

SOUTH ATLANTIC FISHERIES MANAGEMENT COUNCIL

SHRIMP COMMITTEE

**Renaissance Orlando Airport Hotel
Orlando, Florida**

June 11, 2012

SUMMARY MINUTES

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Other observers listed in the back of the document

The Shrimp Committee of the South Atlantic Fishery Management Council convened in the Vienna Ballroom of the Renaissance Orlando Airport Hotel, Orlando, Florida, June 11, 2012, and was called to order at 4:50 o'clock p.m. by Chairman Charlie Phillips.

MR. PHILLIPS: I'd like to call the Shrimp Committee into order and see if there are any changes in the agenda. Hearing none, approval of the agenda, I have no dissension. The Shrimp Committee minutes; are there any changes in the Shrimp Committee minutes? Hearing none, those are approved. Jennifer is going to give us an update on Atlantic Sturgeon.

MS. LEE: This is something that you specifically requested. I am going to go through it pretty quick, but my understanding is you just wanted a little background on the listing. Also, some of you were particularly concerned as far as what it meant for fisheries and so I'll just get started. Just a little background here; this listing did originate from a petition.

We had actually done a status review well before we were petitioned, but in October 2009 we were petitioned by Natural Resources Defense Council to list Atlantic sturgeon under the ESA to designate critical habitat. We went through out typical 90-day finding analysis and found that there was information that showed the petitioned action may be warranted.

Then we moved forward with completing a status review and on October 6, 2010, the proposed rule was published indicating that the listing may be warranted. Our final determination was just this year, February 6, 2012. The effective date of the listing was April 6, 2012. Anytime we are looking at whether or not a species should be listed, there are five factors essentially that are considered.

The ones in red are all ones that in this particular case we found were related to the listing in terms of there was some rationale behind that caused us to list the species. The only one that we excluded, as you can see, was disease or predation was not a factor in this listing. Destruction, modification or curtailment of habitat or range is one of those listing factors. In this case primary stressors are listed here on the screen.

You can see these are mainly riverine-related habitat issues, but these stressors were found to represent a substantial risk to long-term survival of the species. Overutilization for commercial, recreational, scientific or educational purposes; I know you all know about the Atlantic States Marine Fishery Commission implemented a coast-wide moratorium back in 1998, and NOAA Fisheries Service implemented a moratorium in federal waters in 1999. Despite that, though, fishery bycatch does remain a significant source of mortality, particularly sink gillnet fisheries such as the monkfish and dogfish.

This listing factor was also considered to be a substantial risk to the long-term survival of the species. Other natural manmade factors affecting the species; actually vessel strikes were determined to be a significant source of mortality in particular rivers. Note these are rivers actually outside of the South Atlantic jurisdiction, but still again was a factor in the listing.

Lastly, inadequacy of the existing regulation mechanisms; again, threats from directed fishing have been addressed via interstate and federal fishery bans on landing Atlantic sturgeon; however, primary threats including, as I mentioned, bycatch, vessel strikes, dams, water quality issues, even climate change' these things are not being addressed via existing regulations, so again this was considered to represent a substantial risk to long-term survival of the species.

Again, the listing became effective April 6. You can see there are five distinct population segments that were listed. The Gulf of Maine was the only one listed as threatened; the other were all listed as endangered. One thing I did want to point out is when it comes to the South Atlantic's jurisdiction; in the marine waters really these DPSs mingle with each other.

When we do consultations and things like that on your federal fisheries, really we are looking at impacts to a certain extent of all these populations just because of that mingling. But here you can just see within your region, Carolina, distinct population segments; it includes all Atlantic sturgeon that lay eggs or hatch in the rivers and tributaries of the Southern Virginia, Albemarle Sound and other coastal areas of North Carolina and South Carolina to Charleston Harbor.

Then you have the South Atlantic DPS, which again from the Ashepoo, Combahee and Edisto River Basin, and boundaries extend along the South Carolina, Georgia, Florida coastal areas to St. Johns River, Florida. Current populations in the DPSs are estimated to be 96 to 99 percent below their historical abundance.

Spawning occurs in 11 rivers in the southeast, but spawning no longer occurs in 5 to 9 rivers. Again, all four listing factors were impacting animals of these DPSs. The conclusion was both these DPSs are in danger of extinction. Now what does listings mean for fisheries? Really a listing means that taking now is a violation under the ESA.

I think you all are pretty familiar with this definition, so I'm not going to read it. Obviously, it is a pretty low bar to trigger a take. The ESA does provide ways that take can be authorized through the Section 7 process. That is essentially our – we do Section 7 consultations on federal activities. Those are what you are familiar with, our biological opinions and our incidental take statements.

In the case of perhaps if you're concerned about scientific research and enhancements, there are exemptions through Section 10 permits. Actually those two types of Section 10 permits we've probably talked about before. The 10(a)(1)A was applying to the scientific research. The 10(a)(1)B applies to non-federal entities and incidental take, so that's the one that can include state fisheries, because as you know that Section 7 consultation is only on federal actions.

That 10(a)(1)B is really the process through any state fishery or again private entity would be able to get a permit. In terms of federal fisheries in the South Atlantic that may affect Atlantic Sturgeon that will require consultation, we're actually coming to you already ahead in the sense that we went ahead and amended the shrimp biological opinion when we were working on it; extended that consultation to look at Atlantic Sturgeon, so that is actually already done. Coastal migratory and pelagic resources as it does involve gillnet is probably the only other FMP offhand that I think we will require a formal consultation on.

We'll probably get started on that in the very near future, and I put others just in case, but really I think on the horizon we're looking at the coastal migratory pelagic resources as a biological opinion on Atlantic sturgeon. Again, it sounded like a lot of people were concerned, but with any biological opinion we'll be going through the same steps as far as how we look at it; and in the end in the event that it was a jeopardy opinion, there would be a reasonable and prudent alternative which specifies essentially an alternative action to get us out of that situation.

Most likely if it is a non-jeopardy opinion, which you are more familiar with, there would be an incidental take statement that would essentially authorize any incidental take that we anticipate. It would specify reasonable and prudent measures and terms and conditions. Those are just ways to minimize the take that does occur in specific actions that the agency needs to do as authorizing the fishery. That's really all I had there.

Kelly Shotts is our Atlantic Sturgeon Coordinator. If you have specific questions you are welcome to contact her or me or Andy, who typically comes to the South Atlantic Council meetings these days, and that is our general phone number where you can reach all of us. That's it for Atlantic sturgeon.

MR. PHILLIPS: Okay are there any questions for Jennifer? Michelle.

DR. DUVAL: Mr. Chairman; I'm not on your committee. Jennifer, you said that the biological opinion for shrimp was done, actually completed.

MS. LEE: Yes, and my next presentation will give you information on that.

DR. LANEY: Jennifer, relative to other trawl fisheries and specifically I'm thinking about ones in the more northern part of the South Atlantic jurisdiction like the trawl fishery for striped bass off North Carolina during the wintertime or summer flounder fisheries; are those going to be done by the southeast region or are those going to be done by the northeast region?

The reason I ask is because we routinely have caught Atlantic sturgeon during the cooperative winter tagging cruise. I've talked to Chris Bonzak and Jim Gartland, who run the MARMAP nearshore survey, and they routinely catch Atlantic sturgeon, so it seems to me that they are getting routinely in trawls.

One other case I'm aware of is when one of your gear folks from Pascagoula was up there doing some experimental work off North Carolina, they got 75 in one tow. It seems like there are at least some trawl fisheries that are routinely catching them. I wondered if you were going to be doing a BO on any of those other trawl fisheries.

MS. LEE: Well, certainly, we'll be working with the northeast region on completing any biological opinions that need to be conducted. Again, I guess I was focusing on the fact that the Section 7 is a federal fishery issue, so with the South Atlantic Council I was looking at your managed fisheries here. That doesn't mean that these other state fisheries and things will be addressed. I guess we'll be working that out.

DR. LANEY: Just a followup. The other thing that people keep asking me about are the operations of federal facilities, specifically Corps of Engineers reservoirs, and Corps of Engineers Navigational Dredging Projects; and I know that there is an existing BO for navigational dredging for the South Atlantic. Is that one going to be revised to consider Atlantic sturgeon? Then relative to reservoir operations, are those just going to be done on a case-by-case basis as there is a federal action that requires a Section 7, or how are you going to proceed with that?

MS. LEE: When it comes to the Corps, I believe actually we're in the process really of reinitiating on our regional dredging BIOP, anyways, but, yes, certainly that is a case where we will need to consult and reinitiate on the biological opinion. I know we're working with the Corps on that. Then on the others it's just a matter of whether – for anything that we have a biological opinion in place on an action that is still going on, we'll be working with those other federal agencies on making sure that they go ahead and reinitiate where needed.

MR. CURRIN: Jennifer, are there implications for the states, I presume, as well for gillnet fisheries both in the ocean and outside? Do you expect that all the states will need to or be required to seek Section 10 permits for gillnet fisheries? Are there other fisheries as well that might be impacted besides gillnet and trawl fisheries?

MS. LEE: As far as bycatch issues, it is pretty much gillnet and trawl fisheries that are the ones that have issues. The interesting thing with Section 10 is it is certainly something that should be considered. There aren't a lot of Section 10 permits out there. There are a lot that states should have. The NOAA Fisheries Service; we can't make a state come in for that.

That is a state decision, but it is something we encourage. We've encouraged it with Florida for sawfish because their recreational fisheries catch sawfish all the time. I guess the state that is having the most experience right now is North Carolina with sea turtles. It's out there and something that should be considered.

MR. HAYMANS: I just wanted to ask the question or at least confirm it. This council, the commission, every single Atlantic coast state came out in opposition to this listing. What was it that all those bodies were missing? What did all those biologists who were doing the work on these animals miss in this listing?

MS. LEE: I can't speak to that other than to say that I encourage you to read the actual FR Notice, the Rule will have all the detailed information, response to comments, things like that. That is really where I would direct you to look, and it looks like Roy wants to add something.

DR. CRABTREE: Well, that would be the best place, because all those comments were addressed in the comments' response in the final rules. We've sat down with the states, Atlantic States Marine Fisheries Commission, and I'm fully aware that this wasn't a popular decision with the states. That is the best I can tell you in terms of the comments on it.

DR. DUVAL: Mr. Chairman, again I'm not on your committee. Doug, I'll just make a flip comment and say that probably most of the states would say that NMFS missed something in the biological opinion or on the listing. Just to Mac's point about states submitting incidental take permits; I know that we've submitted a draft ITP for sturgeon. I think Georgia submitted one when they were looking at their sustainable fishery plan for shad. I think some of the frustration that a lot of the states have experienced is that they submit an IPT and it takes years to get through that process.

DR. LANEY: Well, since nobody is here officially representing ASMFC, does everybody know what action ASMFC took at their last Sturgeon Board Meeting? I'll just briefly tell you that they passed a motion. They passed two motions actually. The first one was similar to one that was passed by the New England Fishery Management Council, which the short version of is that they requested I think – Michelle, correct me if I'm wrong – but they requested that NMFS staff meet with their SSC.

ASMFC followed suit and requested that their technical committee meet with NMFS to review the science that was used in making that decision. The second motion then that was made and passed by the board was requesting the technical committee to look at the process of preparing a delisting petition for Atlantic sturgeon.

The reason that the board passed that motion was Dr. Daniel asked NMFS staff that was present at the meeting about the timeframe required to secure a Section 10 incidental take permit relative to the time required to process a delisting petition. The response he got was that it would take less time to process a delisting petition than it would to process an incidental take permit.

That is why they went ahead and passed that motion, so that's what they're doing. Those of us who sit on the technical committee from the Fish and Wildlife Service and from NMFS I presume will not be participating in any delisting petition preparation, since obviously we would have a conflict of interest on that. We can participate, we've been told, in the review of scientific information that went into the final rule.

Just also as an FYI so you know, I met with Roy's staff, with David Bernhardt and Kelly Shotts, and I will be submitting a request for a Section 7 consultation for the Cooperative Winter Tagging Cruise in the event that we should incidentally encounter Atlantic sturgeon during that cruise and we might be able to opportunistically tag those based on my discussions with David and Kelly. We'll be working with them on that.

I'm still waiting on some additional protocols – additional people are asking us to collect data on that cruise on other species, so I'm trying to have a complete draft protocol to submit to the southeast region. My understanding again from Roy's staff is that they will work to secure us authorization from the northeast region as well so we don't have to submit the same request to two different regions. I really appreciate Roy's staff agreeing to do that for us.

MR. PHILLIPS: Is there any more discussion? Seeing none, we'll go back to Jenny.

MS. LEE: Okay the next thing that I was asked to present here is the new 2012 Shrimp Biological Opinion on the sea turtle conservation regulations, including the proposed skimmer trawl rule that is out right now in the federal shrimp fisheries. First, I'm just curious; I noticed in the briefing book actually that where it said the biological opinion was actually the DEIS on the rule. I'm curious; has anyone read the Biological Opinion or skimmed it; just a show of hands. We got one, two, okay. I just wanted to get a feel.

It is a pretty complicated opinion; it's 200 pages before references and appendices. I'm going to do my best to highlight some of the key points. If after the meeting you read it and have more questions or just want to ask me after as well some specific questions about it, I would be happy to do that because that will be a little hard to cover all of it; but I'll do my best.

Components of the Shrimp Biological Opinion, like any biological opinion these are the basic sections. I'm going to use those to sort of walk you through a little bit. Consultation history; you are probably aware, but certainly this is not the first time we've consulted on the shrimp fishery. Numerous past consultations and biological opinions over the years; all of them closely tied to the lengthy regulatory history governing the use of TEDs and a series of regulations aimed at reducing potential for incidental mortality of sea turtles.

Generally speaking, we always consult on everything as a whole; but when smalltooth sawfish were listed we did do a couple sawfish- only BIOPs, and that is the 2005 and 2006 opinions, so South Atlantic and Gulf are separate. We reinitiated both the 2002 opinion, which was still in effect for sea turtles, and our 2005 and 2006 biological opinions.

We reinitiated over a period of time for a variety of reasons, and I've come to you before and explained those as far as the rationale for why we reinitiated. I'm not really going to go into any detail here, but on May 4, 2009, with the smalltooth sawfish we reinitiated on the fishery to look at smalltooth sawfish in the South Atlantic.

We then in 2010, in February, added on the Gulf of Mexico federal fishery; 2010, in August, was when we expanded the consultation to look at sea turtles in both the Gulf and South Atlantic. Then we have our new skimmer trawl rule which is proposed right now. Since that would change the effects on sea turtles, that got added in.

Finally, we had the new species listing of Atlantic sturgeon. This biological opinion covers all those re-initiations. The proposed action that was subject to analysis therefore was the continued implementation of the sea turtle conservation regulations under the ESA; again as proposed to be amended, so that is in state and federal waters of the Gulf and South Atlantic.

Then we also are looking at the continued authorization of Southeast U.S. shrimp fisheries in federal waters under the Magnuson-Stevens Act. This isn't just your biological opinion. This is also the Gulf of Mexico fisheries in here, and we're looking at the sea turtle regulations that we authorized as well.

If you haven't been following; I did want to throw in just a brief little bit on the skimmer trawl proposed rule, but we are proposing to withdraw the alternative tow time restriction and require

all vessels using skimmer trawls, pusher head trawls and wing nets to use TEDs. Obviously, skimmer trawls are used more in the Gulf, but certainly North Carolina and also Biscayne, Florida, use the skimmer trawls. The following TED exemptions would still apply. We actually have a couple protective resources staff going down to Biscayne Bay because an issue came up with Florida to double-check the skimmer trawls in that area actually likely meet this exemption. Status of the listed species and critical habitat in the action area, state and federal waters here; obviously, we have a lot of species, but the ones in red are the ones that we determined were likely to be adversely affected and are carried out throughout the entire biological opinion in terms of the analysis.

We have our five sea turtles, and I think the last time I was here maybe we talked about how loggerheads are now Northwest Atlantic DPS; and then our Atlantic sturgeon, Gulf sturgeon and smalltooth sawfish. Again, this consultation considers the effects of NOAA Fisheries' exemption of the take of sea turtles through its Sea Turtle Conservation Regulations and what effect that has on listed species.

Then the effects of the regulations themselves, in other words, what effects do the TEDs have in the gear on listed species. Then the federal authorized fisheries, and I only point this out again because NMFS does not bear responsibility of take for species except for sea turtles in state-managed fisheries, so it does not authorize take in state fisheries of those other fisheries.

Because our Sea Turtle Conservation Regulations do apply to state and federal waters, we are looking at what the effect of that exemption has. Certainly that exemption affects our sea turtles. That is a just a little distinction I wanted to point out. As with any biological opinion, we have sort of a basic setup and format, the way we look at things.

We look at the types of interactions when exposed to gear; in this case trawl gears. We consider factors affecting the likelihood of exposure. For example, with sea turtles we might be looking at the effect of tow times and multiple captures and things like that. Then we evaluate and quantify the effects using the best available information that we had.

Like I said, I'm not going to go through all the analysis, but I wanted to point out just a few key considerations that were accounted for. The 2002 BIOP was based on 2001 effort, and I think as you all know we've had substantial decreases in shrimp otter trawl and really just shrimp effort since 2001.

Another key factor is there have been substantial increases in Kemp's Ridley and green sea turtle abundance since 1997 and 1998. The reason why those dates are important is that is actually when we have catch-per-unit effort for sea turtles in shrimp trawls. The catch-per-unit effort data that we have on sea turtles is very old.

The fact that populations have increased was something we needed to consider. It looks at sea turtle conservation, regulatory fleet compliance expectations based on recently documented and compliance levels. I think over the last couple of years you have heard a lot about some issues with TED compliance.

We also looked at estimated effects of turtle excluder device violations on release rates of small and large-sized sea turtles and quantitative analysis of the vessel boarding data. One, the small and large is just because different size turtles obviously different violations in terms of the size opening or the angle of the bar can affect turtles differently; that is all that is about.

What we did here is we worked with our Pascagoula gear experts and looked at what the impacts of different gear violations are on release rates. Again, when we put this all together, we found that our take estimates we had increases in estimated and anticipated interactions, captures, and mortalities compared to the 2002 Opinion Estimates, pretty substantial, but they were attributed to the incorporation of this information.

They were attributed to the fact that we had population growth estimates for Kemp's Ridley and green sea turtles, again where I mentioned that old CPUE data was old. We looked at basically assuming a relationship between the CPUE and abundance and showing that was a linear relationship and we factored that in. You had if Kemp's have increased five times, then your CPUE potentially could increase five times.

Again, recent TED compliance data and associated capture rates; one thing I want to point out, our 2002 BIOP and all BIOPs we've really done prior in the shrimp fishery, we've always assumed 100 percent compliance, meaning we require TEDs to have only sea turtle capture rates of 3 percent, so we always assumed that therefore that is what we got when we were looking at our estimates.

In this case we actually looked at boarding data and like I said tried to look at the impacts of those regulations – I'm sorry violations to come up with what that really meant and found that as opposed to necessarily getting a 3 percent release rate, in some cases it was substantially – I'm not saying this right – but basically we were finding that a lot more than were getting caught with the violations.

Then another reason why when you look at the total number of estimates, why it's so much larger; in the past we've only really qualitatively just talked about skimmer trawl and try net effects, and in this biological opinion we did quantitative analysis. We also are accounting for the number of captures associated with those fisheries.

As I say, the sources of error, there are many sources of error and uncertainty in these estimates. We actually in this biological opinion have a couple sections – one section that goes through that all and sort of talks about the different specific sources of error. Then we summarize what that means.

These are the actual take estimates, but again don't get bogged down in these numbers, because we have a lot of explanation that talks about these are the numbers that we came up with using the best methods that we could with the data that we had, but we recognize that there is a lot of uncertainty here and we kind of go through what impacts those have.

Producing bycatch estimates for fisheries as large and diverse as the southeastern shrimp fisheries, it's very complex, includes a large number of data sources and variables associated

with shrimp effort, turtle catch rates, turtle mortality; like I said, the effectiveness of TEDs in compliance with the existing regulations. Some of those data sets, as I mentioned, are incomplete, are old.

Many had assumptions that had to be overcome to overcome associated data gaps. We actually as part of this looked at the Kemp's Ridley numbers relative to the population numbers in the model we have and really concluded that the estimates particularly with Kemp's appeared to be unreasonable and too high given the interactions and mortalities exceeded the annual population size in total mortality estimates.

I'm just telling you all this, and that is why I was saying it is a little hard to just do a quick overview, because there is a lot of detail and really good information if you read that part of the biological opinion that talks about what these numbers really are and the various caveats and things about them and then how we use them.

Moving on to something a little less complicated was the sawfish. If you're interested, that is in Section 5.2 of the biological opinion. There we relied on new bycatch estimates that were based on extrapolation of observer data. That is a Southeast Fishery Science Center report we have. The take estimates are calculated based on combined effort across areas and years, so we did some pooling recognizing the limits of the data.

We estimated basically 80 sawfish captured annually or 240 every three years. One thing I want to point out I think we've talked about here before is the limited range of smalltooth sawfish. The Science Center did not just take our number of interactions or bycatch records and extrapolate it using effort throughout the entire South Atlantic and Gulf of Mexico; they focused on the areas where sawfish are really the core part of the range, so in the Gulf's statistical zones 1 through 4 and the South Atlantic zones 24 through 26.

As far as estimated mortality, you may recall the last biological opinions, at that point we didn't have any extrapolation. We just had some limited information and the information that we did have though showed that we expected the take to all be lethal. Now that we have a little more data, we have revised that.

Our estimated mortality rate here was 37.5. It was basically just based on looking at the eight observed sawfish interactions that we had and what we thought of their fate related to looking at the notes and release condition. That amounted to 90 smalltooth sawfish mortalities every three years.

Also, we did consider the impact again of our requiring TEDs in the gear. In the case of sawfish, very large animal, very easy to entangle, so really didn't see an impact on capture rates that we accounted for, but certainly it doesn't hurt basically. It is not contributing to the likelihood of capture magnitude impacts. We don't think it's doing much.

Atlantic sturgeon, as I said we also looked at Atlantic sturgeon. We estimated otter trawl and trawl net captures in federal waters based on observed catch-per-unit effort extrapolated to the fleet

based on federal effort. We had I think 9 interactions maybe; some were in state; sorry, 9 observed interactions in the Observer Program.

Some were in state some were in federal, so we looked at that. We sort of extrapolated out of it first and then factored in sort of the amount of the proportion of effort in federal versus state waters, because again in this particular for the species the take is specific to the federal fishery. Estimated otter trawl interactions, here is some good news. The Southeast Center has through its TED work actually has found that TEDs are successful at releasing Atlantic sturgeon and not just sea turtles.

Based on data that they had, the data demonstrated TEDs result in actual 87 percent reduction in Atlantic sturgeon bycatch by number of individuals. Mortality, again this was just looking at our observed mortality rate, which is 11 percent. Just as a note that is high relative to other studies when it comes to trawl mortality. There are other studies that show that that rate is less. We did use the 11 percent to be conservative, but that is a very conservative rate we believe.

That kind of helps counter the fact that TED compliance, like I said that was a very big factor in looking at sea turtles. Now when it comes to Atlantic sturgeon, we didn't really believe it would be an important consideration except for egregious violations obviously. If there is no TED or if it is sewn shut, that Atlantic sturgeon is not going to get out, but we didn't account for that in our estimates. We felt that we were conservative in other choices that we made.

For Gulf sturgeon you may recall we only had two observed takes documented in observer programs; one was in state one was in federal waters. In this case we looked at the information and we just really did not feel comfortable extrapolating out to the fishery in terms of a quantitative, you know, applying that with our effort data. Just because there is a lot of things have said Gulf sturgeon, most of what we know is they are more apt to stay closer to shore.

We do have that federal take documented and it certainly can happen, but to go ahead and just kind of extrapolate that uniformly just didn't seem appropriate to us. We did estimate just that observed captures would not exceed one per year based on the fact that we've really only seen two so far. We did go for it and just acknowledge that we really don't know what the true number is.

One thing, though, we do think that just like with Atlantic sturgeon that TEDs in shrimp trawls likely do benefit Gulf sturgeon by providing a route of escape when those rare interactions do occur. Section 5 looks all through the effects in terms of detailing as much as we can about the numbers of animal interactions and their fate and factors, et cetera.

But Section 7 is the Jeopardy Analysis and that is where we're looking at – we're basically looking at the results of that Section 5 and that the effects of the proposed action, how they affect the likelihood of survival and recovery. We do that first by looking at whether there is a reduction in the reproduction numbers or distribution.

In this case obviously I've been talking to you about a variety of bycatch estimates so, yes, there would be a reduction in numbers from lethal captures and then any associated reproduction

losses. But the next stage is then, of course, evaluating whether that reduction causes an appreciable reduction and the likelihood of survival and recovery. I have the definitions here. Just so you can see this is sort of how we evaluate it; we look at the species persistence.

A lot of it focuses on what are the trends, what is the current trend information, how big is the population as a whole we think, things like that. Again, I guess I just said that; status trends, environmental baseline, you know, cumulative effects, pretty much everything that precedes the Jeopardy Analysis gets factored in.

Then we look at the effects and recovery goals and objectives pertinent to the threats posed by the fishery as well. Like I said, I know I skipped over some stuff like with sea turtles obviously. The proposed rule to require skimmer trawls is something that is actually an action. The sea turtle recovery plans has a big effect particularly on Kemp's Ridley. I didn't get into a lot of detail on the specifics as far as the skimmer trawl analysis, but all those things were factored in.

As you know, we did conclude it was not likely to cause – the proposed action is not likely to cause an appreciable reduction like it would about the survival and recovery, therefore not likely to jeopardize the continued existence of any listed species. Now one thing that I want to point out, as we always have with the non-jeopardy opinion, we have our incidental take statement which authorizes the anticipated take.

What is a little different here is that, like I said, we had a lot of issues with our sea turtle analysis. We're actually in the future using a take proxy for triggering re-initiation. Rather than redo all those specific details of the analysis, we're focusing on effort, which has a major impact, of course, on the take and then compliance levels.

I didn't get into the details probably enough on that. Essentially take of sea turtles will be considered exceeded and the effects on sea turtles will be considered greater if 2009 and/or 2000 effort levels are exceeded, because essentially effort is not expected to increase at this point. Then compliance levels are expected to result in TEDs being less effective than the predicted 88 percent effectiveness.

Again, when we looked at all the compliance information relative to what we thought its impact on the effectiveness of TEDs rather than the 100 percent compliance and assuming 97 percent effectiveness, we really felt that in the future we would be able to maintain this 88 percent effectiveness.

When it comes to the other species, it is a little more typical. Here you can see what we have for estimates for anticipated take. Another thing that is a little different that you might be familiar with Gulf sturgeon, take actually isn't exempt. They are a threatened species and you exempt take through a 4D Rule. Fish and Wildlife Service has one; we actually do not.

That is why they are not included in the ITS, but certainly in considering future needs to re-initiate we would be looking at our jeopardy analysis and if effects are greater than what we've predicted there, then certainly we would re-initiate. It doesn't change the re-initiation factor, but that is why it is not in the ITS.

Reasonable and prudent measures, as you know anytime we have a non-jeopardy opinion, we always have reasonable and prudent measures to minimize the extent of the bycatch that we are authorizing. For sea turtles these are our four reasonable and prudent measures. You can see they focus on monitoring effort and TED compliance.

Again, those were very critical to our analyses and will be critical to whether or not we re-initiate in the future; also just working with monitoring and strandings and improving the utility of our strandings, continuing outreach programs, training fishermen and net shop personnel in the proper installation and use, things like that.

Again, I encourage you to look at the terms and conditions of the BIOP. There are a bunch of them and I just didn't feel like reading a whole bunch of slides to you. All of the terms and conditions are just specific things that explain how we are going to carry out these four things. For the smalltooth sawfish, focusing on research to better understand the nature of smalltooth sawfish interactions with shrimp trawls and conducting outreach to fishers that fish in areas where they are most likely to interact with them and making sure they know and use safe handling release guidelines. For Atlantic sturgeon, again really conducting research, terms and conditions outline specifically what we're looking at.

These are things that NMFS as responsible for authorizing the fishery has to do. I did want to point out a couple of what I thought were key terms and conditions that you probably should be aware of that pertain to the sea turtle RPMs. Related to the first reasonable and prudent measure, NOAA Fisheries Service must coordinate with the states to monitor shrimp fishing effort and major gear types and must use this information to determine trends in shrimp fisheries and possible effects of these trends on sea turtles.

Since we have our state partners here, I just want to point that one out. Then like I said, a big part going down the road is going to be keeping on TED compliance and the effects. Related to that, NOAA Fisheries Service Protected Resources Division will be coordinating with the Southeast Fisheries Science Center Gear Monitoring team, the Pascagoula gear folks, the Observer program, NOAA Fisheries Office of Law Enforcement, U.S. Coast Guard and the state enforcement agencies.

All of this data that was used for this analysis, we want to continue to coordinate and look at that information. We'll actually be doing six months – every six months we are going to be looking at that information in the same manner that we did in the biological opinion to develop estimates of average capture rates for sea turtles so we know where we are in terms of are we getting the release rates that we expected.

If we are not, then NOAA Fisheries must use a step-wise approach to deal with low levels of TED compliance and use the data on TED compliance to talk at outreach enforcement efforts, maybe even emergency rules if necessary ranging from possible TED modifications to closures. Now again, step-wise and there are a variety of steps illustrated out.

I'll give you a little more information on that. If we're in this situation, NMFS must determine first that the lack of compliance is throughout the entire area or if it is concentrated in certain portions of an area. Once the extent an area of non-compliance are determined, NMFS through the gear monitoring team must hold trainings, conduct courtesy boarding's and other outreach as necessary in those areas where non-compliance is prevalent.

OLE must consider what enforcement response is most appropriate to address that. We must increase the frequency of our Compliance Data Analysis to a monthly basis instead of – if after we've looked at six months we're not doing well, we're going to start looking every month and see are we improving, are the actions we're taking making a difference?

Then if after six months capture rates based on compliance data continue to be above this 12 percent rate, then NMFS must consider using other authorities to either close areas – of course, we can lessen the amount of time involved. The point here is just that we are going to be very diligent in continuing to look at if we're getting the results that we said we were and taking action to make sure that compliance doesn't drop and we don't end up with more effects than we anticipated.

I don't really need to read these to you, but there is always again with all biological opinions, there are conservation recommendations, so the difference between a term and condition and reasonable measure versus conservation recommendations – these are just things we should do as opposed to we must do in order for our take to be authorized. A lot of it is just research-based additional things.

Again, as you are aware we do have a draft Environmental Impact Statement out right now. These are the alternatives that were considered, but again the proposal that was included when we looked at what the effects of the fishery are did include that withdrawing alternative tow times and requiring vessels using skimmer trawls to use TEDs.

If you go to a public hearing, you'll have seen that. These actually are the public hearings so far that have been held. The one in your region was actually on May 30, approximately 25 attendees. You can see that we're down to now just this week; Bayou le Batre is our last one that we'll be having. If you are planning on commenting, just make sure to get it in by July 9. We just wanted to make sure that you were aware in case you hadn't made it to a hearing. The DEIS is July 2. That concludes my presentation.

MR. PHILLIPS: Do we have any questions for Jennifer? John.

MR. JOLLEY: Yes, Jennifer, it looked like you had some numbers that showed turtle mortality at about 10 percent, rounding it off. I was interested in whether or not you had any guestimates about what turtle mortality was in the shrimp fishery in the seventies and eighties.

MS. LEE: I'm trying to think of where you got the 10 percent. If a turtle is caught and doesn't escape from the TED, mortality isn't releasing it from the TED. The mortality is actually very high on an individual basis. I think the estimates are like 80 to 90 percent of turtles in otter trawls end up dying from that interaction if they're not released.

It does vary dramatically between the Gulf and South Atlantic. I can't remember those statistics offhand. Obviously, in looking at the sea turtles it was very complicated because effort used to be obviously much, much higher. Turtle populations have grown since then. It is difficult to compare the estimates that have been out there with so many factors.

Certainly, like I said, this is the first time that we've really delved into looking at compliance and the impact on the release rates. Now, does that mean when the 2002 Biological Opinion was done and didn't look at that; does that mean it didn't exist back then? Well, no, I'm sure we've always had compliance problems to some extent.

Again, it is difficult to sort of compare things because there are just so many variables that have been going on. We're trying to look at things more comprehensively now by paying attention to the fact and not just assuming, oh, boy, these regulations are everything; that's it, it is 100 percent compliance.

MR. JOLLEY: I just was looking for a guestimate just to get some feel for maybe improvement. What are RPMs?

MS. LEE: I'm sorry if I used that acronym; reasonable and prudent measures and those are to minimize the extent of bycatch, really.

DR. LANEY: Jennifer, is the agency going to designate critical habitat for Atlantic sturgeon; and if so what is the timeline for that?

MS. LEE: I don't know the timeline offhand, but certainly the agency needs to make a determination on critical habitat. I think we usually have a year after the final listings in which we can make that decision, so stay tuned.

MR. PHILLIPS: Anything else? They are going to e-mail out the presentations so you can have any addresses and phone numbers.

MS. MARTIN: What we have next is a quick overview. Richard Vendetti is on our Deepwater Shrimp Advisory Panel, and he is going to review the recommendations that the joint APs had that do not pertain to the Coral HAPC measures, so these are primarily pertaining to Shrimp Amendment 9. After his review of the miscellaneous recommendations that weren't covered by Mike earlier, we'll get into the Shrimp Review Panel's recommendations and then the decision document for Shrimp 9.

MR. VENDETTI: Good afternoon. Again my name is Richard Vendetti; I'm with Southern Shrimp Alliance; and I'm a member of the Shrimp AP here to report on the joint Shrimp and Deepwater Shrimp AP meeting in Charleston in April. There were three primary areas of discussion.

One was the general council process and how it relates to APs. There was some lengthy discussion on that actually. I'm going to touch on primarily Shrimp Amendment 9; and as Anna

just mentioned CE-BA was covered earlier today during the Ecosystem Committee. Two primary issues we were dealing with in Shrimp Amendment 9 is, of course, there is a contingency that would like to see a more expeditious process and perhaps additional criteria for closing the EEZ in adjacent waters to a state's waters during the event of a freeze or extreme winter weather.

You know that stems from the current process being 80 percent mortality determined at the state level and then the state having to wait to put in their request for a closure until the March meeting of the council, which could be weeks, potentially even a couple months after the event. Industry would like to address that.

The second action is revising the criteria for determining minimum stock size threshold when considering whether South Atlantic pink shrimp are overfished. As you all are well aware, it has been determined that pink shrimp have been overfished for a couple of years now, but you all are also well aware that it is not due to overfishing.

The Motion Number 4, which addressed our first action on expediting the process to close the EEZ during the event of a freeze; there are two components of it are modifying the criteria and modifying the process for the state to put in its request. The resulting motion, as you can read, is that a state may request a closure of the EEZ if the water temperature is 8 degrees centigrade or below for at least a week.

The second part of that is that the data would be submitted directly to NOAA Fisheries. Motion Number 5 addressing the MSST on pink shrimp; again there are two components of this and that is additional definitions, but additional data sources because of the current SEAMAP data not being able to do the job, first of all. The species is coming up as overfished when it is not, because the data is not covering the full range of the species.

The resulting motion was to recommend that the Shrimp Review Panel develop additional definitions of overfished for pink shrimp and that the AP supported the use of additional data and suggested at least one set of data, which was the Pamlico Sound Trawl Survey. There were also some recommendations to go along with that that were given to the council staff.

Those recommendations are just good common sense and good science measures, but any definition should prevent the triggering of the statutory requirements to rebuild stocks when overfishing is not the cause; of course, should be submitted for review by the Shrimp AP and the public. Consider whether the definition of MSY for pink shrimp is appropriate in addition to MSST.

Incorporate potentially new modeling methodologies that are being used at the Gulf Council we know right now for very similar situations. Finally, to just ensure that the data used, as I just mentioned, covers the full range of the stock. That is really all I had. I did want to touch on the presentation that staff gave with regard to the council process and the APs concerns.

It really kind of stemmed back to CE-BA 3 and the public hearing process. There were just concerns about learning that the council was going to move to what was called an expedited

process. The fishermen felt like they were being managed through CE-BA and not through their own fishery management plan. It is confusing to them. Staff did a great job in explaining it, but I think still in the end they felt like they didn't really understand it.

In that regard they proposed another motion, which I am sorry I didn't make a slide of it, but the motion was essentially to just make sure they know what's going on. The Shrimp APs recommend that any AP be involved on any measures relative to them prior to public scoping. They just felt like again the public scoping process with regard to CE-BA could have been a little more well-fleshed out and well publicized. They didn't seem to kind of know what was going on with the CE-BA 3 scoping process.

MR. PHILLIPS: Are there any questions for Richard? Okay, hearing none, Anna.

MS. MARTIN: I'll just quickly review with you the Shrimp Review Panel report and their recommendations. This panel met over a webinar, conference call, if you will, in May. They were convened to address the issue in Shrimp Amendment 9 regarding the overfished status criteria for pink shrimp.

As you recall, in the March meeting the Shrimp Committee tasked the Review Panel with convening to develop some recommendations for alternatives to consider for that measure. That was the sole purpose of their meeting. They did, and so I'll just quickly review with you. But just to give you a little bit of background, Richard touched on this a little bit, currently SEAMAP is used as the data source for developing the BMSY proxy for pink shrimp.

There are some geographical limitations with that survey. I think currently the pink shrimp landings are primarily north of Cape Hatteras and south of Cape Canaveral. This is an area where the SEAMAP survey isn't commonly sampling. The Review Panel was convened to talk about additional data sources that could be factored into the mix here. Essentially the recommendations that came from the webinar, the Review Panel is recommending the addition of the Pamlico Sound Trawl Survey, and this is coordinated by North Carolina Division of Marine Fisheries.

This is something they feel should be factored into consideration of the current proxy determination. Its geographical range is capturing a lot of the habitat where pink shrimp are currently caught in waters in North Carolina. This is an independent survey that falls under the umbrella of the SEAMAP survey. It has been in place since 1987.

It has comparable sampling design and gear type selection. Currently their sampling area covers the Pamlico Sound, also the Pamlico River, Punga River and the Neuse Rivers up to Broad Creek area. It is a little more comprehensive in scope and capturing some of the range of the pink shrimp in North Carolina waters.

This is a fishery-independent program in North Carolina, sampling all penaeids, blue crab and target finfish species. The Review Panel also discussed that if this issue continues to occur and the overfished threshold is triggered in the future with the consideration of this data source into

the mix as a recommendation here; that the Shrimp Review Panel revisit this discussion and perhaps consider incorporating a new assessment for penaeids like what is in place in the Gulf.

I'll just mention that Rick Hart, he serves on our Shrimp Review Panel and he is affiliated with the Science Center, he was instrumental in developing a stock synthesis model for Gulf shrimp stocks. As Richard was mentioning, they were having a similar issue over there. One thing that this new assessment model captures is not only fishery-independent data but also fishery-dependent data, environmental and climatic conditions, also Louisiana state inshore data and other landings data, so it is a little more comprehensive in scope.

Of course, the Review Panel brought up the fact that any assessment would have to be vetted through the SEDAR process and would also have to make the schedule under the assessment priorities. Understanding that this isn't on there right now, there would have to be some discussion about adding such type of an assessment to the schedule.

They just talked about that, perhaps revisiting a similar type assessment in the South Atlantic if this issue continues to surface. The other point they discussed and the other issue that is in Shrimp Amendment 9 that Richard reviewed also, the Shrimp Review Panel is interested in remaining a part of the process for reviewing state data when a concurrent closure to close the adjacent EEZ off of the state due to cold weather event is initiated.

We have an action that looks at modifying the criteria and expediting the process in Shrimp Amendment 9. The Review Panel, as you'll see, we have a couple of alternatives that consider involvement of the Review Panel in reviewing the state's data and one alternative does not. They were posed the alternatives and commented on their preference for that measure. That is the report of the Shrimp Review Panel.

MR. CUPKA: Anna, in regard to including the Pamlico Sound Trawl Survey to look at the overfished situation; I know that just based on a SEAMAP data, at least for the last seven or eight years it has indicated it's overfished, and that the Pamlico Sound survey data goes back a number of years. Do you know if anyone has actually sat down and included the Pamlico Sound survey for those seven or eight years that showed it was overfished to see what impact that would have had on the outcome?

MS. MARTIN: To my knowledge, that hasn't been done. We have the data in here from the Shrimp Review Panel report that does indicate since 2003 the overfished criteria has been – the threshold has been triggered. To my knowledge, incorporation of other data sets including Pamlico Sound, perhaps it has been discussed but it hasn't been compared or included.

DR. CRABTREE: Did they talk about the possibility of changing the minimum stock size level? It looks to me like if we don't believe that we're below it because of fishing activity, then something has changed in the environment that has reduced the productivity of pink shrimp stocks. Until that changes back, this may be where we are.

It seems to me it would make sense to come and revise the minimum stock size threshold to bring it in line with what the current productivity of the stock is. It looks to me like if it is not

fishing, then something has changed in the environment and there just aren't as many pink shrimp out there as there used to be, and we need to bring things into line with that; probably MSY, but the stock threshold and the rest of these things.

MS. MARTIN: Gregg is suggesting that we talk about any changes here within the decision document. If we can get into that, perhaps we can revisit the discussion of potentially changing the action. I guess I'll go ahead and get started. The decision document is Attachment 5 in the Shrimp Committee Briefing Book.

We are taking a look at those couple of issues that we've already touched on; expediting the process and specifying criteria that states need to demonstrate in order to be able to request a concurrent closure of the EEZ adjacent to their state during cold winter events; and revising the proxy for BMSY for pink shrimp to better incorporate the geographical limitations that the SEAMAP survey is demonstrating through their data.

The first step would be to approve the purpose and need for this amendment. This is an environmental assessment that the committee has approved for development this year. Now the IPT does have a recommendation for a purpose and need for this amendment; the purpose being of Amendment 9 is to modify the criteria for South Atlantic states requesting a concurrent closure to protect overwintering white shrimp; streamline the process by which a state can request a concurrent closure; and revise the methodology for monitoring and establishing an overfished proxy BMSY for pink shrimp.

Now the suggested need for the action by the IPT here is the need in Amendment 9 is to allow for a more efficient process to facilitate timely concurrent closure requests, to maximize protection of overwintering white shrimp during cold weather events, and to improve the accuracy of the biological parameters for pink shrimp management.

MR. HAYMANS: Mr. Chairman, I make a motion that we accept the IPT's suggested wording for Purpose and Need.

MR. PHILLIPS: I have a motion from Doug, do I have a second; second from Wilson. Discussion? Any objection? Seeing none, **the motion passes.**

MS. MARTIN: Okay, PDF Page 4 in the decision document is Action 1. This is what is currently included in the document. Action 1 does combine changes in criteria that a state must demonstrate in order to request a concurrent closure with the process for expediting a closure. The criteria are identified in Alternatives 1 and 2. Alternative 3 is the process for expediting a closure. The IPT discussed that it would make more sense and perhaps to reorganize this action is to split out the criteria with the intent to expedite the process.

MR. HAYMANS: Mr. Chairman, I make a motion to accept the IPT's recommendation to split Action 1 into two actions and to change Action 2 as it exists to Action 3.

MR. PHILLIPS: I have a motion from Doug; second from Roy. Discussion? Does everybody approve? Any objections? No objections, **the motion passes.**

MS. MARTIN: The new Action 1 becomes specify additional criteria that triggers a state's ability to request a concurrent closure of the overwintering white shrimp fishery and the adjacent EEZ during severe winter weather. Alternative 1 is what is currently in place as defined under the FMP for South Atlantic shrimp, and this is based on population abundance. A state must demonstrate an 80 percent or greater decrease in abundance of overwintering white shrimp in order to initiate a concurrent closure request.

Alternatives 2, 3 and 4 identify temperature threshold criteria in addition to what's currently the process. Under Alternative 2, a state may request a concurrent closure upon providing information that demonstrates an exceeded threshold for water temperature, and the temperature must be 45 degrees or below for at least a week. Alternative 3 is the same type of measure based on temperature threshold criteria, but under Alternative 3 water temperature must be 46 degrees or below for at least a week.

Now this is the alternative that the Shrimp Review Panel did discuss that this particular temperature threshold would be a suitable benchmark here if the committee were to discuss this measure. They didn't endorse a preferred, but the Shrimp and Deepwater Shrimp Advisory Panels did, and they have endorsed Alternative 3 as their preferred, and that is the 46 degree benchmark or below for at least a week.

MR. HAYMANS: Mr. Chairman, I make a motion that we accept the Shrimp and Deepwater Shrimp APs' endorsement of Alternative 3 as our preferred alternative.

MR. PHILLIPS: I have a motion; second by Mel. Discussion? Any objection? Seeing none, **the motion passes.**

MS. MARTIN: Okay, I guess my next question for the committee would be the way the wording of the action, it states specifying additional criteria, and under the Deepwater Shrimp and Shrimp recommendation was to endorse Alternative 3 as their preferred, and that would be in place of what is currently the criteria. There is a question for the committee about whether or not the preferred alternative would replace the population abundance criteria.

MR. HAYMANS: I believe that is certainly the intent is to do away with the 80 percent and rely solely on water temperature as the method to request the closure. There may be additional data provided, but it is the water temperature that allows us to request.

MR. PHILLIPS: Can we just use that as direction for staff if there is no objection or do we need a motion?

MR. CUPKA: You need a motion.

MR. PHILLIPS: All right, do you want to make that in the form of a motion, Doug?

MR. HAYMANS: I'd be happy to. I'd make a motion that the water temperature, in this case the preferred alternative 8 degrees would be used in lieu of the abundance criteria.

MR. PHILLIPS: Do I have a second? Second by Mel. Any discussion? I'll let you read it, Anna.

MS. MARTIN: **The motion states that water temperature criteria are to be used in lieu of population abundance criteria under Action 1.**

MR. PHILLIPS: Any discussion? David.

MR. CUPKA: Well, one thing that is a little confusing at least to me where it says additional criteria; to my mind it raises this issue is it something in addition to what we currently have. It seems to me it would be better to say specify new criteria except that to me that is less confusing than additional. Additional sounds like they're adding something to what we already have. It's just a suggested word change for the action itself and not objecting to this, because I think the intent is to take action based strictly on the water temperature and not what we have now.

MR HAYMANS: Could we not strike the word "additional" and the action read specify criteria that trigger the state's ability, blah, blah, blah.

MR. PHILLIPS: That does that take care of it, David?

MR. CUPKA: I think that would be better.

MR. PHILLIPS: Is that okay with the seconder?

MS. MARTIN: Is that a motion?

MR. CUPKA: No, you have a motion on the table; that was just a correction to clarify.

MR. PHILLIPS: We haven't voted on it yet, Anna, I don't think. Direction to staff.

MR. CUPKA: You have a motion on the table.

MR. PHILLIPS: Okay, anymore discussion? Did we vote on it, I've lost track. Okay, anymore discussion? Any objection to the motion? Seeing none, **the motion passes.**

MS. MARTIN: Is that right?

MR. CUPKA: No, what was approved Anna was the motion about the water temperature criteria. We didn't make a motion on direction to staff.

MS. MARTIN: Sorry, losing my marbles here. Okay, that takes us to Action 2. This is PDF Page 6. This is the IPT's recommendation for the language for Action 2 and that would modify the process for a state to request a concurrent closure of the overwintering white shrimp fishery in the adjacent EEZ during severe winter weather.

Alternative 1 is what is currently in place that we have discussed. It is a lengthy process that involves the state, demonstrating they are meeting the population abundance criteria, submitting this to the Shrimp Review Panel for review. These recommendations are then reviewed at the next council meeting. The council then discusses whether or not to submit a recommendation to the Regional Administrator requesting a formal closure of the state's adjacent EEZ.

Under Alternative 2, any state requesting a concurrent closure would send a letter directly to NOAA Fisheries Service with the request and necessary data to demonstrate that criteria have been met. Just a note here that as Richard presented, this is the preferred alternative from the Shrimp and Deepwater Shrimp Advisory Panel.

They discussed this would expedite the process, leaving out the review by the Shrimp Review Panel. Under Alternative 3, any state requesting a concurrent closure would send a letter directly to NOAA Fisheries Service with the request and necessary data to demonstrate that criteria have been met. The requesting state would also submit data to the Shrimp Review Panel, who would review data and make a formal recommendation to NOAA Fisheries Service.

The difference here is Alternative 3 includes the Shrimp Review Panel in the mix as reviewing state data. This is in interest of the Review Panel. They are a formal advisory panel in that they do require formal noticing, and so the minimum amount of time required to convene this panel is 23 days. Now under Alternative 3 it does exclude waiting around for the March council meeting. It would be faster than what is currently in place, but there is that consideration there.

MR. HAYMANS: Mr. Chairman, I make a motion that we accept the Shrimp and Deepwater Shrimp APs' endorsement of Alternative 2 as our preferred alternative.

MR. PHILLIPS: Second by Roy. Any discussion?

MR. HAYMANS: Sorry, just a brief moment of discussion in that most of the members of the Shrimp Review Panel are the state agency officials responsible for the shrimp season, anyway, and they contact each other on a regular basis during this time of year to discuss such matters.

DR. CRABTREE: Yes, and the criteria are pretty clear cut. Also, I'm not aware of any situation where a council advisory panel makes a recommendation directly to the Fisheries Service. Normally those recommendations are made to the council and then the council acts on it, so that would be unusual to do something along those lines. I think it's just another step that is not necessary and will make this too bureaucratically cumbersome.

MR. BELL: I might just add the whole point in doing this was to expedite the process so it is not the end of March by the time we're ready to do something, so this would work. I'm looking at in 2011 we would have met the criteria, at least where we were by the 17th of January we would have had that met. It will help expedite things, I think.

MR. PHILLIPS: Is there any objection to the motion? Seeing none, **the motion passes.**

MS. MARTIN: Okay, that takes us to the last issue in Amendment 9, and this is on PDF Page 10. This becomes Action 3. What's currently included in the document is to revise the minimum stock size threshold, MSST proxy for pink shrimp. Alternative 1 is what is currently in place.

Alternative 2 in the document would use another fishery-independent survey for pink shrimp MSST proxy in addition to the SEAMAP survey. Alternative 3 would use another fishery-independent survey for the pink shrimp MSST proxy in place of the SEAMAP survey. Alternative 4, add the Gulf pink shrimp MSST proxy in addition to SEAMAP.

As with Action 1, the IPT had some discussion about restructuring this action to better capture what was addressed in Shrimp Amendment 6, considering that this is an issue that carries over from that amendment. They are recommending revised language for this action. That would be to revise the overfished status determination criteria for the pink shrimp stock the BMSY proxy.

Alternative 1, and this again is the IPT recommendation for the action, Alternative 1 is what is currently in place that uses the SEAMAP survey to develop the proxy for pink shrimp. It does have the time series in there of 1990 to 2003. Alternatives 2 and 3 also carry over from Shrimp Amendment 6, and these are based on landings.

Alternatives 4 and 5 were developed based on the recommendation of the Shrimp Review Panel to include the Pamlico Sound Trawl Survey data set into the mix for developing this proxy for pink shrimp annually. Under Alternative 4, a BMSY proxy for pink shrimp would be calculated using the best scientific information available as determined by the Shrimp Review Panel, which would meet on an annual basis to review this proxy and stock status. This alternative allows for future data sets to be factored into the mix.

Currently there isn't a complementary independent program in Florida. Under Alternative 4, if there was one in the future or any other data set that could be incorporated, this would allow the Shrimp Review Panel to consider such a data source. Alternative 5 is more specific, and under Alternative 5 this would establish two proxies for BMSY for pink shrimp using catch-per-unit effort information from SEAMAP and the Pamlico Sound Trawl Survey as the lowest value in a certain time range that produced catches meeting MSY the following year. Again, this is an IPT recommendation for restructuring this action to mirror what was addressed in Shrimp Amendment 6.

MR. HAYMANS: Mr. Chairman, I'd make a motion that we accept the Shrimp Review Panel's endorsement of Alternative 4 as our preferred alternative.

MR. PHILLIPS: Motion from Doug; second by Mel. Discussion?

DR. CRABTREE: Well, I find this whole section confusing. I don't really understand why we're reviving all the alternatives from Shrimp 6. Alternatives 2 and 3 make no sense whatsoever to me. What we're essentially saying there is if landings drop we're going to say the stock is overfished.

Well, what we've seen in the shrimp fishery over the years is effort has plummeted. If everybody quit shrimping, we'd say it's overfished. I don't think Alternative 2 or 3 are defensible and I wouldn't want to put it in the document. Did they specifically recommend that we put Alternatives 2 and 3 into this? I'm not sure what's happening here.

MS. MARTIN: The IPT essentially carried over this issue from Shrimp Amendment 6. This is the language for the same action in Shrimp Amendment 6 and these were alternatives that were considered at that time.

DR. CRABTREE: But I'm right that Alternatives 2 and 3 are both based on if landings fall below some level.

MS. MARTIN: That's right.

DR. CRABTREE: Then I guess to the motion on the board – and we can come back to those – I don't really know what Alternative 4 means.

MR. HAYMANS: Well, I read it as to allow the Shrimp Review Panel the maximum flexibility in determining what overfishing was for pink shrimp.

DR. CRABTREE: But I don't know that we can put in place an overfished threshold that is not defined other than that they'll figure something out. They need to figure it out and then we put it in the document. I don't think we're prepared to choose a preferred on this. At least I'm not prepared to, because I don't have any idea what this preferred is. I guess I'll vote against the motion, Doug.

MR. HAYMANS: Or I can withdraw the motion.

DR. CRABTREE: Well, that's up to you, but I'd be happy if you did.

MR. PHILLIPS: Well, let me get, Michelle, and maybe she'll shed some light on the subject.

DR. DUVAL: Mr. Chairman, I'm not on your committee but I was just curious just to Roy's comments in the fact that the review panel had made comments about that there was not a specific index that could be used from the state of Florida. Is there a framework process for this AP that would allow for inclusion of other data sets that are appropriate to help with this as they become available? I mean would that be a way of providing that flexibility? I'm just asking a question.

DR. CRABTREE: We could certainly incorporate – if there is another data set that we could incorporate in the MSST, I would think we would do that in this amendment and pull it in and re-estimate it. But if it's something that may come available in the future, I don't know if we have a framework for shrimp or what it allows, Monica.

MS. SMIT-BRUNELLO: I'll look.

MR. WAUGH: Part of the difficulty of dealing with this is these shrimp species are an annual crop. We got into this box with Shrimp Amendment 6. We considered some landings. We had landings as our previous definition. But then the advice we received at the time we were working on Amendment 6 was that we had to go to a biomass-based definition.

One was constructed with the hope that it would never be triggered. The problem we're in now is it is being triggered not due to overfishing. We're sort of doing this tightrope dance here trying to come up with a definition of overfishing/overfished for an annual crop that doesn't get met.

We asked the Shrimp Review Panel that includes all the state shrimp experts, the NMFS shrimp expert, with the hope that they would come up with something. I would agree with the comments that have been made. I don't think we've found a way to deal with this box yet. We're certainly open to any suggestions from anybody else who can craft a solution.

DR. CRABTREE: My understanding is there was a North Carolina data set that is not included in the current MSST; is that correct?

MS. MARTIN: That's right.

DR. CRABTREE: Is there not a way to incorporate that into a modification of the current MSST?

MS. MARTIN: Well, that is what we're trying to do here. That's what Alternative 4 and 5 would do.

DR. CRABTREE: That's not what Alternative 4 says, though. I can see Alternative 5 says that, but I don't know what Alternative 4 – I think what we need is to see those fleshed out more. Then if that is not a practical thing, then, Gregg, my solution is we ought to reduce the current MSST to a lower CPUE based on the average in more recent years, because clearly something has changed the productivity. It is not due to fishing it is too high, it needs to be reduced.

I think an alternative that looked at doing that and then a more developed alternative that pulls the Pamlico Sound Trawl Survey into this make sense, but I don't have any way of knowing if just pulling the Pamlico Sound Trawl Survey into this even fixes the problem. We still might be triggering it, so we still might need to make adjustments. I think what we need to do is work out along those lines, get rid of Alternatives 2 and 3, and then I think we could come back in and make a choice about a preferred; but I don't think we ought to today.

MR. CUPKA: Yes, and Roy speaks to the very issue I was trying to make earlier. I think we need to pull in – apparently as a first step we need to pull in that Pamlico Sound data and see where that takes us and then decide from there where we need to go. It may or may not help the situation, but it ought to be easy enough to do I would think.

MR. CARMICHAEL: My question is kind of simpler. It is do we need an MSST if this is an annual crop? My understanding was biomass-based references didn't have really meaning in

that because it doesn't mean anything to rebuild to that level for annual crops and that we're required to have the overfishing type of things to prevent overfishing from occurring, but we didn't need the biomass-based references and the rebuilding things and such that are contained within the Act. I thought there was language in there that said for annual crops, that particular section about biomass references and rebuilding times and such wasn't applicable.

DR. LANEY: Mr. Chairman, I'm not sure whether this question has anything to do with the present discussion or not, but it seems to me it's a relevant question. That is relative to Alternative 5 and the pulling in of the Pamlico Sound Trawl Survey and establishing two proxies. Mac asked me if the SEAMAP protocol and the Pamlico Sound protocol are the same.

If they are not the same, then I guess you would have to somehow look at the method in which those two are conducted and then somehow do some sort of correlation between the two of them. I'm not sure; Bonnie might want to speak to that, but still that is a question I think would need to be answered is how you compare the two.

MS. SMIT-BRUNELLO: To John's question; John, I think what you're thinking of is that annual crops don't need annual catch limits or accountability measures, but they still need definitions of what does it take to – status determination criteria, what it means to the definition of overfishing and what it takes for them to be overfished.

MR. CARMICHAEL: I definitely agree on the overfishing, because I thought that was a separate paragraph in the Act, but then I thought there was a section about rebuilding times and implementation, and it mentioned the biomass as not being required for annual crops. Because if you think about it, it is one of the things the SSC struggled with when they made ABC recommendations was trying to say what does the biomass mean for an annual crop, because what you get next year has nothing to do with what you have this year.

DR. CRABTREE: Do we still have a motion on the board?

MR. PHILLIPS: We do have a motion and we're in discussion. Doug.

MR. HAYMANS: I'd be happy to withdraw that motion, Mr. Chairman.

MR. PHILLIPS: Okay, with concurrence of the committee. Now, Roy.

DR. CRABTREE: I think this action just needs restructuring and we ought to look at what does bringing in the Pamlico Trawl Survey do and how would that work? Then we ought to look at some alternatives of changing the magnitude. I don't think fundamentally there is anything wrong with this MSST. It just appears to me that it may be too high now. It also appears to me it is geographically not reflective enough of the whole area, and maybe the Pamlico Sound survey fixes that, but I think we need to see that worked up and then come back to this.

MR. PHILLIPS: Gregg, is that going to work for direction to staff?

MR. WAUGH: Yes, with a question. This can be done, but we talked about seeing what adding the Pamlico Sound Trawl Survey does. We can't do that analysis here at this meeting. Is it the intent that we would make these changes within Shrimp Amendment 6, and perhaps you would just take this out to public hearing with no preferred for this action? It would be refined; all the analyses, and then we come back after public hearings and pick a preferred.

MR. CUPKA: Yes, that would be my preference; otherwise, we may miss the next round of public hearings that we have scheduled for August.

MS. SMIT-BRUNELLO: Just so I'm clear, Gregg, you would have the alternatives fleshed out at this meeting. You wouldn't have the analysis or the results of what the alternatives mean, but you'd have the alternatives? Then by the time you went to public hearing, you would have that analysis done?

MR. WAUGH: Correct. I mean we can work up – you just strike through Alternatives 2 and 3, make sure we have – and I think Alternative 4 or 5 make it clear that we're pulling in the Pamlico Sound Trawl Survey. We'd have to construct a new alternative that would reduce the CPUE trigger for the current MSST approach. We could have that wording for full council.

DR. CRABTREE: I think that is fine and if you can pull that together, we can take a look at it and then maybe work on some estimate of when the analysis could be done, at least enough analysis so the public could have some basis to comment on it. If we can do all that, I think we'd be okay.

MR. HAYMANS: Do you need a motion to remove Alternatives 2 and 3, Mr. Chairman?

MR. PHILLIPS: Probably.

MR. HAYMANS: Mr. Chairman, I make a motion we remove Alternative 2 and 3 to the considered but rejected.

MR. PHILLIPS: Motion by Doug; second by David. Any discussion? Any opposition to the motion? Seeing none, **the motion passes.**

MS. MARTIN: Okay, those are the issues in Shrimp Amendment 9. I guess we can defer discussion of approval for public hearing until full council.

DR. CRABTREE: I would like to wait until we see that we have those alternatives in good shape before I approve it.

MR. PHILLIPS: Any other discussion? I think that gets us down to other business, Anna.

MS. MARTIN: Yes.

MR. PHILLIPS: Is there any other business? How about timing and task, is that going to be full council? Then the Shrimp Committee is adjourned. Thank you.

(Whereupon, the meeting was adjourned at 6:35 o'clock p.m., June 11, 2012.)

Certified by: _____ Date: _____

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July, 2012

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 June 11, 2012
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June 11, 2012

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General Information

Webinar Name
SAFMC Council Meeting - Day 1 of 5 (Monday)

Webinar ID
222234954

Actual Start Date/Time
Jun 11, 2012 11:56 AM EDT

Actual Duration (minutes)
399

Clicked Registration Link
78

Opened Invitation
42

Total Attended
30

Session Details

Gore,Karla	karla.gore@noaa.gov
Attended Yes	
Registration Date	Jun 11, 2012 10:09 AM EDT
City	Sarasota
State	FL
Unsubscribed	No

In Session

Join Time	Leave Time	In Session Duration* (minutes)
Jun 11, 2012 11:56 AM EDT	Jun 11, 2012 06:28 PM EDT	391.67

Interest Rating

Attendee's In-Session Level of Interest: 46

Registration Q & A

Questions Asked by Attendee

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Austin,Anthony	redress@ec.rr.com
Attended Yes	
Registration Date	Jun 11, 2012 02:47 PM EDT
City	hubert
State	NC
Unsubscribed	No

In Session

Join Time	Leave Time	In Session Duration* (minutes)
Jun 11, 2012 02:50 PM EDT	Jun 11, 2012 05:23 PM EDT	153.1

Interest Rating

Attendee's In-Session Level of Interest: 69

Registration Q & A

Questions Asked by Attendee

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Waymer,Jim jwaymer@floridatoday.com

Attended Yes

Registration Date Jun 11, 2012 02:42 PM EDT

City Melbourne

State FL

Unsubscribed No

[In Session](#)

Join Time	Leave Time	In Session Duration* (minutes)
Jun 11, 2012 02:42 PM EDT	Jun 11, 2012 03:10 PM EDT	27.1

Interest Rating

Attendee's In-Session Level of Interest: 35

[Registration Q & A](#)

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DeVictor,Rick rick.devictor@noaa.gov

Attended Yes

Registration Date Jun 11, 2012 01:49 PM EDT

City St. Pete

State FL

Unsubscribed No

[In Session](#)

Join Time	Leave Time	In Session Duration* (minutes)
Jun 11, 2012 01:50 PM EDT	Jun 11, 2012 05:01 PM EDT	190.93

Interest Rating

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Whitaker,David whitakerd@dnr.sc.gov

Attended Yes

Registration Date Jun 11, 2012 02:52 PM EDT

City Charleston

State SC

Unsubscribed No

[In Session](#)

Join Time	Leave Time	In Session Duration* (minutes)
Jun 11, 2012 02:52 PM EDT	Jun 11, 2012 05:35 PM EDT	163

Interest Rating

Attendee's In-Session Level of Interest: 24

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klostermann,joe grkjk@aol.com

Attended Yes

Registration Date Jun 11, 2012 09:00 AM EDT

City ft.pirece

State FL

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[In Session](#)

Join Time	Leave Time	In Session Duration* (minutes)
Jun 11, 2012 04:03 PM EDT	Jun 11, 2012 06:35 PM EDT	151.8

Interest Rating

Attendee's In-Session Level of Interest: 52

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Whitaker,David whitaked@dnr.sc.gov

Attended Yes

Registration Date Jun 11, 2012 01:58 PM EDT

City Charleston

State SC

Unsubscribed No

[In Session](#)

Join Time	Leave Time	In Session Duration* (minutes)
Jun 11, 2012 01:58 PM EDT	Jun 11, 2012 02:00 PM EDT	1.23

Interest Rating

Attendee's In-Session Level of Interest: 69

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Merrifield,Jeanna jeannam@wildoceanmarket.com

Attended Yes

Registration Date Jun 11, 2012 09:29 AM EDT

City Titusville

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Join Time	Leave Time	In Session Duration* (minutes)
Jun 11, 2012 11:56 AM EDT	Jun 11, 2012 06:36 PM EDT	399.85

Interest Rating

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klostermann,joe **grjffk@aol.com**

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Registration Date Jun 11, 2012 08:38 AM EDT

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Join Time	Leave Time	In Session Duration* (minutes)
Jun 11, 2012 11:56 AM EDT	Jun 11, 2012 03:22 PM EDT	205.97

Interest Rating

Attendee's In-Session Level of Interest: 43

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Registration Date Jun 11, 2012 02:24 PM EDT

City Edisto

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Join Time	Leave Time	In Session Duration* (minutes)
Jun 11, 2012 02:25 PM EDT	Jun 11, 2012 03:18 PM EDT	52.97

Interest Rating

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Beckwith,Anna anna@pamlicoguide.com

Attended Yes

Registration Date Jun 11, 2012 09:06 AM EDT

City Morehead City

State NC

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[In Session](#)

Join Time	Leave Time	In Session Duration* (minutes)
Jun 11, 2012 11:56 AM EDT	Jun 11, 2012 06:35 PM EDT	447.63

Interest Rating

Attendee's In-Session Level of Interest: 64

[Registration Q & A](#)

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Byrd,Julia byrdj@dnr.sc.gov

Attended Yes

Registration Date Jun 11, 2012 03:51 PM EDT

City Charleston

State SC

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Join Time	Leave Time	In Session Duration* (minutes)
Jun 11, 2012 03:52 PM EDT	Jun 11, 2012 05:16 PM EDT	84.77

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fenske,kari kari.fenske@safmc.net

Attended Yes

Registration Date Jun 11, 2012 08:28 AM EDT

City charleston

State SC

Unsubscribed No

[In Session](#)

Join Time	Leave Time	In Session Duration* (minutes)
Jun 11, 2012 01:14 PM EDT	Jun 11, 2012 03:43 PM EDT	148.88

Interest Rating

Attendee's In-Session Level of Interest: 23

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Lamberte,Antonio tony.lamberte@noaa.gov

Attended Yes

Registration Date Jun 11, 2012 01:39 PM EDT

City St. Petersburg

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[In Session](#)

Join Time	Leave Time	In Session Duration* (minutes)
Jun 11, 2012 01:40 PM EDT	Jun 11, 2012 02:56 PM EDT	75.97

Interest Rating

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Eich,Anne Marie annemarie.eich@noaa.gov

Attended Yes

Registration Date Jun 11, 2012 08:52 AM EDT

City Saint Petersburg

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[In Session](#)

Join Time	Leave Time	In Session Duration* (minutes)
Jun 11, 2012 11:56 AM EDT	Jun 11, 2012 04:07 PM EDT	237.67

Interest Rating

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[Registration Q & A](#)

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sandorf,scott scott.sandorf@noaa.gov

Attended Yes

Registration Date Jun 11, 2012 01:56 PM EDT

City st petersburg

State FL

Unsubscribed No

[In Session](#)

Join Time	Leave Time	In Session Duration* (minutes)
Jun 11, 2012 01:57 PM EDT	Jun 11, 2012 04:54 PM EDT	175.7

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Attendee's In-Session Level of Interest: 26

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MacLauchlin,Bill **billmac@charter.net**

Attended Yes

Registration Date Jun 11, 2012 12:02 PM EDT

City Stockbridge

State GA

Unsubscribed No

[In Session](#)

Join Time	Leave Time	In Session Duration* (minutes)
Jun 11, 2012 12:02 PM EDT	Jun 11, 2012 06:06 PM EDT	363.35

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Attendee's In-Session Level of Interest: 64

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[Poll Questions](#)

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Mehta,Nikhil **nikhil.mehta@noaa.gov**

Attended Yes

Registration Date May 25, 2012 10:54 AM EDT

City St. Petersburg

State FL

Unsubscribed No

[In Session](#)

Join Time	Leave Time	In Session Duration* (minutes)
Jun 11, 2012 11:56 AM EDT	Jun 11, 2012 04:38 PM EDT	282.65

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Attendee's In-Session Level of Interest: 50

[Registration Q & A](#)

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Attended Yes

Registration Date Jun 11, 2012 11:01 AM EDT

City titusville

State FL

Unsubscribed No

[In Session](#)

Join Time	Leave Time	In Session Duration* (minutes)
Jun 11, 2012 11:56 AM EDT	Jun 11, 2012 06:34 PM EDT	398.62

Interest Rating

Attendee's In-Session Level of Interest: 76

[Registration Q & A](#)

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Mueller,Mark **mark.mueller@gulfcouncil.org**

Attended Yes

Registration Date Jun 11, 2012 01:58 PM EDT

City Tampa

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Unsubscribed No

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Join Time	Leave Time	In Session Duration* (minutes)
Jun 11, 2012 01:59 PM EDT	Jun 11, 2012 06:36 PM EDT	277.27

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Williams,Erik erik.williams@noaa.gov

Attended Yes

Registration Date Jun 11, 2012 03:29 PM EDT

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State NC

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Join Time	Leave Time	In Session Duration* (minutes)
Jun 11, 2012 03:29 PM EDT	Jun 11, 2012 04:25 PM EDT	55.83

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Travis,Michael mike.travis@noaa.gov

Attended Yes

Registration Date Jun 11, 2012 01:32 PM EDT

City St. Petersburg

State FL

Unsubscribed No

[In Session](#)

Join Time	Leave Time	In Session Duration* (minutes)
Jun 11, 2012 01:36 PM EDT	Jun 11, 2012 06:06 PM EDT	270.75

Interest Rating

Attendee's In-Session Level of Interest: 38

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Meyers, Steve steve.meyers@noaa.gov

Attended Yes

Registration Date Jun 11, 2012 10:39 AM EDT

City Silver Spring

State MD

Unsubscribed No

[In Session](#)

Join Time	Leave Time	In Session Duration* (minutes)
Jun 11, 2012 11:56 AM EDT	Jun 11, 2012 03:59 PM EDT	241.02

Interest Rating

Attendee's In-Session Level of Interest: 32

[Registration Q & A](#)

[Questions Asked by Attendee](#)

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c,mike mec181@yahoo.com

Attended Yes

Registration Date Jun 11, 2012 12:02 PM EDT

City mtp

State SC

Unsubscribed No

[In Session](#)

Join Time	Leave Time	In Session Duration* (minutes)
Jun 11, 2012 12:02 PM EDT	Jun 11, 2012 06:36 PM EDT	393.32

Interest Rating

Attendee's In-Session Level of Interest: 41

[Registration Q & A](#)

[Questions Asked by Attendee](#)

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pugliese,roger **roger.pugliese@safmc.net**

Attended Yes

Registration Date Jun 11, 2012 02:15 PM EDT

City charlston

State SC

Unsubscribed No

[In Session](#)

Join Time	Leave Time	In Session Duration* (minutes)
Jun 11, 2012 02:15 PM EDT	Jun 11, 2012 06:35 PM EDT	259.62

Interest Rating

Attendee's In-Session Level of Interest: 32

[Registration Q & A](#)

[Questions Asked by Attendee](#)

[Poll Questions](#)

[Post Session Survey Questions](#)

Thomas,Janie **fecsapi@aol.com**

Attended Yes

Registration Date Jun 11, 2012 08:25 AM EDT

City Fernandina Beach

State FL

Unsubscribed No

[In Session](#)

Join Time	Leave Time	In Session Duration* (minutes)
Jun 11, 2012 11:56 AM EDT	Jun 11, 2012 05:11 PM EDT	315.38

Interest Rating

Attendee's In-Session Level of Interest: 54

[Registration Q & A](#)

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DeLancey,Larry **delanceyl@dnr.sc.gov**

Attended Yes

Registration Date Jun 11, 2012 01:29 PM EDT

City Charleston

State SC

Unsubscribed No

[In Session](#)

Join Time	Leave Time	In Session Duration* (minutes)
Jun 11, 2012 01:30 PM EDT	Jun 11, 2012 05:08 PM EDT	218.25

Interest Rating

Attendee's In-Session Level of Interest: 60

[Registration Q & A](#)

[Questions Asked by Attendee](#)

[Poll Questions](#)

[Post Session Survey Questions](#)

Merrifield,Mike **mikem@wildoceanmarket.com**

Attended Yes

Registration Date Jun 11, 2012 01:26 PM EDT

City Titusville

State FL

Unsubscribed No

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Join Time	Leave Time	In Session Duration* (minutes)
Jun 11, 2012 01:26 PM EDT	Jun 11, 2012 03:57 PM EDT	150.78

Interest Rating

Attendee's In-Session Level of Interest: 62

[Registration Q & A](#)

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[Poll Questions](#)

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Michie,kate **kate.michie@noaa.gov**

Attended Yes

Registration Date May 25, 2012 11:03 AM EDT

City St. Petersburg

State FL

Unsubscribed No

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Join Time	Leave Time	In Session Duration* (minutes)
Jun 11, 2012 01:29 PM EDT	Jun 11, 2012 03:30 PM EDT	120.85

Interest Rating

Attendee's In-Session Level of Interest: 25

[Registration Q & A](#)

[Questions Asked by Attendee](#)

[Poll Questions](#)

[Post Session Survey Questions](#)

Kelly,Bill **fkcf1@hotmail.co**

Attended No

Registration Date Jun 11, 2012 09:34 AM EDT

City Marathon

State FL

Unsubscribed No

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Join Time	Leave Time	In Session Duration* (minutes)
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Interest Rating

Attendee's In-Session Level of Interest:

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[Questions Asked by Attendee](#)

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Daniel,Louis **louis.daniel@ncdenr.gov**

Attended No

Registration Date May 25, 2012 02:01 PM EDT

City Morehead City

State NC

Unsubscribed No

[In Session](#)

Join Time **Leave Time** **In Session Duration* (minutes)**

Interest Rating

Attendee's In-Session Level of Interest:

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[Poll Questions](#)

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Hudson,Russell **dsf2009@aol.com**

Attended No

Registration Date Jun 11, 2012 09:42 AM EDT

City Daytona Beach

State FL

Unsubscribed No

[In Session](#)

Join Time **Leave Time** **In Session Duration* (minutes)**

Interest Rating

Attendee's In-Session Level of Interest:

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[Poll Questions](#)

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Sedberry, George **george.sedberry@noaa.gov**

Attended No

Registration Date Jun 11, 2012 01:06 PM EDT

City Savannah

State GA

Unsubscribed No

[In Session](#)

Join Time	Leave Time	In Session Duration* (minutes)
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Interest Rating

Attendee's In-Session Level of Interest:

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[Poll Questions](#)

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FARMER,NICK **nick.farmer@noaa.gov**

Attended No

Registration Date May 25, 2012 10:58 AM EDT

City ST PETERSBURG

State FL

Unsubscribed No

[In Session](#)

Join Time	Leave Time	In Session Duration* (minutes)
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Interest Rating

Attendee's In-Session Level of Interest:

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youngman,jeff

jyoungman1@gmail.com

Attended No

Registration Date

Jun 11, 2012 11:36 AM EDT

City

rockledge

State

FL

Unsubscribed

No

[In Session](#)

Join Time

Leave Time

In Session Duration* (minutes)

Interest Rating

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