ROBSON: All right, are there any other comments or suggestions or motions?

MR. TEEHAN: Mr. Chairman, I just have three comments to make before you guys discuss this. I just want to clarify that when I made my remarks about the recreational survey that our agency does, I'm not saying in any way, shape or form that it is inaccurate. My point was that I'm not

sure if we want to put them in the position of using a survey that was not necessarily intended for quota closures and use that survey for just that mechanism.

Now, having said that, I'm looking at these alternatives and I'm thinking to myself an in-season closure for a commercial fishery could be achieved. As Roy said, they would set up a separate monitoring program so it wouldn't even be the trip ticket system that was being used. I think that is a viable way to go. As far as the recreational AMs, I'm thinking along the lines of a following season alternative, not selecting one, but I don't see any way that we're going to get accurate recreational data in the short period of time that the actual majority of the fishery goes on so that something can be done within that season. Those are just my thoughts. Having said that, does anybody on the committee have any comments on accountability measures?

MR. SIMPSON: Philosophically this 75 percent issue and then a slow down, I'm of the philosophy let's don't cut the dog's tail off an inch at a time; let's just do it all at one time. The second comment is that the way these things are read, if you read the very last few words in each of these things it is "as projected to be met". I'm not sure that – you know, you have to have precise up-to-the-second, real-time data to do this. Just some thoughts.

MR. TEEHAN: Those are very good thoughts, Larry, and I think there are some other fisheries that are slowed down when they reach a certain percentage. Then they go to a trip limit or they go to a daily limit or something along those lines. We could work out something like that in this fishery also. Jerry, did you have a comment?

MR. SANSOM: I just wanted to comment that in the past, at the fishery commission level, we've done a lot of analysis of the flow of trip tickets to kind of get a feel for what is happening in the fishery with landings. I would suspect before the council moves forward with anything regarding accountability measures that Florida FWC would want to do a little flow analysis on the trip tickets to see when the landings occur and how fast they go to help us craft anything that we may need.

Those of us in the industry have a pretty good feel for how fast we think that fishery runs and somewhat of a feel for the recreational fishery. If we do get to the point where we actually have to do numbers, I think that will be very informational. If nothing else, if you will run that I think it would give you a feel for what we already know in the fishery as to how much is caught and when because most of the large harvest in lobster is done in the fall already.

The biggest part is done in the late summer. Then in the middle fall it ratchets off because the big guys move into stone crabbing. As you said, it is not unlike some other fisheries. It is kind of like king mackerel where some fishermen try to make their fishery last a whole year and those tend to do different volumes at different times. I think that would be reflective in the trip ticket analysis.

MR. TEEHAN: Thank you, Jerry. Well, I think we probably have – if we don't actually have that in the can already, that would not be an impossible task to look at. Remember the trip tickets are dependent upon when they're turned in. A lot of that, when they're actually turned in – and we all know that is not always in a timely fashion, but what I've seen over 30 years of

doing this is the preliminary data – and, of course, trip tickets haven't been around for 30 years, but – well, maybe they have.

MR. SANSOM: It is damn close.

MR. TEEHAN: The preliminary data is generally not that far off from what the final data is. It may be a couple thousand pounds here and there in a million or a two million pound fishery, but basically I think you can hang your hat on the preliminary data in many instances.

MR. SANSOM: I wasn't talking about the data on the trip ticket when the wholesaler sent it into you guys. I was talking about the date of a sale, which is everyday. As we know, that stuff doesn't hold, the guy brings the stuff in, unloads it on the dock, the trip ticket is generated, and there is a date put on it, and there is an amount put on it, and we can flow from that.

MR. TEEHAN: All right, anymore committee discussion or any motions to spring forth on AMs? Larry.

MR. SIMPSON: Just one additional thought, Mr. Chairman. We are talking about the current status of trip tickets for spiny lobster being into three to four months, but that doesn't preclude trip tickets to be required to be submitted on a more timely basis nor does it preclude the use of electronic reporting to be that proxy to project from.

MR. TEEHAN: Certainly, and those are good points, but I think if the councils are going to move down the path of quota monitoring in the commercial fishery, I think Roy has already indicated they would probably be setting up a separate program for that and not relying on state trip tickets; is that my understanding, Roy?

DR. CRABTREE: Yes, all of the quota monitoring programs we have in the Gulf and in the South Atlantic now are separate and distinct from trip tickets and use dealer reports. The dealers report to us every two weeks or something like that all of the landings that they've had come in, and that is what we use.

MR. TEEHAN: Is there any other discussion; we're really getting late into the day, and I don't want to drag this out. We will go ahead and turn this back over to the chairman.

MR. ROBSON: All right, we are running out of time and we want to make sure that we cover the things that are critically important especially to the AP members that are here. With the council committee members permission, I would like to skip Action 7 right now and move to some of these last actions that I believe we would want to get some real input from the AP members on, and can we get a brief discussion of Action 8, Carrie.

MS. SIMMONS: Action 8 examines modifying regulations regarding possession and handling of undersized attractants. Alternative 1 is the no action alternative, allow the possession of no more than 50 undersized Caribbean spiny lobsters or one per trap aboard the vessel, whichever is greater for use as attractants.

Alternative 2 prohibits the possession and use of undersized Caribbean spiny lobsters as attractants. Alternative 3 explores modifying the number of undersized attractants that would be allowed regardless of the number of traps fished. These regulations have changed quite a bit over the years, and I won't go through that in detail. This has come up numerous times I guess due both to law enforcement issues and also due to biological issues with mortality of these undersized lobsters being used as attractants. There are some numbers in the documents that you can refer to for both of those, but since we're short of time I won't go through them in detail unless need be.

DR. CRABTREE: Shouldn't Alternative 3 say regardless of the numbers of traps on board the vessel and not the number of traps fished; as number one says trap aboard the vessel?

MS. SIMMONS: Yes, thank you.

MR. LESSARD: For years we've heard about consistencies between state and federal regulations, we've always tried to push them. The state has had a law for a long time that you're allowed to have 50 attractants plus one per trap on board the boat. Action 1 says allow the possession of no more than 50 undersized spiny lobster or one per trap aboard the boat, whichever is greater, for use as attractants.

Because of enforcement, the Florida Marine Patrol, if they stop someone in state waters we're allowed to have 50 plus one per trap; they go into federal waters and the law changes. I would recommend that Alternative 1 should read no action, allow the possession of no more than 50 undersized lobsters and one per trap aboard the vessel, which is currently the Florida law, as attractants; or, you can make a new alternative which would state that, whichever would be the easiest. I'm sure I can get second from any one of my members.

MR. ROBSON: There is a question here from Bill.

MR. TEEHAN: Roy, Gregg, Monica, couldn't we just handle this whole action through a letter requesting that the federal management plans mirror the Florida undersized attractants; why not?

MS. SMIT-BRUNELLO: We would need an amendment to change the federal regulations that are in place, so we would need to change the FMP either via –

MR. TEEHAN: Well, that's what I mean, but I thought the framework that we had set up between the state and the federal management was that if we wanted some sort of consistency out of the federal management, we requested that from the Gulf Council, the South Atlantic and NOAA Fisheries, and pretty much that procedure went forward.

MS. SMIT-BRUNELLO: Right, but that framework is so out of date, it describes a process that doesn't even exist anymore in terms of how your agency is established and whether your – I'm going to misspeak, but under the governor, part of the cabinet, whatever it is, it seems like that just isn't even accurate any longer. Now, I'd be glad to look at it and see whether the part where Florida would request compatible regulations would still be workable under that outdated framework. I will go ahead and look at that.

MR. TEEHAN: In Florida when we have those kinds of inconsistencies in our rule language and statutes, especially when our agency was formed in '99, it was just artistic license to change some of that stuff. I know you're referring to archaic processes that don't exist anymore; and even references to the Marine Fisheries Commission, it seems like it doesn't take council action to change that and then that framework should function.

MS. SMIT-BRUNELLO: I'll be glad to look at it.

DR. CRABTREE: But I can tell you, Bill, because this is when I was in Mark's position with FWC, that is when the commission put in place I think the current regulations. We did write to then Regional Administrator Joe Powers asking for a compatible change and NMFS declined to ask for additional analysis and all sorts of stuff, and I don't think they ever agreed to go along with it at that point.

It may have been that the stickler at that point became the protocol was out of date, I don't recall, but we did go through a whole process with that. I know they did ask for a lot of followup, and I can't remember whatever came of that, and then it dropped at that point.

MR. TEEHAN: My recollection is a little different, but we talk about it offline, so I guess Mark has got something to look forward to.

MR. ROBSON: Maybe. Let's get back to the AP recommendations. Karl.

MR. LESSARD: Would it be easiest if we made a new alternative stating an Alternative 4?

MR. ROBSON: I believe it would.

MR. LESSARD: **In that case the Gulf AP would like to make an Alternative 4 which says no action, allow the possession of no more than 50 undersized lobster and one per trap aboard the vessel, whichever is greater, for use as attractants.**

MR. SANSOM: I'll second that, but we need to refine that, Karl, to not say no action; to say to maintain the current regulations with the addition of the language relative to 50 and one per trap on board, because that's in essence what we want to do is keep the existing regulations; it that not right, Gregg? Is that what you've got up there?

MR. WAUGH: My understanding is what you want to do is change it to change the "or" to "and" –

MR. SANSOM: Right.

MR. WAUGH: – is my understanding so –

MR. SANSOM: We want to have, in essence, not no action but no change other than to have that language.

MR. WAUGH: I would just suggest a new alternative that says what you want it to say, and that is allowing the possession of no more than 50 undersized Caribbean spiny lobsters and one per trap aboard the vessel, whichever is greater.

MR. SANSOM: Right, and that includes –

MR. WAUGH: – for use as attractants.

MR. SANSOM: And that also, though, includes the existing language relative to live wells, et cetera, right?

MR. WAUGH: Yes, this does not address any changes to the live well requirement. This just deals with the allowance for the attractant.

MR. SANSOM: That is the only component that deals with?

MR. WAUGH: That is correct.

MR. ROBSON: All right, there was a motion and a second. Bob Gill, do you have a question for the AP?

MR. GILL: Given the rewording of the motion, you need to delete “whichever is greater” because it is no longer germane.

MR. ROBSON: Roy, was that your question to the motion?

DR. CRABTREE: Yes, that was my clarification to the motion, but when you deem it appropriate I have a question about the rationale.

MR. SANSOM: No, it is not redundant, Mr. Chairman, because it is a minimum of 50; because if you’ve only got ten traps on board, you want to maintain 50 in the live well because you’re servicing the live wells. The purpose for the 50 and one per trap is when you are moving gear, you’ve got your ones in the live well as your base; and then as you’re picking up gear and moving it, you want to be able to add the additional lobsters to your live well to be able to service the ones you’re moving and then to service the ones that are already there, which is the reason it is worded that way. Isn’t that right, Karl?

MR. LESSARD: I believe so.

MR. ROBSON: Bill Teehan can read the language in the current state rule.

MR. TEEHAN: **Yes, I would just suggest if your intent is to mirror the Florida language, just take what is in our rules right now, which is – and I’ll just take this out of context – “undersized spiny lobsters not exceeding 50 per boat and one per trap aboard each boat if used exclusively for luring, decoying or otherwise attracting non-captive spiny lobsters” – let’s use that language.**

MR. SANSOM: That's fine; that says the same thing.

MR. TEEHAN: If you want to go consistent, be consistent.

MR. SANSOM: I'm with you; I didn't have it in front of me. I was trying to do it from memory, but that's great.

MR. LESSARD: Any discussion by the Gulf AP?

MR. ROBSON: Well, if you're wanting to follow that language, you need to modify the language in the motion. Can you read that motion; read the language again.

MR. TEEHAN: **Read the language again slowly – I'll just go from “undersized spiny lobster not exceeding 50 per boat and one per trap aboard each boat if used exclusively for luring, decoying, or otherwise attracting non-captive spiny lobsters into traps.”** Now, there is also – and I don't know whether the federal plan has live well requirements or not, but we have those, also.

MR. SANSOM: It looks like they're down in the body of this language.

MR. LESSARD: **We'll take that as a friendly amendment from the Gulf AP, add a new Alternative 4, “undersized spiny lobster not exceeding 50 per boat and one per trap aboard each vessel to be used exclusively for luring, decoying, or otherwise attracting non-captive spiny lobsters into traps.”** Okay, Bob, I know you have something you'd love to say.

MR. GAITANIS: Given the information we got this morning that the virus may well be a major part of the problem that we have in the fishery and that the virus transfers between lobsters and it can transfer through the water, my personal feeling is any increase in the number of lobsters we use as attractants, their co-mingling in a live well may well be counterproductive. I couldn't see increasing the number of captive lobsters in a live well. I think it would be counterproductive to the fishery, both to the commercial and to the recreational.

MR. SANSOM: Mr. Chairman, I just need to ask a question. Lower down in the briefing document, on Page 53, current regulations at 50 CFR 640.21C state – and it references the 50 or one per trap, whichever is greater, may be retained, and then it has the live well. Other than the language to make it consistent with the state, I'm curious why we're discussing it because it is already in here. It says “or” but whichever is greater.

MR. STAFFORD: Yes, but we want 50 and whichever is greater.

MS SANSOM: I understand, but I thought from reading the no option in the paper here that somehow the one per vessel wasn't around, but that's fine. The motion is good.

MR. LESSARD: Would anybody like to discuss what Bob had to say in this or should we call the vote?

MR. ROBSON: Karl, a council member would like to ask a question of the AP.

DR. CRABTREE: I think what you guys need to think about this in the context of is National Standard 9, which says, "Conservation and management measures shall, to the extent practicable, minimize bycatch." Now, undersized spiny lobsters are bycatch. Bycatch is defined as something that is not retained and you can't retain these.

It seems like what is proposed here would increase the number of shorts on board the vessel and I assume the numbers of shorts in traps, which seem contrary to National Standard 9. I think what you need to talk about is how doing this, if you can make the case that it is not going to reduce the overall numbers of shorts handled by the fishery.

MR. LESSARD: Roy, everyday we go out as fishermen we have our traps that have been molested and our bait taken out, so we have to carry enough sub-legal attractants to replace what has been robbed, plus one for every trap that we have on board the boat. The fishing mortality on spiny lobster is roughly 8 percent.

If every other fishery had a fishing mortality as low as us, there probably would be no real reason to have this council. I don't know if I would call them discards or bycatch. They are a planned thing that has been used in this fishery since the beginning of time that this fishery started. We may disagree on the word "bycatch", but I thought bycatch was usually discards.

DR. CRABTREE: To that point, this is the definition of bycatch in the Magnuson Act, "The term bycatch means fish which are harvested in a fishery but which are not sold or kept for personal use and includes economic discards and regulatory discards." You're not allowed to sell the shorts, you're not allowed to keep them for personal use. It seems to me it is bycatch as defined by the Magnuson Act.

MR. SANSOM: Let me see if I can put it in a different way. To some degree they are retained for personal use. If you're going to try to define this as bycatch and there is an allowance for retain for personal use, we do retain these for personal use. It is not mortality. As the document further states, those traps with attractants in them produce two to three times as much as any other known attractant in the trap, including a bear trap – and I don't mean "bare" meaning empty – or anything with any other kind of known bait, a lobster with other lobsters in it – and we have explained for years why we don't use legal ones because if we try to use legal ones as attractants, it actually makes the trap more attracting to thieves, because then they know that everything in the trap they'll be able to take and sell; whereas, at least if the thieves come by and rob our traps and empty it out, some of it in there is illegal and maybe they'll get at the dock for having undersized lobsters that they bring ashore and try to sell that we don't.

We do not retain these at all. They go back in the water either in a trap or overboard at the end of the day. We do not retain them, we do not kill them. They are, frankly, more valuable than the lobsters we are harvesting. I don't think in any reasonable definition you call these bycatch. The bottom line is these are traps that we're using to catch the lobster with, and by the very nature in a trap things are retained until you harvest what you want and release what you don't intend to harvest.

That is exactly what we do with these, which is why the industry came up with the requirement of the live wells because it was pointed out a number of years ago that there was some handling mortality, there was some retention mortality, and the industry decided to see what it could do to reduce that to a bare minimum because we get no benefit from a sickly or an unhealthy undersized lobster working in our trap. It's really in my mind a stretch to try to define these as bycatch that we then have to figure out a way to undefined them as bycatch by some kind of handling procedure or some other definition that we put in this thing. In my mind it is just straining at gnats.

DR. CRABTREE: Well, I think the key here, it seems to me, is whether they are kept for personal use. I think if you can make that argument that you are keeping them for personal use, then they're not bycatch.

MR. SANSOM: I thought I just did.

DR. CRABTREE: Well, but then it seemed to me you later turned around and said that they weren't kept for personal use; they were returned to the water.

MR. SANSOM: They are; they're either returned in the trap or they return at the end of the day, but they are not kept; and all I said was if you've got to use the definition – you're trying to make it fit around bycatch.

DR. CRABTREE: Well, that's what we have to do here, Jerry. We have to make it fit around the way things are defined in the statute and we have to make arguments how these things comply with the national standards.

MR. SANSOM: Only if you stamp them with the bycatch label and then say that we've got to make them fit.

MR. ROBSON: All right, we've got a number of people in queue and, Karl, this was an AP discussion and you have a motion. It is okay to continue with this discussion, and there were a number of people in the queue. Are you okay with that?

MR. LESSARD: I'm in favor of calling the vote because it is late and we've got a lot of other issues that need to be addressed; but if it is necessary and people feel that they have to speak on this issue, then they should be recognized.

MR. ROBSON: I think this is obviously an important issue to a lot of people. Corky.

MR. PERRET: As Roy does to me so many times when I state only part of the issue, he only stated part of the standard; minimize bycatch and to the extent practical minimize the mortality of that bycatch, and I think that's exactly what they're doing with these shorts. They've got to have live wells on board.

You've heard Jerry talk about a short – that's the first time I've heard it presented that way – being more valuable than a legal lobster, but I guess in some cases they are. I think the industry

is doing to the extent practicable minimizing the mortality of that bycatch. I think we've spent enough time on this one.

MR. ROBSON: All right, I did have George, Jim and Bruce still wanting to speak to this issue.

MR. GEIGER: Well, I just had a question in regard to the ABC. Are these animals that are – there is some mortality already associated with it; we've agreed to that. Does that go to the annual catch limit? Is that applied in terms of that mortality applied to the annual catch limit?

MR. SANSOM: John factors it in his analysis.

MR. GEIGER: For what, the stock assessment? Well, how are the mortalities in the shorts accounted for and are they included in what would be the figures used to determine the annual catch limit?

MR. HUNT: Well, I don't know what the decision will be on the catch limits, but they do go into the stock assessment. At the last SEDAR we went through, at our data workshop, and came upon a consensus mortality rate at that workshop. It was actually sort of agreed upon by Bruce and myself, if I recall correctly, at that workshop. It goes into the stock assessment and it is mortality, so it would sense to me to incorporate that into the whole ACL, but who knows what will actually happen.

MR. GEIGER: How many shorts are used in the industry during the course of the season?

MR. HUNT: That's a hard number to calculate. Some traps are fished for – I mean, some folks fish traps only for a couple of months; some folks fish traps for a long time; soak periods change late in the season; mortality rates change through the season related to soaks. There is a cost in mortality by using shorts. We have been through this over and over and over.

At the last SEDAR we picked that number of a 10 percent monthly mortality rate. It was based upon some of my earlier work from years ago. It was a consensus number and I think it results in a mortality of about 500,000 lobsters or something like that. These are numbers I was not prepared to be talking about today, so there you go.

MR. ROBSON: All right, we have an AP recommendation on the table. There were three other AP members that had asked to speak to this particular issue. Karl, it was your AP that was working on this motion. I think we had Jim, Bruce and Bob Burton from the Atlantic Council on the queue. Do you want to hear what they have to say and then let's move on this motion.

MR. LESSARD: I would think that the South Atlantic AP is going to spend a little time talking about this, so I'm going to call this to a vote for the Gulf AP. **All in favor aye; opposed. The motion passes.**

MR. ROBSON: All right, thank you, Karl. South Atlantic Council AP, would you like to weigh in on this issue?

MR. ROWE: I would like to see if they have something.

MR. IRWIN: I don't know the exact language of Magnuson about reducing bycatch, but I would also like to point out that while there may be some bycatch, depending on how you define it, there is a 10 percent reduction in traps passively, so there is a trap reduction going on. Under Magnuson we are addressing reducing bycatch. The fishery is addressing that.

MR. BURTON: A lot of things we do today are different than the way granddaddy did it, but I'm here to tell you I am 100 percent opposed to using short lobsters as attractants in the commercial lobster fishery. Granted, it works, granted it increases the catch, but there is a tremendous amount of mortality associated with it.

I've got nothing against Bruce, I've got nothing against my compatriots on the other side. I understand they feel this is a critical, critical need for them to stay alive. It is not the best use of this resource. It is a privilege to make money off the people's natural resources, and those that do so have a greater obligation to give back to the resource than those that do not. I cannot foresee this practice continuing and continuing. Granted, it has been around since Father Time, but you're going to hear about it more and more that this is a practice that needs to be continued.

MR. ATACK: It sounds to me like the other issue is just because of law enforcement and poaching that you want to keep the shorts, so, really, legal-sized lobsters would work in the pots. If the real issue is law enforcement and poaching, maybe we can address that problem with law enforcement.

Law enforcement also is behind this I guess because of shorts being on the boats. You've got biological impacts where the virus may spread with the shorts being in the traps. If you've got 400 and some thousand traps, I don't know how often we change the lobsters, but you could be – you know, 1 million, 1.5 million shorts cycled through those traps in a year, what does that do to next year's class? Maybe you could get more out of the resource by not using the shorts.

MR. ROWE: Mark, are you asking us to make a recommendation?

MR. ROBSON: It is your call.

MR. ROWE: I don't think we have anymore discussions on it.

MR. ROBSON: All right, we have ten minutes until we have to end this joint workshop. We have a listening session coming up at 6:00 p.m., and people are arriving. Let's try to get through at least – I'm assuming that Action 9 is also something that the AP would want to really weigh on, and in the amount of time that we have left, let's go ahead and do that. Carrie and Gregg, can you kind of quickly go through that.

MR. ATACK: Mark, I guess we were wanting to make motion from the South Atlantic to go with Alternative 2 as our preferred alternative.

MR. BURTON: Second.

MR. ROWE: Discussion? What is the subject?

MR. BURTON: Prohibit the possession and use of undersized Caribbean spiny lobster as attractants.

MR. IRWIN: So we want to make that motion so we would basically go against the state and have two conflicting laws in the fishery; so you're 200 yards away if the law changes and then you go 200 yards and it changes; am I correct on that?

MR. ATACK: I would assume that if the federal makes that law, then the state would follow suit..

MR. LESSARD: I would like to speak as a member of the South Atlantic Council on this. If you all want to eliminate the commercial industry, you can do it right here and do it real quick by endorsing this and passing this. This is what keeps part of our industry. I myself usually half the time my traps are baited half with legal and half with one sub-legal attractant.

I only fish my traps from August 1st – and I have every one of my traps out of the water before Thanksgiving. Beside this fishing mortality that you're looking at, what percentage of that would also be natural mortality? You have to also look at that figure. Just because those fish are in the trap, it doesn't mean they're going to be eaten any faster than if they were out of the trap.

We have always been involved with protecting the resource. Down in the Keys our industry set aside more area for protection of the reefs, we formed a working committee that said besides the live wells on the boat let's put oxygen mandatory air pumps because it keeps the sub-legals in better shape. I can see where you're coming from, but I think this is a misconstrued thing on the amount of mortality that is out there.

MR. ROWE: Do we want to vote? **Okay, all those in favor of Alternative 2, show of hands; all those opposed. Four to two; the motion carried.** All right, I think that's it.

MR. ROBSON: All right, thank you. We have five minutes left. I think we're going to need to begin to wrap up this joint session in order to prepare for a 6:00 o'clock listening session.

MR. HARRIS: Why don't you see if you can do this next one real quick.

MR. ROBSON: All right, we've got a limited amount of time, so let's go on to Action 9, which is the tailing requirement, and we want to hear comments from the AP. Let's let the Atlantic Council go first.

MR. MANSFIELD: We have several of us here that are a little bit tired of this coming up. We have been fighting this battle for about 15 years. I have meeting minutes here from the June 13, 2007, meeting where, honestly, we thought this was settled. Mr. Burton said, "I'll formally make a motion to recommend the lobster panel to recommend to the National Marine Fisheries Service to from this point forward deny tailing permits." I seconded it.

We kind of thought we were through with it, but here it is again. We'd like to make that motion again, I'm quite sure, but it's a little premature to do that because this is still in discussion, but I hope that's where we're headed. Enforcement doesn't want it and we don't need it.

MR. ROBSON: Any interest in your panel making a motion or a recommendation?

MR. MANSFIELD: **I'd certainly make a recommendation that we move forward to eliminate tail separation permits as Alternative 2.**

MR. ROWE: I would like to make a statement that I think I've heard way back when this was open hearings that we were talking about allowing only tailing permits for the Key West trap fishermen that go to the Dry Tortugas area for an extended time. I thought that was what was on the table. Everything else in the state of Florida could not qualify for it. I don't know where that is. Gregg, do you remember what –

MR. ROBSON: Well, we have a motion on the table; I didn't hear a second from your AP regarding making Alternative 2 –

MR. BURTON: Burton seconds. Again, the discussion is we've been talking about this since the first day I got on this council. Tailing permits is an invitation to cheat primarily by recreational divers that do multi-day trips, but again it is a license to cheat. We do not think that it isn't that important for the commercial industry to have tailing permits, and we would like to see this finally laid to rest.

MR. ROWE: Personally I think the law enforcement people should have a voice in this how it may help them. I think that would be a big help and it would be my recommendation.

MR. MANSFIELD: I would reiterate that back about 1994 I think was the first time I was contacted by Gene Poole of enforcement. He called me for a conference call where we spent about an hour discussing how it was going to make his life better. Of course, I'm concerned about that because if we don't really have any valid recruitment up north from larval forms, we have to get past Jacksonville to have them walk up over years, months, millennia, I don't know, but that's the way they get there for us basically.

Given that, if they close the door – and, guys, there are some pretty blatant things going on up in that Jacksonville area. Those guys will blow the lobster head off in front of a fisheries individual. He is a scientist and not an enforcement person and they don't care. I've interviewed people that have done that. I know I'm sticking my neck out saying this, but I have talked to people that have witnessed that. If you've got a tailing permit and you're shooting grouper and you've got a powerhead, the lobster is going down.

MR. ROWE: Are there any other comments?

MR. LESSARD: Our organization, the Florida Keys Commercial Fishermen, has been concerned about this for a long time, but we do have a lot of members that fish down in the Tortugas, 140 miles from Marathon one way. I sent Alternative 5 that is on here to the council to put on this amendment.

There are a large number of people that do fish down there for a week at a time, and they do need a tailing permit, but what we've asked is that if you have a tailing permit all lobsters must be either landed all whole or all tailed. I just want to say something because this sort of amazes me that we have a fishery where 90 percent of lobster are caught by the commercial sector in the Keys, and it seems like people from other locations are controlling the destiny of fishermen that are dependent on this for their livelihood from six or seven, eight hundred, a thousand miles away where this is done. Excuse me, but sometimes things need to be said.

MR. ROBSON: All right, gentlemen, it is 6:00 o'clock. The South Atlantic Council AP has a motion and a second. I would encourage you to move that. The motion is up on the screen.

MR. LOWE: Okay, I think it is called Alternative 2. **All those in favor; all those opposed. We've got four to two. The motion carries.**

MR. ROBSON: Is there any other discussion on Action 9 from the Gulf AP?

MR. LESSARD: Okay, the Gulf AP, all of our members of the board, excluding Bob, have talked about this over the recent days. We thought that we should revise the current regulation to clearly state that all vessels must have either a federal spiny lobster permit or Florida restricted species endorsement associated with a saltwater products license in order to obtain the tailing permit, and that all Caribbean spiny lobsters on the tailing permit must be landed all whole or all tailed. I have a second on that.

MR. STAFFORD: I'll second that.

MR. LESSARD: Since we're running out of time, I'm going to call a vote. All in favor aye; all opposed. The motion passes.

MR. ROBSON: All right, thank you, members of the AP. We are out of time. We will attempt to continue working on this amendment and we will look down the road to the future to get more input from the respective APs. We have to move on with our agenda. With that, we are adjourned.

(Whereupon, the meeting was adjourned at 6:04 o'clock p.m., June 7, 2010.)

Certified By: _____ Date: _____

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Transcribed By:
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July 16, 2010

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6. Committee Direction to Staff – Mark Robson/Bill Teehan – 3:15 – 5:15 pm

[Each Council's Committee will vote separately. Mark Robson will conduct the voting for the South Atlantic Council's Committee, and Bill Teehan will conduct the voting for the Gulf Council's Committee.]

- 7. Other Business – Mark Robson
- 8. Timing & Task Motion – Mark Robson
- 9. Adjourn – Mark Robson

DATE:	<u>4/6/2010</u>
FISHERY:	<u>Spiny Lobster</u>
SUBJECT:	<u>Briefing Materials</u>
STAFF:	<u>Waugh/Simmons</u>
SOURCE:	<u>SAFMC, GMFMC, Florida & NMFS</u>

Attachments:
Attachment 1.

GMFMC Spiny Lobster Committee Members:

Bill Teehan, Chair ✓
Robert Gill, V. Chair ✓
Edward Sapp ✓
Larry Simpson/Dave Donaldson
William Walker/Corky Perret ✓

SAFMC Spiny Lobster Committee Members:

Mark Robson, Chair
George Geiger
Rita Merritt
Ben Hartig
Roy Crabtree
Brian Sullivan

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All

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Joint South Atlantic Council and Gulf Council Spiny Lobster Committees and APs
Orlando, FL
Monday, June 7, 2010

NAME &
ORGANIZATION

AREA CODE &
PHONE NUMBER

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Orlando, FL
Monday, June 7, 2010

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