

# **SOUTH ATLANTIC FISHERY MANAGEMENT COUNCIL**

## **SEDAR COMMITTEE**

**Doubletree by Hilton Oceanfront Hotel  
Atlantic Beach, North Carolina**

**December 8, 2015**

### **SUMMARY MINUTES**

#### **COMMITTEE MEMBERS:**

Dr. Michelle Duval, Chair  
Zack Bowen  
Ben Hartig  
Robert Beal

Chris Conklin, Vice-Chair  
Mark Brown  
Charlie Phillips

#### **COUNCIL MEMBERS:**

Anna Beckwith  
Chester Brewer  
Dr. Roy Crabtree  
Dr. Wilson Laney  
LTJG Tara Pray

Mel Bell  
Jack Cox  
Doug Haymans  
Jessica McCawley

#### **COUNCIL STAFF:**

Bob Mahood  
Kim Iverson  
Roger Pugliese  
Dr. Mike Errigo  
Chip Collier  
John Carmichael  
Julie O'Dell

Gregg Waugh  
Amber Von Harten  
Myra Brouwer  
Dr. Kari MacLauchlin  
Dr. Brian Chevront  
Mike Collins

#### **PARTICIPANTS/OBSERVERS:**

Kevin Anson  
Dr. Bonnie Ponwith  
Dr. Rick Methot  
Erika Burgess

Dr. Jack McGovern  
Monica Smit-Brunello  
Tracy Dunn

Additional observers attached

The SEDAR Committee of the South Atlantic Fishery Management Council convened in the Doubletree by Hilton Oceanfront Hotel, Tuesday morning, December 8, 2015, and was called to order at 8:00 o'clock a.m. by Chairman Michelle Duval.

DR. DUVAL: We are going to bring the SEDAR Committee to order. The first item of business is approval of the agenda. Are there any modifications to the agenda? Seeing none; the agenda stands approved. Actually, let me just back up a minute and let folks know who the committee members are.

It is myself, Chris Conklin as Vice Chair, Zack Bowen, Mark Brown, Ben Hartig, Charlie Phillips, and Bob Beal. Now with that, the next item is approval of the minutes. Are there any modifications to the minutes? Seeing none; the minutes stand approved. Next, I'm going to turn things over to John to go ahead and give us an update on SEDAR activities.

MR. CARMICHAEL: One of the primary things going on in the South Atlantic right now is the SEDAR 41, red snapper and gray trigger. That was going to have a data workshop in November before this meeting, but due to some delays in getting data together and some of those subsequent analyses between the data and assessment prep that was pushed back a bit.

It will now be held next week, and it will be held here in Morehead, and a few of you are staying over, of course, to take part in that. That workshop is going to be next week. The plan is to continue to keep it on track with the same end point, which has a review workshop following the March council meeting and then going to the SSC.

The SSC meeting to review this will be the first week in April, because with the late March review time the report wouldn't be available to the SSC until mid April. We gave them the option of taking lesser review time or pushing their meeting back a week, and they really felt for this one it would be better to push their meeting back a week and have the full two weeks to review that.

One trickle-down effect there, I guess, is to have the SSC meeting a little bit later, but you'll get the results of course at the council in June. It looks like things are proceeding pretty well and on track for next week on that workshop from what I hear.

DR. DUVAL: That's going to be held at the Civic Center?

MR. CARMICHAEL: Yes at the Civic Center.

DR. DUVAL: I may poke my head in for that. Are there any questions for John on the SEDAR 41? Okay.

MR. COX: You wouldn't have just a little bit of news on it, would you, any kind of preliminary finding or where we might be on that SEDAR?

MR. CARMICHAEL: No, not at this point. This is the assessment workshop, so they are just getting to even starting runs.

DR. DUVAL: Nice try, Jack.

MR. BOWEN: In my briefing book when I was studying it, I ran across Amendment 43. I guess Amendment 43 will pertain to the results of SEDAR 41.

DR. DUVAL: Amendment 43 is in the snapper grouper tab, and so that is the amendment that would remove the process that we put in place through, oh gosh, 28 that we currently use to just have these limited openings. Yes, it responds to the results of the assessment; anything else before we move on? Okay, the next item is the SEDAR Steering Committee report.

MR. CARMICHAEL: We had two SEDAR Steering Committee meetings this fall. One was an in-person meeting September 28th and 29th, where we covered a lot of ground but weren't able to complete all of the scheduling items that were before us. The committee met again on webinar to complete the schedule. There were a number of things that were discussed at this meeting. It was actually a pretty productive meeting.

I'll go down this list and highlight some of these things and maybe pause on some that we need some action from you guys on. The first one is the upcoming Goliath Grouper Review Panel. If you'll recall, we had Chairs suggested by both the Gulf Council and the South Atlantic Council, so the Steering Committee had to resolve which body would provide the Chair, since that is involving both.

The Steering Committee approved Marcel Reichert from the South Atlantic as a Review Panel Chair, but they made a recommendation that in future assessments there will be two SSC reviewers appointed by the council who doesn't appoint the Chair. What we've done with these joint ones in the past, is had a reviewer from each council, one reviewer from each council and then one of the councils appointed the Chair.

That potentially gave you, say, two people from the South Atlantic and one person from the Gulf on the panel. The decision was made here to say well, to balance that out and give each council equal representation. If one appoints the Chair, the other can appoint two reviewers. That will come to play with things like king mackerel in the future and possibly black grouper if that goes through another benchmark at some time.

DR. DUVAL: Any questions for John on that? Is everyone cool with that equal representation?

MR. CARMICHAEL: Equal representation is always good. The Committee received the report from the Data Best Practices Workshop, which was a pretty big SEDAR project over the past year. One of the things that came out of that was recommendation that we have a Data Best Practices Panel. This would be a standing group that would keep those best practices up-to-date, regularly evaluate them, meet possibly once a year; maybe once a year in person, other times over webinar just to make sure that the best practices are current. If there are new developments and they need to be modified, bring that into play.

Everyone who is involved in SEDAR is asked to appoint someone to the panel. The representative suggested for the South Atlantic Council is Marcel Reichert. If there is no objection to that, we'll move forward with Marcel as our representative.

DR. DUVAL: Seeing none; it sounds good.

MR. CARMICHAEL: Then the councils, we received a presentation on stock assessment prioritization, which is going to come later on in this meeting from Dr. Rick Methot. What the Steering Committee would like to do is have each council receive that. Then at the next Steering Committee, which will probably be sometime late next spring, to have the council's report back and decide at that time how that prioritization process might work within the SEDAR framework.

I think the direction is that this may be a tool that each cooperator can use to better define its priorities, and then we come in at the Steering Committee, we continue to apply the priorities to the available workload as we do now. I think we'll have some discussion of that process when Rick gives his presentation here in a little bit.

One of the big things we talked about, it was kind of a new idea that is being thrown out there, is this next item; is the report from the Science Center on a potential change in the SEDAR process. This will be a change in a benchmark process, and it would call it a research cycle as opposed to the benchmark process that we use now.

The reasoning behind this is that when we go in and do a benchmark, particularly for a first-time species, that has never been assessed before; we really don't know the issues that lie ahead of us. We don't know the data challenges that are there. You don't necessarily know which models will work best with the data that you have.

Invariably, there are challenges and there are unexpected situations that arise that make it really difficult to shoehorn that type of process into the strict schedule that we now have within SEDAR. The workshops are set up a year and a half in advance in some cases; the timing of them.

It really doesn't leave any leeway for any sort of hiccup. What we've experienced with practically every one of our first time benchmarks is some type of delay that led the process to get stretched out, led the Review Panel to get rescheduled, led the assessment to be kicked out of the queue altogether, which has happened with gray triggerfish a couple times and then the red snapper issue with the data that came up that led to this whole process being delayed.

The thought is to have a more open ended process to develop the initial models. A key thing about that is it would be using the data that is available when you get started. Let's say you had an opportunity to start one of those in January. You would use the data that is essentially 18 months old at that time, and you would develop the tool for your benchmark assessment through that. Then once that tool was developed, reviewed, and approved, you would update it with the most recent data. That is really one of the biggest changes in this, and it resolves one of the larger issues we have, is trying to do a benchmark which we know is time consuming, cumbersome, prone to delays; but while also using the most recent data in it.

SEDAR recognized quite some time ago when we went to benchmarks and updates that it was very difficult to do benchmarks with the most recent update. The intention was benchmarks would use the data that you had available, and updates would always be structured later in the year to use the most recent data.

The operational assessment approach would be more open ended than what we have now, but we believe there would still need to be a time by which it gets done, because otherwise you would have an endless research project. That is going to be one of the critical details we'll have to specify as we get into putting this in practice, and something the Steering Committee will have to talk about more at their next meeting.

It is just how do you still make sure that there is an endpoint? We have a review, and we know it is going to get done? Then for you guys the biggest change would be, say you get a benchmark assessment. Well, there may be two more years of data that have since come available that could be added to that before you get the actual results that the SSC then uses to give you fishing level recommendations.

But the thought is, if you build a good robust tool up front you don't need to do benchmarks very often. You should only need to do benchmarks when you have exciting new model development that gives us a better tool, or if we have a really big source of new data such as the new independent surveys that recently happened. Those things don't come along that often.

We want to make sure you guys are aware of this. The SSC is going to receive a full report on it at their spring meeting this coming year, so I think they could then report back to you guys on it at your June meeting. Then fall Steering Committee meeting, maybe by that time all the cooperators and SSCs have been through it. Raise your concerns about details that we need to consider when we put this into an operational plan.

MR. HARTIG: John, this is all well and good, but I don't see anything where the fishing community is going to be involved in reviewing the data and getting their concerns, possibly vet the data. That has been a problem in several assessments over time. That needs to be incorporated somewhere in this early in the research cycle.

MR. CARMICHAEL: I think the research cycle would still include a data workshop just as we do now, definitely. It would basically take everything that we do now and just structure it a little bit differently in terms of time and recent data availability.

DR. DUVAL: I'll probably ask Dr. Ponwith to comment on this, but it seems like this research cycle approach would allow for more thorough discussion of some of those issues that have been brought forward regarding data by the fishing community instead of being squeezed into a one week data workshop; where there may or may not be time to vet that. But Bonnie, I don't know if you have any comments on this.

DR. PONWITH: Well, I just want to congratulate John on capturing really the essence of what we were talking about. The whole notion is disassociate the actual stock assessment and the end product; that catch level advice from the assessment process, so that if you do hit an unexpected bump or you need more time to deliberate on an approach or the validity of a certain dataset, you have that time.

You are still going to want to be bound this by time; because we've learned I think in all of our walks of life that it takes as long as you have. We still want to set deadlines for when the report would be due, but the difference is if you end up hitting a stumbling block and it takes a while to

deliberate, you don't then by default compress the amount of time you have available to actually conduct the assessment, because the assessment is dissociated from that deliberative process.

The answer is absolutely correct. We will have time to look at data inputs and evaluate them in terms of their scientific merit, if the longevity of these time series are adequate for consideration; all those discussions that have been so productive with the fishing industry, I picture, will continue. Then once those deliberations are done, you have the answers in kind of a framework situation. You can walk away and do the assessment, because those key decisions have been made.

DR. DUVAL: Any other questions about the research cycle at this point? Again, the SSC is going to receive a presentation and review this at their spring meeting, so we should have more input after that.

MR. CARMICHAEL: The committee then developed an assessment schedule which is Table 1. We'll get around to that in a second. We've got a few of the details about it. One of the things that is included in the schedule this year is dealing with revising some assessments, and we're using the revised word very carefully to distinguish this from what you associate with, say, updates, because the MRIP has a new effort survey which data is becoming available.

It is underway now and it is being done side-by-side with the old method. We need to get the existing assessments updated with the new information so that when we no longer have the side-by-side and the MRIP estimates are only coming from the new data, we are able to have apples and apples; in terms of how you monitor fisheries and how your assessments were done and what set your catch limits.

The plan to get this started is to do some stocks through the regular update process that we do and some through the benchmarks as we can with the new data. But obviously with the time that those processes take, we can't necessarily do all of the stocks. A plan that is being suggested is to revise some of the assessments.

What this means is you take say an assessment which had a terminal year of 2014, and you would update the recreational data in that assessment to the terminal year of that assessment, which would be 2014. You would have basically a revision of those results; much as we would do if someone found a mistake during say a peer review or something, and you would revise those.

We wouldn't bring any new data into the process, it would be a rather rapid approach to just, here is a new time series we expect to have that new time series coming available sometime in July next year and be able to have that information, plug it into the assessments that we have, and at least bring those up to the best data at the time they were done. Then that buys us a little time to then get those on the queue, see how much they changed as a result of this new data; which could affect which ones we want to prioritize to do full standard assessments on as well over the next, say, couple of years.

I think, in three to four years, we could probably update most everything that would need to be updated based on what we've assessed so far and where we stand on that. But we'll probably

need to do this; the Center will need to do this revision approach for a few of the stocks just to bring them up to speed.

The other choice is what we've done in the past where we just calibrate. You know we maybe calibrate the ACLs, we decide there is a 10 percent change as a result of this change in data so you adjust the ACL by 10 percent. But we know that that is not a very good approach, it is rather coarse. It requires a lot of assumptions across species, which may not hold for individual species.

This is a pretty good compromise, a more robust approach to go in updating for this major data change that is facing us. When we get into the schedule and you see this slot here for MRIP that is what that is; that is time devoted to doing a number of those stock assessment revisions. The Center is going to look at a ranking process. We've talked about that some if you'll recall at our earlier meeting laying out our schedule, looking at what the potential recreational priorities were in the stock priorities to get this data.

But the Center is going to look at that as well. There are suggestions or ways to decide which stocks are most critical, which stocks are even appropriate for having this type of update done. Then we'll get more work from the SSC on this in deciding the stocks, because we at least do have a little time before we have to commit to the species that we're going to do for this process; since we won't have that data for another year and a half. Then the next thing to note is the blueline tilefish.

MR. HARTIG: Before you leave that; Kim, I want to alert you on this one. We need to be up front and center with the public on this and get them acquainted with what's going to happen in the future. I think, in the next update, we should have a detailed explanation of what is going to happen.

DR. DUVAL: That's a great suggestion. I was a little bit confused. I missed the SEDAR Steering Committee, the in-person committee. Ben went on my behalf. I had a misconception of what the MRIP revisions were, and I talked to Bonnie about that. It was a nomenclature thing; originally being called MRIP updates. I had this preconceived notion of this being sort of like an update that we are used to receiving and taking the same amount of time.

This is why John has suggested the use of the term revision; because all you're doing is revising the numbers you are not doing anything else. We should be able to get these cranked out much more rapidly, we would hope, and probably have a little bit more information on how quickly those can be done once the Center has done their rankings of things. But I agree, I think that would be a great addition to the newsletters discussing this, the need for it, when those new estimates are going to be available starting in mid 2017 for use in these assessments.

MR. HARTIG: And the possible impact.

DR. DUVAL: Yes, I think absolutely we need to discuss the possible impacts.

DR. LANEY: To that point on the timing, Madam Chairman. I think, John, you said next year but the overview says July, 2017. Is it 2017? Okay.

MR. CARMICHAEL: Then the last item or just about is blueline tilefish. The SSC reviewed blueline tilefish to consider the type of assessment that should be done. Their recommendation was that blueline tilefish should be done as a benchmark. They were concerned with the number of things that have been raised about that assessment, the performance of it, obviously, the issues with stock ID that have come to the forefront over the last 18 months or more.

Their recommendation was that this be done as a benchmark and be done as quickly as it could. They want it to begin in 2016. The Steering Committee has addressed that and put it in here as beginning. When the Steering Committee looked here, we return to the table now, the Steering Committee had scheduled this blueline tilefish to begin right after SEDAR 41 wraps up in the third quarter of 2016.

Now a couple of things pose a challenge to that; one being the later item there where I mention about the SSC wanting to get together in February to go over terms of reference, look at the stock ID information. Well, the Science Center has got stock ID genetic study that is underway working with VIMs, and we're told that information will be available in May. Clearly, we don't want to go and have a meeting to talk about stock ID where we still have some information coming in on stock ID.

The other issue is trying to balance the data deliveries within the other projects that SEDAR has going on, because there were already several in August of 2016. Between that and the need to probably have a discussion of stock ID and do terms of reference in late May; which really is going to be pushing things for an assessment that would start in the summer, is that we're looking to the assessment starting in probably October with a data workshop in late October.

If you push back a little bit, data will start coming in during the summer, because under the data best practices there is kind of a set of rolling deadlines about data; where different pieces come in and get available to different people along the way. Then in early October most all the data should be available.

What it means for us is we're really going to have a bit of a scramble to deal with, say, the terms of reference. Because dealing with this stock ID thing is critical to the terms of reference for this assessment. We're not going to have that information from May. I've been talking with Julia some about this, and what we're thinking is we will probably put terms of reference out to the SSC for some comment prior to your March meeting, and try to have the bulk of the terms of reference done in March.

Then say, we'll withhold whatever we need to do on the stock ID and have you guys do that in June. That will still give us time to specify that information and have the stock ID worked out in time for the data coming available in October. But it won't hold us up quite so bad on all of the terms of reference.

DR. PONWITH: Given the possible scenarios for the outcome of the second round of genetic studies, one possible scenario is that those genetic studies show there is no differentiation between genetic distinctions between north to south. If that is the case, it begs the question of how that stock assessment should best be conducted.

I just wanted to let the committee know that I've opened discussions with Bill Carp, my counterpart in the Northeast Fisheries Science Center about what approaches would be wise from a science standpoint on conducting that stock assessment. We've had an opening discussion on it, but we need to bring our experts in on it to talk about it. I just wanted to get that on the table that I do picture there being a need for some involvement of scientists from at least the Center and possibly scientists selected by the Mid to join us on that assessment.

DR. DUVAL: Jack, before I get to you. I just want to ask John to provide a little bit more detail on some things he was thinking in terms of process that align with what Bonnie has said, and then we'll come back to you.

MR. CARMICHAEL: Yes what we're thinking is given what we've seen preliminarily on the stock ID stuff, and just knowing how that work type kind of goes. In the SSC discussions about genetics and biological stocks versus management stocks and dealing with management units, is it is quite possible there is a scenario we end up with one stock but we have two different management units. We need to decide how to divvy that up; that yield and how it is going to be handled and how it is going to be handled within the assessment.

Our plan would be to get folks from the Northeast Center and the Greater Atlantic Office, along with folks from our region, our SSC, Mid-Atlantic SSC. Have everyone come together and decide what are going to be the parameters by which we're going to do this and how are we going to develop this assessment and make sure that it gives advice that is acceptable to both councils.

All those folks as well as council staff representatives, I think, for Mid-Atlantic and South Atlantic. I'm envisioning kind of a very big cooperative workshop type gathering of these folks probably in late May, hopefully. I really would like to be able to do it in late May so that you guys can see the outcomes of that in June.

MR. COX: Yes, John, could you tell us just a minute what kind of data information that we have gathered in the last year that is going to improve this assessment; some ongoing work that may have been done?

MR. CARMICHAEL: I think Bonnie can probably respond to that well, because they do have some projects underway.

DR. PONWITH: Yes, we had a very, very successful data collection this fall. The data collection was generated via one of the most successful collaborative workshops we've experienced. It was getting scientists together with state scientists, state managers, and fishing industry representatives to really troubleshoot if this is what we want to understand better the research question.

What is your advice on the best way to tackle that problem? Gathering that advice we used that to pull together research protocols, and we, in cooperation with Atlantic States Commission, got contracted commercial vessels and conducted a bottom longline fishery sampling program this fall, fishery independent sampling program this fall throughout the geographic range of the species from the South Atlantic region all the way up into the Mid.

Those data are in hand. We finished in late October. We are in the process of analyzing the results, making decisions about the analysis of the biological information; because we have gonads, we've got otoliths and we've got genetic tissues. Genetic work is underway right now. It is going to be a pretty remarkable contribution above and beyond what we've traditionally had in hand for the stock assessment.

DR. LANEY: I guess this question is for John or Bonnie or Roy. When you have a species whose range transcends multiple councils, I guess the practice in the past, and I'm thinking bluefish and spiny dogfish here, is that isn't one council usually appointed the administrative lead for that particular species or the species lead? If that is the case in this situation, where the South Atlantic Council has most of the geography and most of the stock of the species, would that be a topic of discussion at the upcoming workshop?

DR. DUVAL: I'll tackle that question. I think we've already had this topic of discussion many times. It has come up at the CCC level and I've had many conversations with Chairman Rick Robins, and we've addressed this at the past several Snapper Grouper Committee meetings. The Mid-Atlantic is moving forward with adding blueline tilefish to their existing golden tilefish FMP. They deliberated on that yesterday.

They are going out to public hearing to add that species. They've also expressed a desire to potentially add other deepwater species or develop a deepwater species fishery management plan, because they have seen landings in the past of snowy grouper, blackbelly rosefish, some of those other deepwater species.

From a management perspective, we would like to manage within our jurisdiction, and the Mid-Atlantic would like to manage blueline within their jurisdiction. We already have a precedent in golden tilefish, which is split at the jurisdictional border; which is the North Carolina/Virginia border.

We have a separate assessment in the South Atlantic, and there is a different assessment in the Mid-Atlantic. Snowy grouper, that is an assessment that only covers the South Atlantic's area of jurisdiction as well, so I don't really foresee the South Atlantic being lead on a coast wide tilefish fishery management plan. I think we've already plowed that ground.

DR. LANEY: Accepting all that Madam Chairman, it just seems to sort of fly in the face of A, administrative efficiency, but B, ecosystem management; especially if the genetics turn out to be that it is a panmictic or single stock structure. It seems that it would be a whole lot better to have a single council having administrative lead. But that is just my personal opinion.

MR. BROWN: When are the genetic studies going to be completed, or when are we going to see that?

DR. DUVAL: I think Bonnie indicated May.

MR. CARMICHAEL: You'll see the South Carolina stuff this week.

DR. DUVAL: There are two efforts that went on, one through MARMAP and then one that has been funded by Bonnie's shop and the Mid-Atlantic Council. I think the specificity of where the

samples have come from, what Bonnie has funded and what the Mid-Atlantic has funded, pretty much each fish is like georeferenced, so to speak, for that study.

MS. SMIT-BRUNELLO: Yes, to Wilson's point. The Magnuson Act at 304-F talks about fisheries under authority of more than one council, and what the Act says is that the Secretary may designate which council shall prepare the FMP for such fishery and any amendment to the plan, or may require the plan amendment be prepared jointly by the councils concerned.

You've got a couple of joint FMPs; however, you also have the situation with the Gulf. I think you've got yellowtail, black grouper and there is probably something else in there in which it has been assessed, it is one stock, but each council manages it separately. However, your SSCs got together and suggested or recommended to the councils what the best way to divide up the ACL in a sense, the ABC between the two councils.

You've had a couple of approaches that you've already dealt with for other fish, but the Act does envision that usually you're going to designate one council to be the lead, and I guess that is what I've got to say on that one. I don't know if you wanted to request that of the Secretary. You certainly could. The Fishery Service Secretary would then have to respond to it.

DR. LANEY: Relative to the genetics, Bonnie, are we going to have an apples-to-apples comparison here? Are the South Carolina geneticists using the same techniques as the VIMs geneticists are?

DR. PONWITH: I can't speak to that right now. I know they are in good strong communication, and it would make sense that they would choose the same genetic approach. But from the analytical side, I would have to check on that to know for sure.

MR. HARTIG: Yes, I have two questions, one for Bonnie and one for Roy. Bonnie, the samples in the latest collections working with industry, were any of those samples taken down around the Keys?

DR. PONWITH: I know that they worked across the full geographic location. I asked some specific questions about the data, and they weren't able to answer it this week; because the data have been handed to a team to do the QA/QC, and so they weren't immediately available to query. I can't answer that question specifically, but I can find out.

MR. HARTIG: The question to Roy is, is blueline managed in the Gulf?

DR. CRABTREE: I think it is in the tilefish component in it, but the landings are very, very low; it's mostly golden. But I'll have to look.

MR. HARTIG: Yes, so already we have the Gulf managing blueline on their own and we're managing blueline on our own. You already have kind of a precedent set for two different councils to manage possibly the same stock.

DR. CRABTREE: Well, the Gulf manages all kind of species that we manage and we treat them as if they're separate stocks and we assess them separately. That is true for gag, for red snapper,

red grouper all those things. Now are they really two stocks or not? We'll see. But we have seen problems that result from just having separate FMPs for one stock.

We're seeing that with yellowtail snapper now with some of the allocation issues, and quota left uncaught on the Gulf side and the South Atlantic side is closed. There are problems anywhere you go on these kinds of things, but there is no assessment of blueline in the Gulf and no plans to do an assessment. That is kind of a different situation.

DR. DUVAL: All right, if there are no other questions on blueline, then I think we should take a look at Table 1.

MR. CARMICHAEL: Yes, so one of the other changes done that is in here, vermilion snapper was shifted back some; that is to take advantage of the MRIP data, so that this would be getting a regular, as we think of it, update with the revised MRIP information coming into it. It would then be positioned to be apples and apples when it comes to monitoring in the future.

In here, we have the MRIP stocks being done. Red grouper is going to be done later this year, or actually next year I guess but almost here. That is one where, for example if you then took red grouper and did the MRIP revision you would actually be pretty darn close to an up-to-date update, because you're going to have a terminal year of that stock of like 2015.

That golden tilefish that is coming up there is another one. That is a primarily recreational fish, so there wouldn't be expected to be as much impact in that assessment, but it is another one that you might decide to go in here. See the golden tile up there. Then to bring your attention here to 2018, did I mention the research track earlier?

The roll out of the research track now is penciled in here in 2018 and to be with the Gulf and the South Atlantic on scamp. Scamp is something that the SSC has highlighted for a while and there was interest around this table of getting that stock assessment done. That is seen as a good test of the research track process. Bringing in both Gulf and South Atlantic together lets us do a unified test of it and to get both groups in there and not have one get ahead of the other on it.

A few years down the road of course, but I think we'll be watching how that develops and particularly how that is scheduled and put together, in terms of dealing with the research track stock assessment. In a practical note, just what we know now by this starting in January, it will be using 2016 data for the most part, which all become landings and such become available in late 2017.

This would be an assessment which is done May, peer-reviewed SSC says the tool is good in mid 2019 and then it would be on slate to then say, okay, now we need to bring this up to date with the most recent data. Depending on what the other priorities are, the other needs are, maybe how the outcome of this one is that might happen later in 2019, once the data become available for 2018. You could have a year delay, you could have six months delay between this research product being developed and reviewed and saying it's good and bringing that most recent data up to date.

DR. PONWITH: One other thing on the SEDAR schedule that I raised at the SEDAR Steering Committee and wanted to just raise again to the South Atlantic Council is that I've been engaged

for the last several years in a program called the Gulf of Mexico Large Marine Ecosystem Program.

We're in the process of the very final stages of submitting a proposal to the global environment facility for five more years of collaboration. One of the things in that proposal is to conduct the very first joint U.S./Mexico stock assessment on a stock of mutual interest of importance in the Gulf of Mexico.

The two candidate species right now are king mackerel or Spanish mackerel. This is a remarkable opportunity, because every single mackerel stock assessment -- one of the things that come up in research needs is, oh if only we knew what the Mexican landings were, or if we had biological information on the Mexican landings, we would have a clearer picture from an ecosystem standpoint of what is going on with that stock.

This is the opportunity to make that correction. We thought we would narrow down to one species or another, but right now, as it stands, it is still either mackerel, the Spanish or the king. The proposal goes in this month. We expect by the spring, by February or March, we'll know whether we received the funding.

The funding comes, it all goes to Mexico; but what it would do is fund their ability to gather up all those data to be able to get caught up and cross calibrate their biological samples with us, and again, have a more robust dataset available for consideration. I bring this to your attention because I will report back to you in the spring meeting what the results of that peer review of our proposal were.

If it is successful then it would be a good time for us to start thinking more definitively about which of those two stock matters the most to us. Mexico will be going through that very same thinking and negotiate a way toward making that decision and then talking about how to schedule that in a way that manages the risk of taking on something that is new.

DR. DUVAL: It is definitely exciting news. Thanks for that, Bonnie.

MR. CARMICHAEL: Do you want time at the SEDAR Committee in March to report on that? Do you think this is the best place?

DR. PONWITH: I think that would be excellent.

MR. BOWEN: John, when we were at the SSC meeting, and I'm recalling from memory, can you maybe elaborate on why the SSC wanted to push the vermilion back? Wasn't it that we were fishing to optimum yield on that species? Can you just elaborate on that a little bit?

MR. CARMICHAEL: It was the Steering Committee that pushed that back to take advantage of the revised MRIP information. We thought that it would be better, considering there is a large recreational component for that stock. Yes, because it is fishing at MSY that it seemed like it made more sense to push that one back a little and get the best, most up-to-date data we can for that one, because I think it is what 60-40. It is one that potentially could have a big impact from a major change in that data series.

MR. COX: I've just got to say that when you have a fishery like the vermilion fishery in the commercial in the South Atlantic, it is the economic driver of our fishery. I just think the estimates are too far apart. It is just something that we've heard over and over; they should really be assessed. I know it is expensive to do it, but it is of vital importance to the commercial fishery. We don't agree that we're fishing on MSY; that we should be assessing that stock every couple of years.

DR. DUVAL: Duly noted. I think everybody understands that it is the bread and butter of, certainly, the commercial fishery here in the South Atlantic. There is only so much that we can squeeze out of folks. I think we would have liked to have done an update. Let's see, it was just in 2013 that we had the last one.

It is a balance of, okay we have these new MRIP data that are going to be coming in. Do we just only update those MRIP data through the terminal year of the existing assessment, or do you want to incorporate that plus the new updated landings additional fishery independent information that might go into the update assessment to get the best answer possible? That is what the Steering Committee struggled with.

MR. COX: To follow up, it always seems that we have to go back to MRIP, because it always delays assessments. If the recreational sector was a little bit more accountable like the commercial sector, we wouldn't be lagging a little bit on this assessment.

MR. HARTIG: Yes that is a long time occurring statement. Things are supposedly getting better by the different ways that they're doing the recalibration. But to your point, in the stock assessment prioritization that you'll get a report on from Rick today, you could actually look at species that don't need to be assessed as often, some that need to be assessed more often. You'll have a chance, with vermilion in particular, to go; we think this stock should be assessed every three years. Then you could fit that into your prioritization plan based on how important it is to the fishery.

DR. DUVAL: Bonnie then Gregg, then I would like to wrap this up so that we can have Dr. Methot give his presentation.

DR. PONWITH: Just a quick response to the MRIP comment. These revisions are due to an improvement in the methodology. The improvement in the methodology was spurred on by the NRC study asking us to take a long look at the sampling methods, because they were concerned there was a possibility of bias; and asked us to do an analysis.

That analysis was completed, the modifications to the protocols were made based on the results of those analyses, and it creates a new methodology that then has to be linked somehow to the data that were collected according to the old methodology. While it is inconvenient to take stock assessment slots to do that it is a good news situation. We have improved the quality and the reliability of those MRIP estimates, and this is a way to be able to connect our contemporary estimates with our historic estimates and make one continuous data stream for the purposes of understanding landings, and for the purposes of stock assessments. Time consuming yes, but it is good.

MR. WAUGH: We're patterning our staff assessment slot approach after this, and I mentioned to Bonnie the first thing this morning. If she could just give us a little background in terms of how they use this internally. Is each of those slots one through five for example here for the South Atlantic. Are those individuals or do they group it according to projects? Just so that that might help inform us so that when we get into Executive Finance and try to do the same thing we would have the benefit of their approach at the Center.

DR. PONWITH: Yes, we have stock assessment scientists who are lead assessment scientists; people who are capable of stepping up and leading that exercise. We count those and assign them basically one of those columns. Then depending upon the type of an assessment, we know approximately how long an assessment will take.

A benchmark takes longer than an update for example. What that does is gives us a feel for how many assessments we think we can manage in a given year, and then a more refined decision making is brought in when we look at what stocks we're talking about, because we do have scientists who become subject matter experts on given stocks.

In that situation, if you schedule two stocks, where they're the experts it could cause an expertise clash. But this is a way to take a first cut at what type of workload we think we can accommodate, and then we can refine from there based on what the timing of the assessment or the intensity of the assessment is.

DR. DUVAL: We agreed to confirm Marcel as the Data Best Practices Panel representative. We've had a nice healthy discussion about the Steering Committee actions. Is there anything else before we ask Dr. Methot to come up and give his presentation?

DR. LANEY: I'm not on your committee, but Bonnie a quick question. Based on what you just said, does that mean that there are 13 stock assessment scientists at the Science Center; based on that table? Is each slot an individual?

DR. PONWITH: Yes. I can go back and take a look, but I guess in general yes. That number is dynamic, because when we hire a new stock assessment scientist remember that we have a policy that we keep them in journeymen's status for their first year. They are not allowed to be a lead scientist.

As soon as that person hits that one year, then they become one of those leads and they are eligible to lead. That bumps the number up. If someone departs it basically creates a reduction for almost two years, the time it takes to replace them and the time for them to go through journeymen status. It's a dynamic number.

DR. DUVAL: Are there any other questions before Dr. Methot comes and gives his presentation? Okay, if not, come on down, Rick. This is in your briefing book. It is entitled presentation underscore, prioritization, SAFMC, December 2015. Welcome to sunny, warm North Carolina, Rick.

DR. METHOT: A lot warmer than where I'm going back to this evening. Thanks for this opportunity to be here and talk about this. I'm sure some of you have seen this presentation at

least once. It is something that we are working on rolling out across the country with all of the councils.

Let me just preface it by saying that I really appreciate an opportunity to sit and listen through the conversations leading up to this. I see a lot of positive steps here and the review process, how to approach blueline tilefish and working through the assessment prioritization steps that you have already in place, in order to come up with a process; all really positive steps.

What I want to talk about now is how we can make the decisions to go forward with developing a process for fully implementing this national stock assessment prioritization process within each of the regions and councils. I'll get my electronics all working here. I just want to briefly go through a little bit of the history that has taken us to this point.

One of the goals we're trying to achieve with stock assessment prioritization process, what it looks like in a high level, not getting too deeply into the details. We're giving you a sense what sort of things we're looking at here, and then to get on with discussing how we can think about developing a process to work for the implementation here for the South Atlantic.

Well, we don't have too many slides, I can do this. The initial development of this process came about really through our budget negotiations. Internally, as we develop a proposal for what the budget could be, and also in the dialogue following on what it would take in order for us to do a better job at portraying, basically, where is the bang for the buck?

We've had a big increase in the investment in our stock assessment enterprise over the last 15 years. This budget line we call the expand-the-annual-stock-assessments has grown to nearly 70 million dollars, in order to provide us a stronger basis for doing stock assessments. The questions would constantly come back of, when are you going to stop asking for more and what are we getting from this?

How can you tell us that you are using this money as efficiently and for the most important reasons? We were asked to provide some real concrete responses to questions like that. The needs have been discussed in proposals for reauthorization of the Magnuson Act. You see language there that is very much like what we have proposed here for stock assessment prioritization.

The process that we have documented here is something that has been discussed over the last couple of years with the CCC, so we've had a good dialogue over time. We've had an opportunity for public comment early last year. We also saw a government accountability office examination of what we are doing with our stock assessment enterprise, and they looked at this process as well and felt as though it was going in the right direction, it was something that they could endorse as something that would provide us a good tool in the future for prioritizing our fish stock assessments. In August of this year, we were able to produce a document that defines the starting place for this. It is not saying that this is exactly how it needs to be laid out for the future. It gives us a starting place so that we can figure out how to go about implementing it in a way that is flexible enough to accommodate all the regional needs that we have, yet gives us a strong sense of we are moving forward collectively in a good way to assess our fish stocks.

The basis for this is because we really don't have enough capacity to assess all the stocks that we want to be able to assess. It just came up, we just asked the question. How many assessment scientists do we have? How many can we get done at a time? We cannot get them all done all the time.

How complete an assessment we need for each one also is an important question. You have a wide range from data limited to really data-rich assessments coming forward. What is the right level for assessing a stock? Part of it is just the reality of what data we have, and another is how much of an investment in data collection and expertise do we need to make for stocks that may not be that valuable. They may not be that at-risk from declines due to fishing.

Making their good, objective decisions about where to put our investments in assessments, and this goes to how frequently as well, and I'll touch upon this in the presentation. All managed stocks need some level of assessment. Some need that higher level, some not; costs may exceed the benefits for some low valued stocks. What we want to get to is sort of a prioritized portfolio, so that those that are really important, really fluctuating a lot, most at risk, get the most attention; but we don't completely forget about the others, as well.

We have a way to cycle through them and look at them at some level to be confident that we are doing okay for all those stocks, as well as fine tuning our assessments for those that are most important and the ones that we need to adjust the quotas as frequently as needed to prevent overfishing and get as much of the biological yield as is available for that stock.

By doing this in a nationally consistent way we'll be able to see where our gaps in overall capability are. We'll work on implementing it within each region, but we'll be able to transparently see where are our gaps, whether we able to achieve high frequency or not. We generally know this; but pulling it all together into one framework will make it a lot easier for us to be able to tell a convincing story of, we have a need to increase our overall capacity and this is a way to document that.

The stocks that need assessment basically fall into four basic categories of information. Stocks that are approaching limits, stocks that we've looked at or we have some information for. It is clear that in order to get as much yield as possible, that means we're always going to be bumping up against overfishing levels in order to get as much of a harvest rate as we possibly can.

Stocks that are pushing that level or have experienced some declines that are pushing down against biomass limits, those need close looks. Stocks that are particularly important to the fishery, well that sort of goes along with stocks that are pushing up against as high a fishing rate as we can sustain.

Those are the stocks that tend to be more important to the fisheries. This also is a rationale for going forward with a high frequency and high level of assessment for those kinds of stock. Where we have new information to bring to the table, whether it is a new genetic study for blueline tilefish or a new survey being introduced for another stock, or a new study that tells us hey, we have a better natural mortality rate now. Bringing this new information to the table is a strong reason for doing a new assessment in order to bring that better information into that overall stock assessment.

We certainly recognize that all of this is happening within an ecosystem context, and that stocks that have a particularly strong role in the ecosystem or are particularly valuable from a non-catch perspective; their existence value is something that is quantifiably valuable to some members of the community.

Being able to bring this kind of information forward, as well, is something that we have built into this prioritization system. The overall process, in this case we've developed 12 factors. We will work towards developing a score for each of those 12 factors, for each of those stocks that we have.

We also recognize that these different factors will have different levels of importance, and that importance is going to vary regionally. Recreational importance versus commercial importance; it is going to play out differently here than it is in Alaska. Subsistence importance is going to play out differently in the western Pacific than it is in New England.

We recognize that not only do we have a need to get technical scores for each of the factors; we also need to have an opportunity so that basically the council and the senior management team within each of the regions needs to be able to weigh in on what are the factor weights. How important are these different factors in coming up with an overall score?

The steps we'll go through would be basically to define the list. Basically, it's going to be the FMPs, but in some cases we'll need to consider combining across FMPs, or splitting within FMPs in order to get a list of stocks that we want to compare to each other in this prioritization process.

You could have one prioritization process for snapper grouper, another one for HMS, or another one for shrimp. Where things don't share the same protocols, we can separate them out. We'll assemble the data. This will be primarily something that I would envision happening with the NMFS staff; the SEDAR staff. The SSC clearly is very interested in being involved.

The relative contribution of the different teams will vary regionally, and it is something for us to get started on today. We already have many of these building blocks available. We just need to pull them together. We'll work on assigning a target level for each stock, a target frequency, and then our science experts will assign the scores and the regional managers will assign the weights.

We then were able to get a stock range, which is basically the sum of the scores times the weights across each of the stocks. This will be objective advice. This will be a list that is developed through scoring of these protocols. We recognize that there are intangibles, there are practicalities, there are additional things to consider as the final list gets developed; and also the consideration of how far down the list we can get. It is objective advice but it is not a rigid prescription. We recognize that there still needs to be some flexibility in the implementation. This develops as a collaborative process between the agencies and the councils and potential other partners; as it plays out in each of the regions.

Principally technical data, where you have a lot of it at hand now, we'll be able to bring that forward, and we also want to work very strongly with the councils; and in this case throughout the SEDAR community to implement this process.

There are opportunities for us to use this proposed list in the upcoming management cycle; data availability, assessment capacity, and come up with the identified list of assessments. What we actually do will be based upon the starting place of this list of prioritized objectives. The first step is organizing stocks for a prioritization.

What we see here is it is best to include all the stocks in a region which there are shared data sources, shared constituencies, and shared assessment resources. Where we have this coming together of a number of joint factors is where we most need to make decisions about well, within this group what decisions can we make? How do we prioritize within that?

We could see a separate prioritization group or their very distinct separations and warrant thereof; and where there are species rich complexes we are going to need to consider about how far to go into them. Certainly, we need to be constantly aware that there are individual species differences within complexes.

The fact that we lump species into complexes doesn't mean we forget them forever and don't look at their trends. What level of attention do we pay to species within complexes and to what degree do we keep this prioritization at the complex level? That will be something to consider as we develop that initial list.

The factors themselves lay out here and I can't quite read it from here. I'll have to turn around. Basically, within the fishery category, we have five factors. Commercial fishery importance we're looking at on a long scale, so that the more valuable stocks are more valuable but the most valuable isn't 100,000 times more important than the stock that is least valuable; and so a logarithmic scale.

We don't have something that is directly comparable for recreational, we'll need to develop that so that it is logically consistent with how we're approaching the commercial scoring. Importance of subsistence is something that could play a factor, as well as non-catch value. We also very much recognize that we need to be able to acknowledge basically constituent demand, some places it is called the choke stock; where species are limiting access to other things.

Stock that is on a rebuilding plan is going to get a bump up in the process anyway, but because it is on a rebuilding plan and its fishing rates are being constrained while it is rebuilding. It is probably limiting access to other stocks, and that is something that bumps up. It is an overall importance to keep close track of that stock as it rebuilds.

A number of fishing important scores, certainly within the stock category, we have relative stock abundance, relative fishing mortality. For ecosystem we have basically a category we label as key role in the ecosystem; and I have another slide later on, we'll touch upon this a bit more. For the assessment category where we see an unexpected change at a stock indicator, so especially in a situation where you're not able to or not expecting to update assessments every one or two years, if you're planning to wait five, six, seven years on some stocks. But that doesn't mean you just forget about it for seven years. We should still be accumulating whatever indicators we have available. We have them transparently updated so that people can see where there are trends that may be deviated from what we previously had forecast as the expected trend for that stock. That is something that we can bring forward, potentially bumping up its priority in the process in order to get assessed more quickly.

Where we have relevant new type of information coming available, and certainly the number of years overdue relative to what has been the established, expected frequency for that stock's assessment. In order to get this target frequency of assessment, the factors that we intend to use are some things that are relatively simple. They need to be relatively simple in order to be applied across the board for data limited and not so data limited situations.

What we propose is that we use, basically, mean age in a catch or a proxy for mean age in a catch, and the degree of variability that we see in that stocks productivity over time. There are two things that we think that we can boil down to apply for in relatively data-limited situations as well as the more data rich for sure.

Those are the factors that we're working with. Identifying the target level is actually something that we're going to put off a bit in this process. We also are working on an update for the stock assessment improvement plan. This is a plan that I was on the team that did it back in 2001. It served us well as a guideline for what our stock assessment enterprise is like and where are we going.

But we are very much in need of seeing this updated, and we are planning to complete that update this year. You all have a chance to see that as we proceed. But in that plan is where we will identify more of the issues of well, how can we look at just how good does each stocks assessment need to be? How can we quantify that? How can we develop some measures of how well we're progressing?

This will give us a way to consider, where do we need better surveys, where do we need age data, or where do we not need age data? Where do we clearly need an ecosystem linkage in that assessment and the data to support it, and where are things stable enough so that we probably can get away without that for now?

We need this to focus on where new kinds of data, higher level assessments are needed and feasible and have a good benefit cost. But labeling things as a pie-in-the-sky approach, saying that everything needs to be a Cadillac assessment isn't going to help us; because we don't need to be there and we can't get there.

We need to be able to use this exercise to give us an opportunity to identify the clear gaps, give us an opportunity to say, you know here is an increment where we could make clear improvements that are feasible and seem to be needed; but not something that establishes a gap that is so great that it really won't help us.

This process of laying out where we're at today with each stock, where we think we need to get to and can get to is something we see rolling into this down the line. For now, I think it is basically good enough to say that we'll look at the stocks that have never been assessed and try to get some sense of which ones are assessable and also basically take a stance that it would be good to improve to some degree each assessment.

With regard to stock variability, I've taken just six sort of random stocks around the country and taken where we think they're at today and played it back in time from the most recent assessment. What does that assessment say about how stable that stock was over time?

The names of the stocks don't matter, but you see some of the lines are fairly flat. Those are long-lived stocks that don't show very much recruitment variability, and hindsight says that they've been really stable for 20 or 25 years. Other stocks looking back over time clearly are showing some pretty big changes over a three, four, five period.

This is the kind of information we're looking to tap into in order to say which stocks really need to be assessed every one, two, three years and which ones really can wait several years; as long as we feel as though we're reasonably confident we have the level right. That is an issue that we need to consider as well.

The way we are envisioning bringing this information into the process is to use again the mean age of fish in the catch. We could approximate this from size comp data or from mortality rates that come from the assessment, or from direct observation. Basically, mean age in the catch has been a common metric.

Then potentially multiplying this by a factor so that if we wanted to have an overall level of frequency across stocks that matched our capacity to do assessments, we could dial this down or dial this up so that if we had an adjustment factor of two then we would be waiting longer, an adjustment factor of 0.5 we would be planning to do things more frequently.

This mean age of fish in the catch is a starting place, and from there stocks that are showing more fluctuations would get assessed more quickly than that, and stocks that have high importance would also be assessed more quickly than that; and conversely on stocks with low fluctuation or low importance.

It is a way to establish a target frequency. We expect that there will be many stocks that show that they will realistically and objectively be assessed with some level of update every year. Others, certainly, we expect they could wait much longer than that. But we are basically trying to peg this at ten years. We can't see putting something on the shelf for longer than that.

The fifth and sixth steps are assigning the scores and weights. Again, we'll be working principally with the steering committees, with the SSC, with the NMFS staff; in order to come up with scores across the factors. There are some where advisory panels certainly could weigh in on things like constituent importance and degree of subsistence importance. We will certainly be able to utilize the input from additional committees within the council process in order to better populate some of these factors with scores.

Then the factor weights are something that we envision that down the line we could go through, basically, a facilitated process in order to work with a group like the council, in order to really do some in-depth look at the importance of one set of weights versus another set of weights in coming up with good transparent approach to assigning those weights. That is going to be a heavy lift in order to create enough time, create enough process to do that. What we envision doing at this time would be to come forward with some prototype weights that would show some degree of contrast, so that as we see the final results, you will have an opportunity to see what the relative importance of different factor weighting approaches would do for the overall process.

The factor scores time the factor weights gives us a total score for each stock, a weighted total score. Then we can sort those weighted total scores across all the stocks and come up for that year with what seems to be those that are most important for getting assessed sooner and which ones are lower on the list and could wait longer before they need that assessment update.

These weights will allow for a regional tailoring of the contribution of each factor of the overall score. As I said earlier, the factor for subsistence is expected to be a high for insular species, which is going to happen in the Caribbean. It is going to happen in the Western Pacific for sure. The factor weights will be the same for all stocks in a prioritization group.

The weights may be different for a pelagics group versus a more nearshore group. It is intended to be developed by the regional NMFS and council leaders, and we will provide prototype weights to be used in the process. The final step then is that this sorted list of ranks is intended as a strong objective guidance.

Final decisions can deviate from this list for various practical reasons, and documentation on the rationale for these final changes will provide both a fully transparent process and improve future process. We'll be able to see; well, clearly, this aspect of it is not working as we intended it to and because we always are seeing adjustments based upon that. It is a way for us to collectively figure out how to improve the process for the future.

Next steps for the South Atlantic are to identify a feasible timeline for implementation where we begin discussion with SEDAR in September, continue with your SSC in October. We're seeking an agreement to proceed at this meeting. As I heard earlier, we're looking to do this, and I am working to do this with the other councils within SEDAR, so we are working towards this late spring date for getting this final agreement on it.

We can start to begin to decide how this would play out within the South Atlantic. What is the best collaboration across the Agency, the council and its committees, and potentially some others; in order to come up with a good set of scores that could work our way through the process? We have a staff person in NMFS headquarters in Science and Technology, who is basically dedicated to supporting this process.

Not that that person is going to be doing the hands on in all the regions, but is there to help us access the national databases and to work with each of the regions as we proceed with the implementation. We're going to make that contribution from NMFS headquarters, but this is really your process to work out with the regional NMFS group in order to figure out how best to populate this with the scores so that we could proceed.

We made a little comparison with the Pacific Council process currently, and from my discussion with your SSC, it is pretty clear that the kind of factors we have here are pretty similar to the kind of factors you already have in mind as you go through your prioritization. It just gives us an opportunity now to pull it all together, actually do it with a scoring process to make it even more objective; and to give us a chance to really show not only the stocks we decided to do, but also the stocks that we decided not to do at this time, and where do they lay out and how soon might they come out. Having that full suite of populated, I think, will be valuable for all. Just briefly identify that we have this process going on, this stock assessment prioritization.

We also have been working on habitat assessment prioritization. That sort of is a parallel activity that could feed into which stocks are particularly important in the ecosystem. The climate vulnerability assessments that have been going on also are valuable. They are showing stocks that are particularly vulnerable to being affected by climate changes at some time scale.

I don't see this climate variability as particularly playing into the frequency issue, but more into the level issues; basically how we need assessments that not only are going to be assessed frequently enough to track the impacts of climate change, but also to be at a higher level to build in the factors so we could be more predictive about what is going to happen to this stock in the future as a result of some level of fluctuations and drift in the climate situation.

These three things are happening independently, but they have a lot of crossovers. We certainly will be looking at it collectively over time. Finally, just looking ahead a bit, there are some things that we will be able to get out of this that go beyond what we're able to implement immediately; one is management strategy evaluation.

I'm sure you've heard a presentation on this. You have some underway, I know that. We can use MSEs to improve upon this whole process of having objective information of just how good an assessment needs to be in order to support management needs. How frequently does it need to be updated in order to support the management needs?

An MSE is an ideal tool to do this, and I strongly encourage, continue to work towards having example MSEs for a stock of each type within your region. Another thing that we'll get out of this will be that gaps between the current and target assessment levels and the number of overdue assessments, well this is all going to help us inform where we should be making future investments in capacity.

We certainly have very different situations across the different regions of the country. The levels of investments today are actually fairly similar, but the situations that they play into are quite different. What it results in, in terms of our assessment throughput, is quite different. Trying to look at this as objectively as you can while having this result from the prioritization process would be a good building block moving in that direction.

The other thing that we can do, and certainly, as this proposed process was reviewed by a number of economists, they certainly identified that this is a relatively simple approach; that you could take it a step further. You could actually look at essentially something that is the marginal value of getting another assessment done for another stock in a region.

It goes along with the management strategy evaluation and basically adds an economic component to it to say, just what are the benefits? If we invest in this survey, in order to assess this stock more frequently, how much better will we do in the long run? What will be the value of that? These are conceivable sources of information that can help us in the future. This isn't immediate. This is something that five, ten years from now we may well have some good tools to move in that kind of a direction. That concludes my presentation, and I'm certainly happy to answer any questions that you have.

DR. DUVAL: Questions for Dr. Methot.

DR. LANEY: Rick, will the analysis include Interstate Fishery Management Commission species, as well? I'm thinking from an ecological perspective like Atlantic menhaden, which is certainly an important ecological species in the South Atlantic.

DR. METHOT: Yes, we certainly want to be able to include as many species, especially as they have shared constituencies, shared resources. If it is an entirely different group that is looking at it, well it doesn't make a lot of sense to compare it in a prioritization process; because if we were to do that we would be moving towards having a fully national process.

We've already argued that it is not realistic for us to go there to that fully national process. As we implement regionally, we are open to breaking it up into chunks. To the extent that that stock has shared resources, certainly you have shared assessment staff and some shared data sources that it would make sense to put it side by side with them.

MR. BREWER: I guess more of a comment or suggestion or thought on slide Number 10, which was I think, Step 2; under the first category there of fisheries, where you're talking about recreational fishery importance. That's got to be something that is going to be, I think, impossible to objectively quantify.

It is going to have to be subjective. I mean NMFS/NOAA does not even know right now what the "value" of recreational fisheries is in the South Atlantic, and certainly on a species-by-species basis, there is no clue. I don't think there ever will be, quite frankly. It doesn't make sense to spend the money to figure that out.

But subjectively, you could talk to some experienced fishermen, recreational guys, charter captains, you know, Ben; and they could tell you if we're just talking about a rank between one and five which fisheries do you think people are targeting? What are people going after? What is important to them?

You'll find like the dolphin will be a Number 1; whereas, a shark might be less than zero or whatever, far less importance. I think that is all you're really going to be able to do is the subjective evaluation of that. That is not going to change that much over time. That is going to stay relatively stable. I was just thinking of some way that might be of benefit to you in trying to get that input into this prioritization.

DR. METHOT: I think you've hit it exactly correctly. It is important to get things separated, what are clearly the ones and what are clearly the fives? There may be a whole lot of threes and fours, but the process doesn't benefit if we don't have some degree of separation in getting that kind of subjective input on what that separation looks like. A lot of stocks share the same score. That is okay as long as overall you have some degree of separation. I think that could be valuable input.

MR. HARTIG: Yes, Rick, thanks. I've seen this a number of times, and it is really a great presentation. Once you get into our area, I mean, you had a slide up there about the factors, about similarity between some of the councils. Certainly, the dynamics of the stock assessment capability are not the same in the southeast as they would be in some of the other council jurisdictions or the dynamics of the available data to do assessments in the southeast compared to other council jurisdictions.

Now having said that, across the southeast regions, we have Gulf of Mexico, South Atlantic Council, Caribbean, HMS and ASFMC species being assessed through one Center in the southeast. That is a lot to expect for one Center to do. Based on your prioritization process, we're going to be behind the eight ball just in the number of years we have between assessments, based on the capabilities of the region.

That is a real problem. Getting at that to some degree, instead of completing a full update for assessment, could you update projections in some cases based on your current catches and update the index indices; where you may not have to take the full time to do something, but you could get the information you need in a shorter timeframe when you have a question that occurs in your fishery.

DR. METHOT: Very much so. I think what you heard earlier this morning was this proposal to have more of a research assessment approach to design an approach for doing an assessment. But once you have that once you've got that external input that full review of, here's our method that we're going to use into the future.

Then the degree of new information that you bring to the table as you updated, has a wide range of possibilities. Certainly, just updating the catch, as you had talked about with the MRIP. I forgot the word that got used, but just changing those numbers or just adding only the catch number for the most recent year and just redoing the projection, just so it is consistent with the past assessment; but now you have an updated number to take into account what the actual catch was compared to what the forecast catch was.

That's a partial update. You see those done across the board in the North Pacific. They get credit for producing like 60 assessments a year. But a significant number of them are these partial updates. There are others that essentially bring forth the survey data and the age comp that you have, but it is basically all the same process.

Mostly, it is the data streams. That is one of the significant challenges you have here is that particularly, the fishery-dependent data, and also to some degree the fishery-independent data come from a lot of different sources. The workload of pulling all that together and having that available so that the assessment scientist can then proceed with whatever level of update, is a significant issue.

That is one of the things that we, as an agency working on investing in, but there is a ways to go. It is basically one of those structural situations that we have here that differs than what you see particularly in the North Pacific, where they have very few distinct fisheries and you have essentially no recreational fishery, and you have an extensive observer program that provides essentially all the catch data that they need. It is so highly one source that it just makes it easy. There is just no way that that can happen here or basically about anywhere else in the country. Where you have that ability to have those really rapid updates depends upon really easy availability of all the data.

DR. DUVAL: I'm conscious of the fact that it is 9:32 and we are two minutes over into our time for Ecosystem-Based Management; but I just wanted to do a quick check and see if there are other questions or comments for Dr. Methot before we switch things over.

MR. BEAL: Rick, how does this system handle surprises? In other words, if we start getting a lot of survey numbers that are way down or way up from what we had seen for the last few years, or for our helpful elected officials in D.C. decide we need yet another cod assessment, which they've been doing recently.

How does this ranking, it seems that if we use this prioritization of ranking to come up with kind of a long term strategy or plan for species, and for whatever reason there is a wrinkle thrown in that how do you prevent the cascade that affects everything else downstream?

DR. METHOT: In a sense the MRIP recalibration is that; because now putting in place a need to get a whole lot of stocks updated together at a quick timeframe. The factor here that is intended to give us an opportunity to address that would be this unexpected change in stock indicator. That is sort of a surprise factor.

That in combination with the availability of a new data type also, potentially the surprise could be something new came online. Those two together provide us an opportunity to address those kinds of issues. But again, this is providing objective advice. It is not rigid prescription. When the surprises happen, you're going to need to deal with them. But we have anticipated that this will come up and we have provided an opportunity to attempt to address it within the process, as well.

DR. DUVAL: Bob, get out your magic eight ball and see if you can forecast some of your surprises so they have as accurate a factor waiting on that as possible. That was a great question. Any other questions or comments for Dr. Methot? If not, Rick, thank you so much for coming out here and for presenting this to us. We look forward to being kept in the loop as you all move forward with this in presenting this to the other cooperators in the region.

DR. METHOT: We won't be able to do it without you, so we're looking forward to finding a starting place so that we can get going with this process; and establishing a time that we think we'll be able to start packaging the information for prioritization according to this.

DR. DUVAL: Let's take just a few minutes, like five minutes and flip over into the Ecosystem and Habitat Protection Committee; so we'll then turn things over to Dr. Laney and Mr. Haymans.

(Whereupon the SEDAR Committee adjourned at 9:30 o'clock a.m., December 8, 2015.)

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**South Atlantic Fishery Management Council -  
December 2015 Council Meeting  
Atlantic Beach, NC**

**Date:** Tuesday, December 8, 2015

**Committee:** SEDAR

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8 DEC 15

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