## UNITED STATES DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

COUNCIL COORDINATION COMMITTEE MEETING

Silver Spring, Maryland Wednesday, November 6, 2019


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$P R O C E E I N G S$

We've had a request to have some
additional public comment today. We didn't have any public commenters yesterday. So, if we have time, we are a little bit ahead of schedule, we might consider some public comment either right before lunch or right after lunch today.

Are there any questions, concerns, changes, for the agenda here on Day two before we get going? loaded, but we are going to be talking about the Modern Fish Act, Section 102. We have four presenters coming up this morning. We are going to start with Chris Horton with Congressional Sportmen's Foundation. He is a Senior Director over the Midwestern States in the Fisheries Program.

All right. We're getting a presentation

So, he is going to cover the recreational perspective this morning. And as soon as Anjeanette gets us going up there, then we'll go right into Chris' presentation.

So, before Chris Horton goes, Chris Oliver, would like to say a couple introductory remarks.

MR. OLIVER: Just to set the stage a little bit. As you know, the President signed the Modern Fish Act into law almost a year ago, December 2018, and we've been working hard to implement the requirements of that law and I think we're making pretty good progress.

We have two contracts in place with the National Academy of Science. One for the study on Limited Access Privilege Programs and one on the MRIP, and are currently identifying panel members for those studies.

The focus today is supposed to be -- is going to be on Section 102 of that Act, which grants the Council's explicit authority to use alternative Fishery Management Measures and

Managing Recreational Fisheries such as, and I quote, extraction rates, fishing mortality targets, harvest control rules, and traditional or cultural practices of native communities. But the law also specifies that the current standards of the Act still apply including Annual Catch Limits and Accountability Measures. Given that, there have been a number of questions that have arisen as we've gone around and made presentations and had discussions on this Section with the Councils. And for example, what new authority it actually provides, what tools are available, how other Councils are using these types of Fishery Management Measures currently in recreational fisheries.

And so we designed -- the intent of this session was to have some discussion and maybe help answer some of those questions. And, with that, I'll turn to Russ Dunn, our National Policy Advisor for Recreational Fisheries because he had a few additional opening comments.

MR. DUNN: All right. Thanks, Chris. I
think you can hear me. So, for those of you who I haven't met, as Chris said, I'm Russ Dunn. I'm the Recreational Fisheries Policy Advisor here at Headquarters.

So, building on what Chris said, as I think all of you know, there is a lot of enthusiasm within the Rec Community about the Modern Fish Act, and in both better understanding the tools that it makes available, and in then subsequently applying those tools.

And as I think we all understand and as the Act states, that Rec Fisheries are different. They're different than commercial fisheries. The motivations are different, and they're different from each other, and they need to be managed to reflect that fact.

And given the diversity of Rec Fisheries comes a need for diverse management approaches, which is what the Modern Fish Act sort of reinforces.

And the tools that it makes available have not been well-understood to this point. And
so, this session is an opportunity for us to share successful approaches, discuss innovations, and establish really a common understanding for the potential application of those tools.

And I think it's really an important opportunity for the Rec Community to provide some insight into what they're thinking is about this, as well as the Councils and the States with regard to these available flexible management approaches. And so, as Jessica indicated, we have four presenters today. The first is Chris Horton, with Congressional Sportmen's, and then I am not sure of the order. But we also have Julia Beaty from the Mid-Atlantic Council, Mike Burner from the Pacific Council, and Toni Kerns from Atlantic States.

So, I just want to thank our panelists for making the effort to be here today and I will turn it back over to the Chair. MS. McCAWLEY: All right. Thank you, Chris. Thank you, Russ. So, now, I'm going to turn it over to Chris Horton.

MR. HORTON: Thank you, Madam Chair. Again, my name is Chris Horton. I'm with the Congressional Sportmen's Foundation and somehow I drew the short straw to provide this presentation today. But $I$ want to let you know that I'm not a lobbyist. I am a former Freshwater Fisheries Manager, but I'm not a lobbyist.

But I do want to talk about some things that we think there's definitely a potential for when it comes to managing recreational fisheries, in particular.

And I also want to make it clear,
though, right off the bat, the intent for alternative management is not to circumvent the Conservation and Management Magnuson-Stevens Act by any means, nor to get around the concept of ACLs.

Recreational anglers would be the first to raise their hands when you raise a problem with a particular fishery. And a lot of the States around here can contest to that because, at the end of the day, for recreational fishing, it's
more about opportunities to be out on the water with family and friends and an opportunity to harvest a few fish.

There's actually no incentive to fish a population down and that's when we strongly support conservation measures to make sure that we have healthy sustainable fisheries.

So, I'll turn it to Management of the Modern Fish Act. Why don't we feel like it needed to be in there. Well, frankly, the short answer is we're still frustrated that sometimes this hard-pound quota commercial and all simply isn't working for recreational fisheries.

What can we do better out there, and we hadn't seen much progress. But if you actually look at the statute, it says to establish specified limitations which are necessary and appropriate for the conservation and management of the fishery on the catch of fish based on area, species, size, number, weight, sex, bycatch, total biomass, or other factors, made the doors wide open there. Yet, we tend to focus a lot on
weight.
Clearly, MSA and Congress never intended for weight to be the sole measure of how we manage fisheries or in so measure of an ACL.

Is it the easiest, probably. Is it the most efficient. Maybe not for every fishery. Certainly not for many recreational fisheries. But the way we've always done it is not always the way we should do it. So, we want to look are there better ways out there to manage recreational fisheries. That's all we're asking.

Anglers as Customers. This is something that the States really do a pretty good job of treating anglers as customers. We hope NOAA Fisheries and the Councils will do the same thing. I mean, whether it's 9 million or 13 million, whatever numbers you believe, there's a lot of recreational anglers out there. And this is a Public Trust Resource and we look to you for your management wisdom to help us get there.

But what do we want. Well, it's pretty simply. We just want more days, more fish, bigger
fish, healthy fisheries, and we want all of the above. But one of the things about recreational fishing is that, for most of them, it's more about Optimum Yield. It's not Maximum Sustainable Yield. We're not out there to try to harvest every single fish right up to a certain limit. But it varies by fishery. Some fisheries are different than others. But at the end of the day, again, it's all about access and opportunity and encounters and having an opportunity to go out there and catch the fish and have a good time on the water.

Some examples of OY to the extreme could probably be found with Kingfish in the Gulf of Mexico and Bluefish in the Atlantic. Where we're leaving a lot of fish in the water, yes. And there's talks about shifting some of that quota back over to the commercial side because the rec side is not catching them. But I can assure you there is a lot of value in leaving those fish in

The Gulf of Mexico is where I fish
almost exclusively. And down there, if everything else is closed and you've got somebody that's never caught a saltwater fish before, the one thing we can go catch is Kingfish.

And although I don't ever -- maybe keep out of fish, and that's only if the angler has never caught one and wants to keep a fish, but that opportunity is always there. As a matter of fact, you'll see a picture on the next slide of my daughter and my best friend's son with a kingfish on just one of those trips when everything else was closed.

Now granted, there will be some rec fisheries where managing more to MSY is appropriate. Red snapper is a good one. They're pretty tasty. They're very abundant. It's easy for anglers to catch their two-fish limit. So, it's not necessarily illegal to fish in the water in that case. It is managing more to MSY.

But the point is, is that not every fishery is the same. They're all different. So, we may need to look at how we can manage these
fisheries more efficiently based on what the anglers want, how they fish this fishery.

The problem we have now is that getting shoved in this commercial management of this hard-pound quota box is not efficient for recreational anglers in many cases. So, we need a system that fits the data we have now or the data that we could get now. Basically, anglers are going to respond to what they're encountering on the water. So, they're out there fishing. A strong year class comes through that the stock assessment didn't predict initially and all of a sudden they're catching more fish.

Is that a bad thing. I mean, we have this hard- pound quota that was projected from data five years ago at where we should be, yet all of a sudden we exceed that. But at the end of the day, if the percentage of the population that we're removing, the $F$-rate is the same as it was when the stock was lower, are we actually having an impact on the population.

We're actually being penalized because we overfished a magic number out here that said we couldn't go over that. When, in reality, from the population perspective, it was fine.

Again, to understand what's going on with the population on any given time, we need some index of what's going on. I mean, obviously, again, we do not want to overfish a fishery. But we need to know what's happening today because that's what anglers are fishing on today. So, you asked for some examples and I think one of the best ones from the States is Florida snook. I mean, snook is managed to a 40 percent SPR rate. And they do this through harvest restrictions such as a slot limit, season links, and bagged ones. And they do a pretty good job of it because they're currently at a greater than 50 percent $S P R$.

But again, in order to understand where they are, they're having to sample the population, look at the population, and what's happening.

Another great example or another reason
snook is a good example of a way to manage differently and a good example of anglers wanting to do something right, when there's a natural event on snook, like red tide or a winter kill, that knocks the population back, angler support, as a matter of fact, will demand that the Commission do something to shut the season down, whatever.

Even though it wasn't anglers that drove that population abundance down, they want to make sure that they're not having an impact on it until the population abundance rebuilds.

Extraction Rates and Harvest Control
Rules. The Modern Fish Act mentions those specifically. Extraction rates or fishing mortality targets is kind of much more common in freshwater fisheries. And again, as a former freshwater fisheries biologist, we didn't worry so much about what the F -rate was on any given year.

We monitor the populations annually. For example, we had catch per unit efforts. We had PSDs, RSDs, was basically a measure of the
stock size, the ratio of big fish to small fish, older fish to younger fish. And we used to monitor those and as they were going along. And if everything was fine, and there was the harvest regulations that we had in place were working. But if we saw a change or a fishery wasn't performing like it was, well, then we'd try to figure out, okay, are anglers driving this. So, we'd do a tag award study. We'd tag a whole bunch of fish and go out there and try to estimate what the fishing mortality rate was. And if it was too high, then we would adjust the bagging regulations until we got it back down, the fishery is performing fine again, and then just periodically check that every once in a while. So, an F -rate in that case.

Harvest Control Rules. Actually, that's kind of what snook is. You've got this SPR you're trying to manage to. And if that changes, there will be regulations in place to be able to make sure you get that fishery back up to its target with $S P R$, and in pretty much doing that with
seatrout, red drum, and other species as well. We're not trying to predict on any given year how many pounds would come out of that system, but have an indicator for the stock. And they're watching that and they're managing for that in the harvest limitation is what the regulations are in place right now. But what do we need to be able to do some of those things. Well, we need to recognize that the annual catch limit is simply a limit on fishing mortality, a measure of catch that limits fishing mortality in some form so that it doesn't exceed overfishing limits.

Can that be an SPR. Maybe the SPR not necessarily. An $S P R$ could be the threshold in the fishing mortality rate and how many fishes coming out is your catch.

Again, to be able to do that, you have to have some sort of contemporary estimate of abundance, what's going on with the actual population today.

And for fisheries like, not red snapper
in particular, because there's a big commercial component, but a predominantly recreational fishery, even if you're managing to MSY, more towards MSY, with hard-pound quotas, if there was some way that you could adjust the ACL based on a predetermined framework so that you had some measure, some index of abundance come into population like discards or release data on any given year and all of a sudden you see this bump come up because there's so many more fish come in the fishery that we missed, is there a way to adjust the $A C L$ based on, again, another framework for that following year in order to respond to what you're seeing on the water rather than waiting for the next dock assessment to go out because anglers are going to be catching more fish.

Is managing to something like that going to require different data sets beyond what MRIP provides, no doubt. Absolutely will. But what does that look. Well, that's kind of where we need NOAAs help. We really appreciate the
opportunity to formally begin that discussion, but we need NMFS to put about at least as much effort into finding ways to more efficiently manage the recreational fisheries that they're asking us to do.

Again, I am not a stock assessment biologist, nor am I a mechanic. But when the car is not running quite right, I don't expect my mechanic to tell me to, well, bring me the part, diagnose it yourself, bring in the part and we'll plug it in and fix it.

We work together. We figure out what the problem is. Then we discuss options. Usually, the least expensive option of how we're going to get there and how we're going to fix it and work together.

But at the end of the day, I mean, we would just like to see an opportunity to maybe identify some fisheries out there working with NMFS, Council SSC's, and see is there a way that we can test some of these other options for managing our fisheries, and not talking about
trying to do it on red snapper or summer flounder, or something like that.

And in some cases, hard-pound quotas may work just fine. It may work just fine on the West Coast where you have pretty limited entry where anglers can access, and you can count those.

But places like the Gulf of Mexico, the Atlantic Seaboard, MRIP is not very efficient of being able to manage for in-season closure. So, what data can we get and what's happening out there today that we can plug in and make sure that we stay within the conservation limits and keep from overfishing.

But certainly I look forward to continuing this discussion and seeing if there are ways we might be able to identify a few fisheries out there. But thank you so much for your time.

MS. McCAWLEY: Thank you, Chris. So,
the plan here is after each one of these presentations, if you have questions for the presenter, we're going to cover those and then, after we get through all four presenters, then
hopefully we can have a broader discussion. So, if you have questions for Chris Horton, now is the time. Sure, Gregg, then Eric.

MR. WAUGH: Thank you, Madam Chair. Thanks for your presentation, Chris. One of the big issues we have in the South Atlantic area is that there are significant issues with the MRIP estimates for our EEZ species and that's a complicating factor as Council wants to look at more flexible ways of managing the recreational sector.

And we need some form of accountability on the Rec side. And we have worked with NMFS and other partners to come up with a recreational reporting app.

And I was just wondering your views on private recreational anglers reporting their EEZ fishing activities via an app and getting maybe an electronic identification number, if you want to call it a permit, so that we know how many are fishing in the EEZ?

MR. HORTON: Thanks, Gregg. That's a
really good question and I think anglers would be -- this whole concept is pretty new. I think they would definitely be a valuable resource and be able to -- would be more willing to report if they knew that at the end of day that that's going to benefit recreational fishing in the long run. Right now, we really don't trust recreational anglers, just honestly, and a lot of areas don't necessarily trust Federal fisheries management.

And I know some of them think and I've had this discussion that went on that, well, if we don't report, well then it doesn't show that we're catching as many fish and we'll be able to fish longer. That's absolutely the opposite because the States know at least in the Gulf of Mexico and the model I'm using is red snapper management because the States are doing, or managing the recreational quota. And many of them have asked if they have to report.

The problem is in not reporting causes a bigger buffer on what you're actually catching.

So, you're actually losing days on the water because they have to estimate that, well, you're not reporting. So, how many of these other anglers are not reporting. So, we have to squash that down quite a bit and you're going to have fewer days in the water.

But I think with time and if they see the value of it, every angler $I$ know would be more than willing. If it's going to mean better management and I'm going to get to spend more time on the water with my family, then let's do what we need to do. But it's going to take a little bit of time of educating them on that.

MS. McCAWLEY: All right. Eric?
MR. REID: Thank you, Madam Chair. Thank you, Mr. Horton. So, you know, one of the big components of the recreational fisheries is what happens to the fish that are released alive. And, you know, in some cases the mortality rate is estimated at 9 percent or some other number.

To me, that's -- considering in some fisheries that the discard rate is higher than the
actual A plus B1 or whatever it may be, to me, the thing that we need to better understand in order to calculate what's really happening on the water is what happens to the fish that are released alive.
And, you know, that's -- I don't if it's
a tagging study or whatever. It's a big project. But because it is such a big part of the math problem, I think that's something we really need to spend some time investigating to get some real numbers. Thank you.

MS. McCAWLEY: Thanks, Eric. More questions, comments? Yes, Roy. MR. CRABTREE: Just a couple of things, Chris. You had one slide up about anglers as customers and it listed a number of boxes. Anyway, more days, more access, was one of the things, and it also said better catch rates.

And I think one thing we need to think about is that access and days on the water is directly related to catch rates. And what we've seen over time in the recreational fishery is a
huge increase in fishing power of the fleet because of technology and equipment that's available.

So, fishermen are vastly more efficient and better fishermen today than they were 40 years ago because they've got much more sophisticated equipment onboard. And that leads to quotas being caught more quickly and more constraints required because catch rates are up.

The other thing we've done particularly in the Gulf of Mexico is a proliferation of artificial reefs and we know that the catch rates for things like red snapper are 10 to 20 times higher on artificial reefs than they are on natural bottoms.

And so, even if they're increasing productivity a little bit, they're not increasing at anywhere close to the amount that they're increasing catch rates.

And so, we've got a number of things going on that are increasing catch rates and that's resulting in shorter seasons and less
access and we need to think more holistically about how artificial reef programs and other things all fit into the objectives we have, which if it is more access and more days, then we may be doing things that are contrary to that and are leading us in the other direction. And I think that has been a big problem in the Gulf of Mexico. One thing you talked about was the need to have more indices and make more frequent adjustments so that we're not so out of date in terms of setting catch limits.

And that's something that we all recognize as a problem. And the Southeast Fisheries Science Center is working towards interim assessments where we can update based on an index and then we can do annual specifications on catch levels. And that should solve a lot of that.

So, but what we need to do that is a good index of abundance that is used in the assessment and that we can then rely on the scale of catches on an annual basis. But I think the

Center is making a lot of progress on that.
And I think that will have the effect of lessening some of the things you're seeing where a big year class hits the fishery and the catch limit is exceeded very quickly. And then we find out that, well, it was exceeded because there are way more fish out there and it'll enable us to scale the ACLs up on a more timely basis.

So, we are working on addressing some of these issues that you raised that $I$ think will make the system work better.

MS. McCAWLEY: Mel?
MR. BELL: Thank you, Madam Chair. Thanks, Chris. I appreciate you being here. Just a question. Given what Roy just said and all, do you see any interest at all or willingness at all of fishermen to consider some sort of truncated seasonality to fisheries, recreational. You know, in terrestrial game management, deer, turkey, you know, you name it, a long time ago, you know, we realized that, you know, you can't have seasons that go 365 days a year, you know, and manage

1 those resources.

So, do you see any willingness on the part of folks to kind of consider some more say truncated seasonal access, you know, with guaranteed access in the seasons perhaps. Is that something even on the table do you think?

MR. HORTON: I think it is and
especially as effort continues to grow because effort is growing. And I think, you know, making those analogies to the wildlife and terrestrial side of things is absolutely applicable and I think anglers understand that. It's determining what's the acceptable level to them of the number of days.

I mean, right now, the recreational community in the Gulf of Mexico is just ecstatic with State-based management of that quota because they're watching that quota.

Now, their seasons were three days at one point in Federal Waters. But when they got bumped up to 26 days, I mean, that was the State -- and I'm talking about Alabama where I fish
mostly. Alabama DCNR were heroes, you know, to give us that. But that's a pretty limited amount of time.

So, there is a balance there of how much
time that they can be on the water that's
acceptable. And I think for the most part anglers are realizing that, you know, we can't fish 365 days anymore. You know, we realize that if we want the abundance, to have those encounters, that we do have to have shorter truncated seasons.

MS. McCAWLEY: More questions or
comments? Yes, Russ?
MR. DUNN: Just one. Chris, so on your second slide where you talk about, your first bullet, OY versus MSY. I guess my question is how would you disentangle that OY from MSY given the statutory definition is linked. And so my question is are you thinking about a legislative change there because, if you recall, OY is -- MSY is reduced by certain factors. So, are you thinking that's a legislative fix that's needed there or what's your thought?

MR. HORTON: Honestly, that's a good question, Russ, and I don't think a legislative fix is there because $I$ think it's there.

It talks about OY being a factor of MSY reduced by economics, social (inaudible). That's up to kind of the Councils and NMFS to decide how much do we reduce that MSY harvest in order to leave enough fish in the water that we have this economic and social benefit to the recreational community for those fish that are actually left in the water.

And that brings up another point. All
along, the frustration with the recreational fishing community and the fact that the lack of data to be able to support that from NMFS, that NMFS provides, that NMFS collects, is what -- I mean, what's the value of those kingfish we leave in the water. We'll argue that there's absolutely significant value to that. That we will fill our boats, and we will buy tackle and we will go try to catch those fish that are still left in the water. And again, not necessarily to harvest, but
to have that option to harvest if we want. We're not getting anywhere close to that quota.

But there's value in all the things we do to go fish for that fish as there is going for fishing for red snapper that we harvest. So, there is value there but, one, how do we get better handle on what that value actually is.

And the mechanism is already in Magnuson to manage based on MSY reduced by these certain factors and we just don't have that number consistently to be able to use in fishery management plans.

MS. McCAWLEY: All right. Any more questions or comments for Chris? All right, yes.

MR. HANKE: Thank you for your
presentation. I'm a Charter Captain from the Caribbean and everything you're presenting, I can relate to. I can agree on pretty much about everything. But I want to highlight each region and its own characteristics and we have to adapt. I think that recreational fishermen, we underestimate our ability to create new systems
and to support better data. And I'm a hard believer on that and thank you very much for your presentation and keep going. Thank you.

MS. MCCAWLEY: Anyone else? All right. Thank you, Chris. Next up, we're going to go to Toni Kerns. She's with the Atlantic States Marine Fisheries Commission. She is the Director of the Interstate Fisheries Management Program Oversight and Policy Development.

And Toni, I think you have a new
presentation that's a little bit different than the one that's on the CCC Website?

MS. KERNS: It is. I made some small changes after our meeting week last week. Thank you for having me. Today, I'm going to talk about the Atlantic Migratory Group of Cobia Fishery Management that the Commission has recently taken over from the South Atlantic Council.

In my presentation, I'm going to go over the goals and objectives of our new Fishery Management Plan and how we manage the recreational and commercial fishery and making recommendations
in Federal Waters.
The goals, one is to provide an efficient structure that implements coastwide management measures providing both equitable and sustainable access to the Atlantic Cobia Resource to the Fishery.

This goal is supported by a flexible management system that includes harvest specification processes, measures allowing sustainable harvest, monitoring through the cooperative and diverse data collection programs, protections for recruits to maintain a healthy breeding stock, and a list of research needs that can enhance the knowledge and management of cobia. Amendment 1 makes several changes to portions of the Commission's Fishery Management Plan that were previously dependent on the Coastal Migratory Pelagic Plan through the South Atlantic Council. It institutes a long-term strategy for managing in absence of a Federal plan. And several of these changes establishes processes for the Commission to carry out
management responsibilities that were previously performed by the Council including setting harvest quotas, sector allocations, defining stock status criteria, recommending management measures to be implemented in Federal Waters.

Additionally, we transitioned responsibilities of monitoring and closings, in particular, the commercial harvest to the commission, if necessary. The Amendment also changes the units to use and evaluate the recreational fishery from pounds to numbers of fish. By using numbers of fish, it eliminates confusion from the differences and average weights that have been applied previously by MRIP and the Southeast Fishery Science Center. And also, using numbers of fish reduces the uncertainty by eliminating one of the estimation steps.

Currently, the assessment that is being conducted right now is being run in both pounds and numbers of fish, which will help us utilize this in the future.

For the harvest specification process, the Commission Harvest Specification Process allows the Board to specify a limited set of management measures for up to three years of time.

One of the measures that can be set through this process is the Coastwide Harvest Quota. The quota itself would be informed by the stock assessment results and the Board can then take out any quota for an uncertainty buffer. This uncertainty can either be from management uncertainty or scientific uncertainty, but it is not required by the plan. Then the quota is then allocated 92 percent to the recreational fishery and 8 percent to the commercial fishery.

The Board can set coastwide measures. Those include vessel, possession or bag limits, minimum size limits, and commercial closure triggers. And the possession limits and the minimum size limits can be for both the commercial and the recreational fishery.

And then, in managing the recreational
fisheries, up here are the current management
measures. The direct quota is allocated to the recreational harvest targets.

First, we take 1 percent off the top of that recreational quota for de minimis states. These are States that don't have a major portion of the fishery. The four major states are Georgia through Virginia, but we still are starting to see catch of cobia in States as far north as Rhode Island. And so, therefore, we want to set aside a portion of the recreational quotas to account for those fish that are being caught in other States. The Recreational Harvest Targets are then allocated based on the percentages that you see here on this table. The percentages come from both recent and historical landings.

Percent are from a 10-year average of 2006 to 2015 and percent is from 2011 to 2015.

So, this helps us to take into account what States had previously been harvested as well as looking at where the changes in the fishery have been occurring in recent years.

The recreational landings are then
evaluated against these recreational harvest targets on three-year averages. So, if we set measures this year in 2019, then we would evaluate how well we performed in 2022 based on the average of landings from 2019 to 2022.

For the commercial fishery, as part of the specification process, previous weekly landings will be used to set a commercial trigger. That would help us determine when we need to close the fishery.

The trigger will be set such that a closure would occur at least 30 days after the landings reached the trigger. And if that trigger amount is reached, all States would be notified of the closure date and be required to close their commercial fisheries for the remainder of the year. In addition, the Commission would make that same recommendation to NOAA fisheries to an active closure in Federal Waters.

So, for an example, how this would work if the commercial -- if the average number of days for weekly commercial landings from Virginia to

South Carolina go from 77 percent to 97 percent, and from 2015 to 2017 was 32 days, then the commercial trigger based on that data would initiate a closure of 32 days after the in-season reported landings were at 77 percent of the total commercial quota.

In addition, the Amendment also sets aside 3 percent of the commercial harvest for the States that are north of Virginia to utilize for the fishery.

For Federal Waters, since there is no longer a Federal Plan for Atlantic cobia, the Atlantic Coastal Act allows us to make recommendations to NOAA fisheries to implement regulations in Federal Waters.

In order to enforce the recreational regulations with each State having their own seasons, we ask that the Federal measures be enforced by vessel state of landing. So, wherever the vessel says they're coming home to, the measures would be enforced based on that State's open season. We would also ask that NOAA
fisheries closes any measures in Federal Waters. And I'm going to go back -- I apologize. I didn't say that, based on these recreational harvest targets, the thing that each of the States can implement on their own is their State specific seasons and this allows them to tailor their fishery to their specific State needs, either for their majority of their charter party boat and fishery as well as their private anglers. So, what are the benefits of this flexible management system that the Commission has the ability to do. First of all, it allows the fishery to carry out on its own previously closures would be preemptive. They would be projected when they needed to be and not based on what was actually occurring in the fishery for that year.

And so, the Commission, by taking over management, we are not projecting when the closure needs to occur, but using it based on the current data that's coming into the fishery now.

And then, it also allows for smoothing
of the variable recreational data. One of the biggest challenges in the cobia fishery is that the -- it is a pulse fishery that occurs very quickly and then there's a lot of noise in the recreational data.

And so, the Commission has taken on looking at specifications in three-year time chunks where we're only setting the measures once every three years and we're not evaluating the recreational quota against that harvest target each individual year, but on that average three-year timeframe. And so, it allows for smoothing of that data and, hopefully, better management of the system.

So, we haven't actually carried this out in its full glory yet. Next year will be the first year that the Commission is able to do this based on the stock assessment that is coming out two weeks from now. If you have any questions? MS. McCAWLEY: Thank you, Toni. Questions, comments, for Toni? Yes, Chris.

MR. MOORE: Thank you, Madam Chair.

Thank you, Toni. I think is the first time I've ever heard Toni give a presentation, although I've known Toni for how many, 15 years or so. So, you did well.

I'm curious about the three-year
averages. All right. So, you talk about averaging the recreational harvest over three years. What do you compare it to, a three-year ACL, or how does that work?

MS. KERNS: We're comparing it to the harvest target that is set based on the recreational quota and how well we perform against that.

And if there isn't an updated stock assessment with a new quota, then we would make adjustments in order to meet this recreational harvest target in the next three-year timeframe. If there is a new quota that has been established through a stock assessment, then it would be setting measures to reach that new quota's recreational harvest targets.

MS. MCCAWLEY: Go ahead.

MR. MOORE: So, I'm still a little confused. So, you have this approach, which I think is good, a smoothing approach, where I say smooth out the harvest levels over that three-year period. You set harvest limits for each one of those three years or do you have a harvest limit that's like an average for those three years that you're looking at. So, you're comparing an average to an average.

And then you say also that it's not set it and forget it. It's set it and revisited every year. So, I'm wondering how complicated all this is going to be for the Commission.

MS. KERNS: We're not revisiting it every year. So, the specification process is for a three-year timeframe. So, we're setting it -setting these measures once and letting it ride out for those three years.

And then to see how well we performed against that recreational harvest target, we take the average of the annual landings for each of -for those three years and see how well we did for
those measures. Does that help?
MS. McCAWLEY: Mel?
MR. BELL: I was just going to add to that, and then it would be the responsibility of the State. For instance, if South Carolina's average after three years was 4,000 fish, then it would be our responsibility to adjust our regulatory approach to stay within that box, so to speak, so that responsibility to stay in those targets goes back to the individual States.

MS. KERNS: And I should note that the States do always have the ability to make changes in that three-year timeframe. If they see that their landings are going wildly high, then they can ratchet back if they want to in order to not have to make such a dramatic change at the end of the three years or, if they were really underperforming, they could make some changes. Those would need approval by the Management Board in order to liberalize regulations, though. MS. McCAWLEY: Yes, go ahead over here. Mike? MR. LUISI: Thank you, Madam Chair. Toni, you may have mentioned it, but I missed it in the beginning about what the actions are going to be on the States north of Virginia. So, as we're seeing more and more cobia in our State Waters and Chesapeake Bay, is there going to be or has there been discussions about how we might make adjustments on these types of quotas and accountability for those States as well. Thanks. MS. KERNS: You're really testing me, Mike. You can't quote me on this, but I believe the de minimis States are matching the State's regulation to the south of them. So, I believe that the de minimis States match Virginia's landings.

We don't require in the commercial fishery weekly or monthly reporting. It's annual reporting that we look to. And then for the recreational fishery, it's looking at the annual reporting. And then the Board will have to evaluate each of those State's landings over time. If they start to really increase, as we
see more cobia further north, then we'll have to potentially adjust the management plan to include some of those previous de minimis states as non-de minimis and it's part of this table you would see here.

MS. McCAWLEY: Go ahead, Mike.

MR. LUISI: You've seen me on the hot seat plenty of times, Toni. That was good. Thank you.

MS. McCAWLEY: Chris?
MR. MOORE: Thank you, Madam Chair. Toni, I don't want to put you on the spot, but how do you think this could be used for the species we're involved with, you know, summer flounder, scup, sea bass. Have you thought about it? Have you guys thought about it?

MS. KERNS: I mean, I thought about it, Chris, but that would require you giving up those FMPs because, you know, the beauty of the Commission for those that are not aware is that we are not managed under Magnuson-Stevens Act. So, we do not have to fulfill the requirements of
accountability measures and ACLs.
I think that some of our measures that we put in place are very similar to ACLs and AMs and perform in similar ways, but we wouldn't have those same things. And so I don't know enough on how if you could not actually look at the annual RHL is under Magnuson or not.

If you could, then $I$ think we could work this. But if you always have to look at how well you did at the end of each year, this is difficult.

MS. McCAWLEY: Chris, did you have more?
MR. MOORE: Thank you, Madam Chair. Just quickly. So, that was my point, right, can we use this approach within our ACL-AM box, and it's nice -- if we didn't have the box, obviously, we could.

But I'm just wondering if, you know, thinking about your presentation today, I haven't really tracked cobia that closely. I think there may be some application to summer flounder, scup, and black sea bass, as Council managed species,
right, and I think we need to think about it. Thank you.

MS. McCAWLEY: Gregg?
MR. WAUGH: Thank you, Madam Chair, and thanks, Toni. And following up on Chris' point, I don't think we'd have to give up any FMPs because that's, in essence, the old ACL that we had. They just allocated it by State. And the question is in setting up your accountability measures, I'm not sure under Magnuson, it's probably something we could discuss after this session in the general part.

But I'm not sure we have to do our accountability on an annual basis. So, there's a recognition that there's a lot of variability in MRIP. So, if we were to propose something like this and have an accountability measure that would look at it in two years, maybe three years, I'm not sure that would not be allowed under Magnuson. MS. McCAWLEY: So, Toni, I had a question about, so if one of the States -- so Mel was giving an example where South Carolina went over.

Are you making say quota adjustments within the three-year time periods of say South Carolina went over and Georgia was way under, would you transfer quota or would you wait until the end of the three-year time period and then consider whether or not you needed to transfer quota among the States?

MS. KERNS: We wouldn't -- for the recreational fishery, the Board didn't talk about transferring quota from State to State. It was more that the States would have to adjust their regulations to how well they performed to their Rec harvest target.

Now, and during those three-year cycles, there's certain things that the Board can do that I had outlined, just do a Board action at the table.

If they wanted to change these quota percentages, they would need to do an addendum, a management document to conduct that. But there's nothing that would prevent them from relooking at
those allocations. And I think that that will definitely be something that they will have to do as we see cobia move further north.

MS. McCAWLEY: So, basically, they could relook at those allocations before the three years is up?

MS. KERNS: Not before the three years is up. I think you'd have to carry through that three-year timeframe and then relook at those allocations.

MS. McCAWLEY: Thanks, Toni. Any more questions, comments? All right. Thank you, Toni. Next up, we're going to go to Mike Burner with the Pacific Fishery Management Council.

MR. BURNER: Madam Chair. Good morning, everyone. While it loads, maybe I'll just preface my presentation with a little review.

I was asked to give this presentation by some of the staff of the West Coast Region. We, the Pacific Council, starting in 1990 and a subsequent few years, declared 10 species in our groundfish FMP as being an overfished condition.

And did a lot of work in the early 2000's to implement rebuilding plans across those 10 stocks and we've managed to rebuild 9 out of 10 of those at this point.

The West Coast Region asked me to give an example of one of those species that has recreational importance on the West Coast. So, we decided with -- we went with bocaccio, a species that's primarily off the Coast of California and then north of Washington. I'll get into that in a little bit.

But so, I guess, what I would preface this is this is sort of a case study of our success story here with bocaccio, but it obviously predates the Modern Fish Act. But it does stay within the framework of the Magnuson-Stevens Act and the National Standard Guidelines.

So, there was a lot of hard choices we had to make, especially with 10 different stocks in an overfished category. That FMP does though have over 90 stocks in it, some of which at that time had some harvestable population sizes.

So, a lot of the story I'm going to tell here is not just reductions on bocaccio or some of the other species that we were rebuilding, but more of an avoidance of those while we targeted species for which we did have some sustainable harvest opportunities.

I guess one more disclaimer, I put this presentation out for review from some of our West Coast Regional Staff, as well as our staff, and the Science Center. Several people pointed out that this photo is from Newport, Oregon, and that boat is not likely targeting bocaccio. Neither is bocaccio very important to Newport. But I took this picture myself and I really liked it. So, I went with it.

So, just a quick overview. Bocaccio is an important commercial and recreational fishery primarily off of Central California and Southern California off the West Coast. It's range goes all the way from the Gulf of Alaska to Baja, California. However, it's not very prevalent off of Oregon and the Washington Coast.

There seems to be two populations, one to the north and one to the south. So, I'm going to focus on the population south of Cape Mendocino. That's the portion of the stock that was declared overfished in 1999.

You can see landings are quite high through the '70s and '80s. It started to decline quite a bit in the '90s. And then, right there, right around 2000, 1999, it was declared overfished and we went into our rebuilding plan. And you can see there by the landings numbers, that we went into quite a conservative harvest approach there.

They are largely a deep water species thought to be generally in high density between 80 to 100 fathoms. That said, particularly as we have seen some rebuilding happen, that's not to say they can't be found in shallower waters, particularly juveniles.

So, in 1999, as I mentioned, we had a situation where you can see up there on the top left, that's the estimated spawning depletion over
time. There, we saw quite a dip in the '90s. And then, in the late '90s, right around 1999, the stock was estimated to fall below 25 percent of its unfished spawning population size and was declared overfished.
We put a rebuilding plan in place
shortly thereafter. And as you can see, recently, we have declared the species rebuilt.

We worked under the T -Min and T -Max as our sideboards, $T$-Min being the time to rebuild the species, the estimated time to rebuild the species in the absence of fishing. T-Max, on the other hand, was specified through regulation and Magnuson-Stevens Act and the National Standards to be 10 years under the Act.

But this species being long-lived, it was T -Min plus the mean generation time for this species, which is about 13 years. So, in other words, the maximum time to rebuild was calculated to be the year 2031. Where in the absence of fishing, it was estimated the stock would rebuild by 2018. Recall, this is back in the early 2000 s
we were making these forecasts.
So, then in terms of what we're going to
target for rebuilding, those were basically our
sideboards. And the Council considered many things, including the stock itself, but also impacts to the communities that depend on bocaccio, the opportunity to harvest species that aren't rebuilt, in other words, sustainable harvest opportunities for co-existing species and the economics of both recreational and commercial fisheries.

Down in the lower right, are sort of some of the harvest projections we looked at. So, the $T$-Target was more or less we were shooting for an estimated timeframe that had a 50 percent probability of rebuilding. So, we looked at a variety of harvest policies and that's what all those colored lines with the various shapes and colors are. And we more or less picked one that had a 50 percent neighborhood of rebuilding within the timeframe we were looking at.

So, we chose a harvest rate with an SPR
of about percent with a probability -- a 50 percent probability of rebuilding the stock by 2026. So then, how did we go about converting that into some management targets through Harvest Control Rules. We basically went and followed the National Standard Guidelines.

I think you've all seen a lot of these graphics, particularly that rainbow list of Overfishing Limit. This would come out of the stock assessment as the FMSY as estimated by our SSC.

We then would calculate an Acceptable Biological Catcher at ABC based on a probability of overfishing, sort of a policy choice by our Council. And that's what up here on the left and you're probably all familiar with this.

But the Council would choose a
probability between zero and 50 percent of overfishing giving some of the uncertainty of a stock assessment, some uncertainties associated with what surveys we've had for a given species. And thankfully bocaccio was a relatively data rich
species for our Council.
Our Council chose a probability of 45 percent, which then just calculates, based on this relationship as approved by our SSC, a reduction from OFL to an ABC. That's it.

Under Rebuilding, we didn't really have the ability to fish at that rate and still meet our T-Target. So, we needed a different way of coming up with a Harvest Control Rule under our Rebuilding Plan. And that's what that first Rebuilding ACL Harvest Control Rule is. Again, the number, we have looked at that relationship at an SPR of about 78 percent was the target that the Council chose.

To be clear, we didn't manage our ACL at that rate. We converted that to a tonnage, which is shown in the graph below. But this rate for our ACL under the SPR under Rebuilding was considerably below our ABC.

And as you can see, that converted to ACLs in metric tons got quite low early on and gradually increased as the stock rebuilt and as we
continued to do assessments over the years.
Once the stock was declared rebuilt, very recently, we will be operating under more of our default Harvest Control Rule for species that are in a healthy status, that being over 45 -- 40 percent of their unfished biomass. And that sets our ACL equal to the ABC. So, we no longer have this restrictive rebuilding harvest rate or ACL in place.

And so, as you can see, that results in annual catch limits increasing quite a bit now that the stock has been declared rebuilt.

So, how do we do that? It was pretty painful, especially in the early years. As I mentioned, a large part of the story was avoidance of not only bocaccio but all 10 of the overfished species we had in our plan.

We largely looked at depth-based management as one of the key pieces here given the species that we were rebuilding all tended to be shelf species in similar depth ranges.

So, for the commercial fisheries -- I know it's a recreational focus here. But for the commercial fisheries, we established a Rockfish Conservation Area that was based on depths. And it was this ribbon of closure that went all the way from Mexico to Canada.

For the recreational fisheries, however, we implemented depth closures where you had to fish shoreward of a specific depth at different times of the year, or there was just plain closures depending on what part of the coast you were on.

There were some regulatory enforcement challenges with that as you can imagine. We had to establish waypoints for these Rockfish Conservation Areas for that entire distance.

We worked closely with our enforcement consultants to come up with not only recreational lines, but commercial lines that followed the contour reasonably close but were also straight enough to be enforceable.

And we had implemented vessel monitoring systems because keeping track of where all of the
vessels were via conventional methods just wasn't a reality given all these area closures we had. One other key piece to the story was in-season management. We have dockside sampling for most of our major ports up and down the west Coast. So, catch is monitored continuously. Our Council meets five times a year. Our Groundfish Management Team tracks not only landings but also makes estimates of discard mortality and total mortality and reports back to the Council and kind of adds up how we're doing at each of our five Council meetings relative to our goals.

And the Council would take in-season mack action accordingly. To change up in the recreational sense would look at some of these depth contours and the dates that are open and make some adjustments there to either ratchet up or down the fishery according to how it was tracking.

So, I really can't stress enough how much in-season management during the year gave us
the flexibility to keep boats on the water as best we could while still meeting our annual catch limits.

Another piece of the story is release mortality. Like I mentioned, part of the goal here was to provide fishing opportunity but avoid, and if you can't avoid, release with the best success for survival we could.

One of the problems with these species of groundfish is barotrauma. You pull them up from depth. You can see up on the right, it's not a bocaccio, but it's the best picture I could find of bulging eyes and inflated swim bladders and things that make the fish quite vulnerable to mortality.

And so, we were charging essentially 100 percent mortality for most depths of these overfished species if they were turned loose. The retention was not allowed. So, we had high pretty high mortality expectations given this barotrauma.

There was some research done that if the fish were descended back down to depth when they
were released that we would -- particularly in about the 50 to 100 meter range, we would experience mortality rates that were half or more less than what we were originally calculating. So, rather than 100 percent of the fish dying, we were in the 20 to 50 percent range for species -- or for fish that were released with one of these descending devices. And the picture on the lower right there is one of the fancier versions.

Some people were just plain using milk crates with weight releases. They'd send a weight on the line and pop the door open. But the faster these fish could get back down to the depth from which they were pulled up, the better they survived.

The device on the right uses -- would grip the fish. And then when it got down to the depth, the pressure would release the device and the fish would be released at depth.

We looked across. We looked at the research that was out there and looked at the
possibility of providing some of these credits, if you will, for the use of these devices.

Early on, the use of these devices was encouraged. The logo there of No Floaters was put out and there was quite a $P R$ campaign to get the message out to recreational fisheries. I think subsequently Oregon and Washington required these devices to be on board for bottom fishing trips. And although not for bocaccio, for yelloweye and canary, which are other rockfish species that we were rebuilding that were very constraining, we did allow a credit, if you will. We reduced the estimated mortality for those species given the understanding that these devices would be used in the recreational fishery.

And we kind of got lucky, to be honest. We were expecting this stock to not rebuild until 2026 under our forecasted population trends. But as I mentioned, we just recently declared the stock rebuilt after our updated assessment of 2017.

The part of the story I've got to say is
environmental conditions, which we also got a little bit of a break. You can see in the declining landings and previously in the slide that showed the declining population sizes, we were in a period that, for better or worse, this could be called the spicy water conditions versus minty water conditions.

That terminology is a simplified way of saying what the predominant water -- the predominant source of water in the California Current.

> If we have Pacific Subarctic Waters
originating from Alaska, tend to be cooler. They tend to be lower in salinity. They tend to also support copepod assemblages that are richer in lipids and much better feed for juveniles, cheeseburgers, as they are called.

Whereas, if we attend to have warmer waters that dominate the California Current, we have assemblages of feed and warmer waters that are lower in calorie and more like celery I guess is what some of the analogies we've heard.

But when we were back here looking at the declining stock and declaring it overfished that the predominant waters of the California Current as measured by sea surface level was more of the spicier warm waters.

But what we have seen since we declared the species overfished was cooler waters predominant and better feed conditions. And so we've seen some very strong recruitments of rockfish across most of our species in that plan. Particularly 2010 and 2013 were very strong recruit events.

So, I guess just the point of this whole slide is that, you know, we did make some conservative choices in our harvest policy, but we also caught a break here in terms of environmental conditions that drive recruitment of these species which also helped accelerate the rebuilding. So, that's my story. I'll take any questions.

MS. McCAWLEY: Thank you. Any questions for Mike? Yes, Tony?

MR. BLANCHARD: Good presentation. As
for dealing with barotrauma, all right, you guys ever tried using a syringe?

MR. BURNER: Yeah. I believe there was, especially early on, the idea of poking or releasing the swim bladder was prevalent. My understanding, that that was not as successful as leaving the swim bladder intact and getting the fish down to depths, which was found to be far more successful and had a higher survival rate. MR. BLANCHARD: Okay.

MR. BURNER: So, we sort of discourage the popping of the swim bladder and encouraged the descending device.

MR. BLANCHARD: Okay.
MR. WAUGH: Thanks, Mike, for your presentation. So, you all specified your ACL in terms of SPR. Is that still the definition? And I guess what you then did was take that rate and convert it to poundage, and so you managed based on poundage and not coming back to that SPR?

MR. BURNER: Yes, that's correct. We did -- particularly during the rebuilding timeframe, we used $S P R$ as sort of a common metric. It was more of an apples and apples to comparison between the rebuilding species. It took into the various fecundity of the species. So, it was more used as a common metric as we described harvest policy across the species we were rebuilding. But when it came time to set an ACL, we did set that at a tonnage.

MS. McCAWLEY: Some other hands up. Yes, Russ?

MR. DUNN: Two questions. So, one of the things you emphasized was the need for in-season management, which is obviously so in somewhat in contrast to the last discussion. Are you still doing in-season management, or now do you sort of set it and forget it for the season and monitor on an annual basis, or what's your approach now?

MR. BURNER: No, we still continue with in-season management at each of our meetings. That said, it tends to be a little less intensive than it was back when the ACLs were low. You
know, there was more adjustments to the recreational fisheries then than there is now. But we continue at every meeting to track catches and make adjustments as necessary.

MR. DUNN: Okay. Great, thank you. And
actually, the second question is actually for Gregg. Gregg, in terms of the -- with the Council adopting venting -- or release, descending device and/or venting, have you all looked at their model in terms of conservation credit for any of the redfish species under your jurisdiction? MR. WAUGH: Thanks, Russ, Yes. That's something we've had discussions with various Southeast Fishery Science Center folks and the intent is, and we did use the Pacific example. The hope is that once that requirement gets implemented and we get some monitoring information to look at compliance, which we can do with the MyFishCount app, that then when that species comes up for a stock assessment, we hopefully get some credit for reduction in the discard mortality rate. And I think that will certainly encourage more compliance if the recreational sector sees that there is some payback.

MR. DUNN: Thanks, Gregg.
MS. McCAWLEY: Mel?
MR. BELL: Thanks. You mentioned the -I think it was Washington and Oregon States implemented the mandatory use of descending devices, but not necessarily for that species. But there is no Federal requirement.

So, I guess -- and I'm not sure of the proportionality of State Waters versus Federal Waters for the fishery itself. But was that sufficient enough to get people to sort of get in the habit of using the devices do you think even without it being mandatory in Federal Waters?

MR. BURNER: Madam Chair. Thanks for the question. The devices were required on bottom trips, not necessarily if you were just fishing for bocaccio, and that included State and Federal Waters. The credits were just given to a few of the species that were more of our constraining
stocks, so, those being canary and yelloweye.
And I should also add that -- I glossed over it earlier, but when we consider those credits, those were depth- based. And so, like I mentioned, between about 50 meters and 100 meters, there was varying in credits depending on the depth that the fishing occurred. And after deeper than about that, it was assumed that all the fish died regardless of the descending device. So, the credit was a depth-based credit as was our estimate of mortality based on the reported depth of angling.

MR. ANDERSON: Madam Chair?
MS. McCAWLEY: Yes.
MR. ANDERSON: I also really want to credit the Recreational Fishery for advocating for the use of descending devices. They also went out and sought grants to buy descending devices like that SeaQualizer that's up there, which is the most expensive one that's on the market and gave them out free of charge to the Recreational Fishing Community. So, a large part of the credit
for wide use of descending devices goes to the Recreational Fishing Community and the organizations that they have.

MR. WAUGH: Thank you, Madam Chair. And, Mike, just one quick clarifying question. So, you all did require the use of descending devices for bottom trips in Federal Waters. Is that correct?

MR. BURNER: In Washington and Oregon, and California was recommended. And as Phil mentioned, I think the Recreational Community largely embraced the method and, therefore, we were able to seriously consider the credits I mentioned for some of our more constraining stocks.

MS. McCAWLEY: More questions. Yes, Chris?

MR. MOORE: Thank you, Madam Chair. Thank you, Mike, for the presentation. I'm curious of the question that Russ asked and triggered this thought which relates to what data are you using to do those in-seasons adjustments
and what are the limitations of that data?
MR. BURNER: Thank you, Madam Chair.
Thank you for the question, Chris. We're using dockside sampling largely reported by the three States on the West Coast. So, Washington, Oregon, and California, all have pretty intensive sampling of anglers as they come off the water. So, it's pretty real time. It's some reliance in all three States for fishing areas that we can't get to but, for the most part, there's pretty intensive sampling that's going on continuously through the fishing season and reported at each of our meetings.

MS. McCAWLEY: Yes. Marcos?
MR. HANKE: First a question. Then a follow-up question to it. On your percentage of release mortality, you're considering one day, two days, a week, 30 days, a year after the release? How do you guys address that on your area? You know, once you see the condition of the fish that are being released, which is a post release condition, how you connected the release mortality
percentage that you present?
MR. BURNER: Thanks for the question. It's largely based on the angler's reported depth of fishing more than anything. It's not necessarily based on the condition of individual fish or the angler's reporting of the condition of that fish. It's based on the assumption that descending devices are in place and based also on the depth of fishing that the trip occurred on. MR. ANDERSON: Just one other piece of information. So, when, in particular, Oregon State University did a lot of the work that helped or bring forward the data on the survival rates associated with fish that were descended, some of those fish were also tagged, radio tagged. And so we were able to go back out and detect whether the fish were still alive or not after some period of time.

So, that's an additional tool that we used to ensure that the survival rates that we were assuming at the time of the release were born out by those fish continuing to be present in the
-- like for yelloweye, in particular, which are really site-specific kind of fish. We were able to go out and determine that those fish were still alive some number of weeks or months later.

MR. HANKE: The follow-up comment and question are the same thing as in the Caribbean because of the multispecies and the size of the fish that you catch when they're bottom fishing on depth that we are on.

I'm collecting personal data, you know, during my operation relating to the release surface, one atmosphere and two atmosphere release. And it's very preliminary, but I think it's the right track especially for recreation and commercial fisherman to pursue and to produce that kind of data.

For example, in my case, I can tell you right away that with the Frigatebird, you release on the surface grouper and snappers, and it's almost an instant release mortality right there. If you release at one atmosphere, you can see the fish swimming away exactly under the
same conditions. And all those very basic data go back to the presentation before, what kind of information the recreational community can produce with very little effort and support from the Science Community. That's my comment. Thank you. MS. McCAWLEY: More questions, comments? All right. Thank you, Mike. We're going to move into the next presentation, which is Julia Beaty, with the Mid-Atlantic Fishery Management Council. She's a Fishery Management Specialist, and we're going to turn it over to her. MS. BEATY: Thank you. Good morning, everybody. So, I'm going to talk about this initiative, which we call the Recreational Reform Initiative, which is a joint project of the Mid-Atlantic Fishery Management Council, the Atlantic States Marine Fisheries Commission, and the Greater Atlantic Regional Fisheries Office. So, this initiative came about largely due to some challenges that we've had with managing the black sea bass recreational fishery. But it also addresses the other three species that
have big recreational components and are managed jointly by the Mid-Atlantic Council and the Atlantic States Marine Fisheries Commission. So, the four species include summer flounder, scup, black sea bass, and bluefish. And I should note that this joint management program for summer flounder, scup, and black sea bass, it's from Maine through either Cape Hatteras, North Carolina, or all of North Carolina. And for bluefish, it's for the whole Atlantic Coast. So, just to provide a little bit more background on the black sea bass challenges that we have specifically. So, black sea bass biomass has been very high for several years. It's been more than double the target level since at least 2015. So, availability to anglers has also been very high. And black sea bass is a very popular recreational fish species in our region.

And anglers have felt like the measures that we put in place have been very constraining. They realize that biomass is very high. Availability is really high. They want to be able
to catch more black sea bass and keep more black sea bass.

But you can see from this figure here that our RHL, that's the red line, has in many years been fluctuating. And then harvest is the blue bars, and you can see that we have very little wiggle room between harvest and the RHL. In many years, we're either bumping right up against the RHL or we're exceeding it. So, we felt like we've had to keep pretty restrictive measures in place.

And also, I don't know who first came up with this term, but chasing the RHL kind of summed up a lot of the struggles that we have been having with black sea bass.

Where every year when we're thinking about what's the next year's recreational harvest limit and should we change the bag, size, and season limits to try to prevent that RHL from being exceeded, it frequently felt like every year we had to make some tweaks to the bag, size, and season to prevent exceeding that RHL, either
because the RHL was changing or our expectations the harvest was changing. So, we felt like we were chasing the RHL and having to change our measures very frequently.

Meanwhile, we have this very healthy stock and anglers are feeling constrained. So, a lot of kind of simmering frustrations with all of that.

So, this recreational reform initiative was largely aimed at answering the question of how can we provide greater stability in the recreational management measures so that we don't have to chase the RHL every year. We don't have to change things a little bit year to year.

And again, this was mostly an issue with black sea bass, but we've had similar struggles with summer flounder, though for some slightly different reasons.

For scup and bluefish, we haven't had to change the measure as much, but they're managed with the same system as summer flounder and black sea bass. So, we're trying to address all those
species together.
So, you know, this issue is kind
simmering for several years. And the conversations really got going after the

Commission Summer Flounder, Scup, Black Sea Bass Board Chair and Vice Chair put together this document that they called the Strategic Plan for Reforming Recreational Black Sea Bass Management. And that was a multiple page document with a lot of different ideas in it and it helped really start the discussion in terms of what do we think we should really focus on and move forward with.

And eventually, that evolved into the formation of a Joint Steering Committee to really dig into some of this and focus on specific issues. So that Steering Committee was formed in March of this year. And membership includes leadership and staff from the Council Atlantic States Marine Fisheries Commission and the Greater Atlantic Regional Fisheries Office.

And the Steering Committee came up with
this Draft Mission Statement to focus our efforts. So the Mission Statement is to allow for more regulatory stability and flexibility in the recreational management programs for summer flounder, scup, black sea bass, and bluefish by revising the current annual timeframe for evaluating fishery performance and setting recreational specifications to a new multi-year process.

So, before I explain why that would make such a big difference, I'm first going to explain what the current process is and how this multi-year process would be different.

So, for all four species that we're focusing on, the fishing year is the same as the calendar year. And this timeline is an example of what it typically looks like when the Council and Board need to set new recreational harvest limits for upcoming years, not when they're reviewing RHLs that were already in place.

So, typically, when they need to recommend new RHLs, they're meeting in August of
the current year to develop RHLs for the next one to three years, usually based on some sort of stock assessment update and other information. So, that decision is made in August. But then the decision on what should the recreational bag, size, and season limits be to help prevent exceeding the RHL, that decision isn't made until much later in the year.

For Federal Waters Measures, that
decision is made in December of the current year because that allows us to consider preliminary MRIP data for Waves 1 through 4 of the current year.

And then the States developed their measures through a separate commission process and that usually happens early in the next year. So, that's early in the year that the measures are needed in. And then depending on the States, maybe they need a little bit more time to finalize all their measures.

And then, of course the Federal Waters Measures have to go through a more involved
rulemaking process. So, even though the Federal Waters Measures are agreed to in December of the previous year, they're not actually finalized and implemented until typically May through July of the year that they're actually needed in.

So, there's some obvious challenges associated with this, that the measures in both State and Federal Waters aren't -- if there's a change to them, that change isn't implemented until, you know, early to even, you know, maybe midyear of the year that those changes are needed in.

And even though some of the decisions are made in December, that still doesn't necessarily give a lot of time to plan for the next year. So, we get complaints from, for example, for-hire captains who said they want to be able to plan their trips well in advance.

Even if they know the decision is made in December, that's still not a lot of time. They'll say people want to plan their summer vacations like well in advance. So, they want to
know when the fishing season is going to be. So, even without this delay and implementation, the December decision- making can be challenging for that reason.

But again, one of the reasons why we do it this way is because it allows us to consider the most current MRIP information to think about what is this year's harvest. And if we kept measures the same next year, we typically assume that harvest will be the same next year as it is this year. So, it allows for that sort of decision-making.

So, the proposed change is you basically keep the timeline the same as it was in the previous one. But instead of agreeing to the bag, size, and season limit for only the next year, you're agreeing to it for two years at a time. So, there's still that delay. And when the measures are finalized and implemented for the first year, but for the second year, if they're staying exactly the same and you already -- you know what they are well in advance for year two,
and you don't need to do any follow-up
decision-making or rulemaking to have those year two measures the same. So, the biggest benefit is in that year two change to how we do things. So, the way this would work is that everyone involved, so the Council and the Commission and Member States would have to agree to the bag, size, and season limits for two years at a time and commit to making no changes for those two years.

So, if you get information in the interim year that suggests that maybe your measures could be a little bit more liberal, you're not reacting to that. Because the tradeoff is that if you get information that suggests that maybe you might need to cut back a little bit, you're also not reacting to that. So, it has to work both ways for it to be able to work.

And so, the other thing is that, you know, in general, we're committing to not responding to new information in the interim year. But in the interim year if we get information to
suggest that the stock has become overfished or overfishing is occurring, we would react to that. So, this has already come up a little bit in the discussion today, but there's some consideration that still needs to be -- to go into this in terms of how we would factor in annual ACL evaluation and accountability measures and what are the Magnuson Act requirements for that.

And if, you know, we're committing to making no changes for two years, if in the interim year we get information to suggest that the ACL in a previous year was exceeded, is it okay to not react to that until year three, for example, and are there any other changes needed to the accountability measure regulations that we currently have in place to allow for basically setting and forgetting it for two years. So, that's something that we still need to develop a little bit further.

And then also, the Steering Committee has talked about the idea of, you know, we make -right now, we make the decisions on Federal Waters
measures, bag, size, and season limits in December, and that's still proposed under the new timeline.

But what if we move that back to October to give even more, you know, advanced notice to what the changes might be and provide some more efficiencies in year one. There's pros and cons associated with that.

That would mean that, you know, there's data that you wouldn't be able to consider that you would have available in December, but not October. So, that's something that needs a little bit more consideration and evaluation. So, another topic that the Steering Committee has focused on is what are your guidelines for deciding if you need changes in your measures or not.

And for black sea bass, there have been some recent years where we have evaluated expected harvest compared to the RHL, and it's been determined that maybe harvest would exceed the RHL. But there's some justification for why you
can keep measures status quo. And the justification for that has kind of been developed on a case-by-case basis.

So, the Steering Committee thinks it would be helpful to come up with guidelines that are agreed to and you can use every single year. So, it's not something that's on a case-by-case basis. It's something that is transparent and everybody buys into it and you know what your guidelines are.

So, there's two aspects to this. One aspect is looking at stock status information. And so, on the screen are some examples of kind of metrics that you would look at for stock status. And if you have multiple positive indicators that could work in your favor in terms of justifying status quo, bag, size, and seasons limits, when moderate reduction in harvest would otherwise be needed.

And then the other piece of it is how you determine what percentage reduction or liberalization in harvest you might need with your

RHL for the next year.
And so the Steering Committee recommends also establishing guidelines for that. So, if you establish a certain percentage above and below the RHL, that if you're within that, you're not making any changes, and again, it has to go both ways.

And then come up with guidelines for how you deal with uncertainty in the MRIP data and then so how you deal with potential high PSEs and smoothing of outliers and things like that.

And then with this concept and then also the two- year timeframe, some further work needs to be done and consideration given to the pros and cons of using the most up-to-date data possible, and having your decision-making occur, you know, later in the year versus using -- having decision-making be based on data that's maybe not as current as possible, but is the final MRIP data. And that allows you to make the decision earlier in the year.

And for all of this, the Steering Committee agrees that we need to do a lot of
stimulation testing to look at what would happen if you set it and forget it for two years and you have an old bridge or if you use these new guidelines for status quo to not take reductions when you would otherwise need that. What would be the impacts of that. What would be the impacts of not taking slight liberalizations that you would otherwise be allowed to do.

So, those are the major next steps in this process is, you know, so far this has been discussed at kind of a high level kind of Steering Committee leadership perspective in terms of where should we focus our efforts.

But we haven't really dug into the technical side of things in terms of what is really feasible and what would be the impacts of some of this.

So, those are the major next steps in this process. And I'm happy to take any questions. Oh, and also there's other people in the room who are on the Steering Committee and they can help me answer questions, too.

MS. McCAWLEY: Thank you, Julia. Questions? Tom?

MR. NIES: Thanks, Julia. I'm kind of intrigued about one of your comments I think on about your second to last slide, which slide which talks about -- I think what it said was, yeah, guidelines for incorporating uncertainty in MRIP estimates.

And I think there what you mean is in evaluating the harvest compared to the recreational in determining whether accountability measures need to be applied.

Is that going to be linked to the stock assessments, or have you thought about linking that somehow to the stock assessments so to make sure that your approach from monitoring the recreational harvest level is consistent with how the assessment treats the data?

MS. BEATY: That's a good question. We have thought about it in terms of thinking about it. Depending on what your stock status is, maybe you don't want to have so much flexibility.

If stock status is good, it's okay to maybe have more flexibility. But that is a good question and may be something that would be worth considering in the simulations in terms of if we're dealing with uncertainty and the recreational data is different than how the assessment is, what would be the impacts of that. And this, dealing with the uncertainty in MRIP is not necessarily just for accountability measures, but also in a situation where you don't think you need an accountability measure, but you're just looking at meeting next year's RHL. So, it could, you know, be used for rules aspects. But that's a good question. Something I think that could be simulated.

MS. McCAWLEY: Other questions or comments for Julia? All right. Thank you for that presentation.

So, we've had four presentations and I think we'd like to have some discussion about Section 102 and thoughts around the table on moving forward from here. Yes, Chris?

MR. OLIVER: I'll just start and throw this out. Because one of the fundamental conundrums $I$ struggle with is the Act says you can use all these other measures, but you still have to stay within an ACL.

And you highlighted this, Chris, in your presentation. As long as we define ACL in poundage, how do we get past that in the sense that you define an extraction rate to reach a particular target, and you get it right, and it's kind of macht nichts.

So, I'm struggling with how, as long as we continue to define an overall quota in pounds, and then let's say it's a million pound quota, and it's a fifty-fifty split, so half a million goes to the recreational fishing sector, then what do we do?

MR. HORTON: Can I respond to that?
MS. McCAWLEY: Chris?
MR. HORTON: Well, that's a good question. I think that was the point is that the ACL for catch, but Magnuson defines catch as
something other than -- it doesn't have to be hard-pound quotas or weights. It doesn't have to be weight- based. It could the numbers, it could be sex, biomass area, or other factors.

I mean, there's a whole conundrum of things out there that we could potentially do, but how do we measure that catch. And I understand the difficulty in trying to define something because pounds is something easy to gravitate to. It's easier to measure based on how we're doing it now.

But these is there a different way that we could collect or different data we could collect, but still looks at that catch based on those other factors. And that is the question. And again, I'm not the mechanic. I can't answer that for you. But would really look forward to an opportunity to pick some fisheries, maybe just primarily recreational, not commercial, but look at ways we could more efficiently manage and what other measure of catch could we then plug in to that ACL besides weight.

MR. OLIVER: And I was trying to reinforce your very point just to kick off hopefully some -MR. HORTON: Gotcha. Yes, sir. MS. McCAWLEY: Other thoughts here?

Okay. Maybe let's go ahead and take a break. And then maybe when we come back from the break, you'll have some other thoughts and maybe we can continue this discussion. So, let's go ahead and take a 15-minute break.
(Recess)
MS. MCCAWLEY: All right, once again $I$ want to thank the four speakers that we had before the break. I thought those were very informative discussions. I'm going to open it up again to CCC discussions on this topic.

Ultimately, maybe we don't necessarily need a discussion because maybe Councils were informed by those four presentations and they just want to go back to their respective Councils and maybe think about some of the different items that you saw this morning. And that's okay, if that's
the answer here, but I'm still going to open up the floor again to see if we want to have any more discussion, or we have any types of questions that we want answered before we leave this topic. Yes, Chris?

MR. MOORE: Thank you Madam Chair. I appreciated the presentations today, but I think, to follow up on Chris Oliver's comments, I think there's still a struggle with how to we get out of this ACL AM Box, as it relates to flexibility for our recreational fisheries.

So, the Mid-Atlantic Council, as Julie indicated, we're struggling with black sea bass. We've also looked at some alternative ways of dealing with summer flounder recreational management. We had some work done up in the northeast relative to simulations and some possibilities there.

But, I think, you know, we're still
trying to figure it out, and it'd be great if we could have some additional ideas from the service, or our science partners, to give us some ideas of
how those things could work.
But one of the things that we haven't mentioned this morning as we think about this flexibility for the recreational fisheries, is how that flexibility could be fair to the other sector that we're involved with.

So, typically, when we get into
conversations with commercial fishery folks about this issue, there is this question of fairness. And they typically bring up the fact that they are managed under hard quotas, and yet the recreational fishery is considering this flexibility that might allow them to over-harvest or exceed their ACLs.

So, those are the things that we deal with in terms of where we're at in the Mid-Atlantic Council, where do you want the commission, and we're still right in the middle of it.

MS. MCCAWLEY: Thanks for that, Chris.
Other comments, questions, discussions; Carrie? MS. SIMMONS: Yes, thank you Madam

Chair. I just have a question about this portion of the Act. I think it said there was a report that was supposed to come out 180 days after the date of enactment. Was there such a report, and is that available, and would that have any helpful information in it?

MS. MCCAWLEY: Good question. Response?
Russ.
MR. DUNN: In consultation with my colleagues at the table, I have learned that we're working on it (laughter). It has -- the 102 Section; Section 102 in the report -- there are certainly substantially advanced drafts that have been developed and beyond that I am not sure of the status.

MS. MCCAWLEY: So, what I heard was, coming soon. Yes, Phil.

MR. ANDERSON: I don't have a lot to offer. I agree with Chris' kind of summation of where we are. We continue to try to look for ways to be flexible where it makes sense, continue to look at the fairness question.

I struggle with what is the advantage of moving from weight to numbers of fish, in our world at least. We can take our black rockfish fishery, for example, which is kind of our base species for our recreational groundfish fishery.

We have average weights, we could turn poundage into numbers, but at the end of the day, we're going to manage that fishery to not exceed that number of fish, which then would translate into a weight, if you backed it back out through the average weight.

So, I'm struggling with trying to
understand how that helps. I think in the halibut fishery, where the average weight does change from week to week lots of times, numbers of fish would provide some greater stability in that example, but I can't think of other examples where that takes place.

And I think by and large, that our recreational fishery wants to be held to high standards, wants to be looked at as a sector that is managed for sound conservation outcomes.

So, I'm not excited on going into a regime where we have a sector, regardless of what it is, that is allowed to exceed our ACLs that are carefully calculated, to achieve a conservation outcome. So, those are my thoughts.

MS. MCCAWLEY: Thanks Phil. Roy, and then Gregg.

MR. CRABTREE: We hear a lot, Chris, about the same kind of issues because almost all of our fisheries are mixed fisheries; they have recreational and commercial components on it.

But the reality of it is, you can't manage them -- commercial and recreational fisheries -- the same because the data delivery is so different. And the difficulties with tracking recreational quotas are -- I mean, it's just very difficult to do it.

So, I think you're stuck with realizing that you have to deal with them differently. We've looked at the issue of weights and numbers umpteen times, and to me it makes no substantive difference how you do it. You still have to take
into account the size of the fish that are being caught, because that's inherent in setting the quota to begin with and effects the selectivities. But I think the other trap that the whole ACL paradigm has pushed us in with recreational fisheries is we get in the sense where we exceeded the ACL and there's a tendency to say, oh, your over-fishing; your over-fishing your quota.

The reality $I$ think is that, generally speaking, recreational fisheries are going to bust their quota when there's lots of fish out there. And so, in my experience, the fisheries that we have had constant quota over-runs and difficulties with, like red snapper, are in fact the fisheries that are doing better than virtually anything else. That's why they're catching so many fish. We have other fisheries like red grouper in the Gulf where the recreational fishery hasn't even come close to catching their ACL recently, and that's because the stock is in terrible shape. So, we tend to get in this trap to where
we're expending all of our time dealing with something like red snapper because we're going over the quota, but the stocks rebuilding at a remarkable rate, and that's why.

And we tend not to look at other
fisheries where we're under the ACL. Why?
Because there aren't any fish out there because the stock's in terrible shape. And so, it's kind of this backwardness of what happens.

And so, I think one of the frustrations with recreational fisheries is often when we're implementing accountability measures and closures and other types of things, it coincides with them seeing just amazing numbers of fish out on the water.

And that gets into what Chris brought up with some of the time lags and the science, which I think we're working hard -- and Clay Porch has made a lot of efforts to improve that --but it'll never be real time. And there's always going to be some lag between your setting the quota and setting things, and what's actually happening on

1 the water.

So, I think there's just an inherent lot of things wrong with managing fisheries with annual catch limits. They're good at ending over-fishing and rebuilding stocks, but they can be a pretty heavy-handed way to do it in some cases and they result in a lot of these perceptions and problems.

And I think if you accept that your main priority -- which I guess is what Congress wants -- is to take away flexibility and end over-fishing, then you're left with some of these consequences that come from that.

MS. MCCAWLEY: Gregg.
MR. WAUGH: Thank you, Madam Chair. I think for the South Atlantic, one of the reasons we have to start looking at multi-year, is because we're left to the whim of a chance encounter with MRIP. So, for many of our ACLs, that whole annual ACL can be blown with one MRIP intercept. So, it really puts us at a disadvantage.

Now, we have accountability measures
that close the fishery so we can change that to where it doesn't close, but it seems to me, until there's some additional way of measuring the recreational catch -- which there is an app out there, MyFishCount, we've worked extensively on that; it'll take a while to get the anglers reporting on it -- but, until there's some augmented way of tracking the EEZ catch in the South Atlantic, the recreational sector is always going to be at the mercy of one-chance MRIP intercept.

And so, looking at this multi-year setting and evaluation is a way to look, okay, if you had an intercept that went over one year, what happens the next year? And when you average them, are you below your target?

And certainly, it has to be done in a way that does not result in over-fishing, and doesn't exceed their allocation. But we've got to break this one intercept MRIP cycle.

MS. MCCAWLEY: Eric, then Tom.
MR. REID: Thank you, Madam Chair. So,

I just have a question about MRIP. That's the tool we have now. It's not the greatest tool in the world, but it costs us X amount of dollars a year to run. I don't know what the number is; 15 million dollars or something like that.

What would it cost to get MRIP to be the tool we want? 30 million dollars? 50 million dollars? And is that an investment we're willing to make over time in order to take a tool that we've been playing with forever to do the job we want it to do. So, I guess that's is. If anybody wants to answer that question, it'd be great.

MS. MCCAWLEY: While you guys are pondering that, I'm going to go to Tom (laughter). MR. NIES: Thank you, Madam Chair. You know, a couple of people -- Chris Moore, Roy -mentioned the issue with ACLs and the struggle with whether ACLs are appropriate. And the underlying assumption is that ACLs are required for every stock that's in need of conservation and management.

And I find that interesting. There was
a relatively recent court decision in Oceana versus Pritzker which, surprisingly, was not a lawsuit for the New England Council (laughter), it was for one of the other Councils, as odd as that may seem (laughter).

And there's an interesting quote in there from the judge where -- without getting into the specific facts of the case -- there's an interesting quote in there, in the opinion, where the judge says, "Nor does the text of," and he's quoting the Magnuson Act, "state that ACLs must be adopted for all species in need of conservation and management, rather the new provision requires only the establishment of ACLs and ACMs such that over-fishing does not occur."

Now, in this specific court decision with river herring shad, the judge goes on and he points out -- he's really looking at non-target stocks in this decision, not target stocks, and he goes on to say, "A bycatch of nontarget stocks is considered in drafting ACLs for target stocks, then such consideration may suffice if the FMP
does not result in the nontarget stocks becoming subject to over-fishing."

You know, I don't want to take this opinion and stretch it out too broadly, but I wonder if highlighting this language gives an avenue for looking at least some cases where we're now wrestling with ACLs when maybe we don't have to.

I don't know if Adam or Sam has explored these ideas at all or would be willing to consider it.

MS. MCCAWLEY: Thanks Tom. Once again, would anyone in this corner of the table like to answer any of these questions (laughter)?

MR. ISSENBERG: Well, I don't know that we've looked at that language to the specific point, and it's been a while since I've read that opinion so I'm not sure I'm really prepared to address in this context. But, you know, we can go back and take a look at it and, I think, talk about it in the context of the specific record.

As you say, this case is very based on
(inaudible) which is very based on the record on that case, which deals with nontarget stocks. So, I think the extent to which you could extend that would really depend on what you're trying to do in any given case.

MS. MCCAWLEY: Thanks Adam, more?
MR. CRABTREE: Well, I can just offer you the most extreme situation that I've had to deal with on that, and this is in the Caribbean. We have never had recreational catch estimates for the U.S. Virgin Islands. And so, I've argued -- not successfully -- but we should not have to have a recreational catch limit because there is no recreational catch. And, if surely Congress meant to have a catch limit, there had to be some measure of the catch. Since the hurricanes, Irma and Maria a couple of years ago, we haven't had estimates of recreational catch in Puerto Rico either. So, there you have a whole Council and a whole region where we just don't have recreational catch estimates.

And so, we've struggled with, what does that mean with respect to AMs and things?

And in some cases, what we've done is had just a total ACL, but it's based on the commercial landings. When they reach it, we close everybody down -- recreational and commercial.

Well, that's not a very satisfactory way to go either. But, that's kind of to the extreme of what we've had to deal with, with annual catch limits.

MS. MCCAWLEY: Other folks want to comment? One comment I have, I feel like recreational fisheries are definitely important in the Southeastern U.S. And I think that the Gulf has explored some ways, especially for recreational red snapper, of doing things a little bit differently.

It did start with a robust state data collection program. It was certified by MRIP. But I would really like to have maybe some folks from the Gulf Council and the South Atlantic Council get together.

Maybe we have a working group and we try to throw out some innovative ideas, talk about data collection; because $I$ feel like the South Atlantic, maybe we need a different recreational data collection system. We can talk about that. We can learn from you guys.

But maybe we can talk about multi-year ACLs. We can talk about AMs so that we're not each trying to reinvent the wheel here. So, I look over to you guys in hopes that maybe sometime in 2020 we can get together and talk about this a little bit more. Carrie?

MS. SIMMONS: Yes, thank you, Madam Chair. We would definitely be in agreement with that. Anyone else who would like to join us, we can work together on that.

We have looked at some of these things, you know, with moving averages, and I think we removed them from the books when we got the ACL requirements. And we need to look back and see why we did that.

It's escaping me right now, but I think
-- because when we get really high landings it was going over the ACL even with the moving average -but that's just speaking off the top of my head. I could be incorrect there. But we would certainly like to look at all of these together in a broader perspective. But, yes, recreational anglers and fishermen in the Southeast are very important. We've moved forward with 50 -- Amendment 50 -hopefully, that's going to be implemented here soon. That took us many years; many different iterations.

And the next agenda item that we're getting into, I think one of the biggest things we're trying to get our heads around right now are the changes to the MRIP FES historical time series, and what that means for us. And the fact that the Gulf states have now implemented supplemental surveys, especially in the Eastern Gulf, to supplement MRIP, and then LA CREELL has been also certified.

So, I think, as we're moving forward,
we're trying to get these better data systems in place and get these into our stock assessments. That's one of our major goals right now, to work with $S \& T$ to do that, to work with the Gulf states to do that, and to see, as we get into the next agenda item, how that's going to play out.

But right now, we're really just struggling, trying to get our brains around how that's really going to all play out as it goes to the stock assessment process. And I think we're going to talk a little bit about that with the next agenda item. But, certainly, we'd like to work with you.

MS. MCCAWLEY: Yeah, that sounds great and I agree. And I think that our SSC's have been talking about that new MRIP data. But maybe at the Council level, maybe some of the Council members get together and talk about maybe what we could do, what are some out of the box ideas, and what are some things that maybe we should try, and maybe we try it together. But, just a thought. Roy.

MR. CRABTREE: Yeah, and I think that's a good idea. Just remember, with respect to red snapper -- because we tend to get red snapper focused, the statutory requirement in the Gulf are not the same as the South Atlantic. And the Gulf has less flexibility in how to do things in the Gulf because they're managed under a different section in terms of quotas and the requirements. MS. MCCAWLEY: Yes, Russ.

MR. DUNN: Yes. So, I think from a biological perspective we saw real success, or we have seen real success with annual catch limits. But where we are is struggling to manage the success which as been achieved and returning a number of stocks to healthy conditions.

And what I saw and heard here around the table is that stability, predictability, and opportunity are important. And what is apparent to me is that the flexibility is needed and the key.

And we're seeing the Councils and the commission take multiple approaches demonstrating
that the flexibility is there, under parts of the Act. We're seeing approaches of what we saw today; interest in annual monitoring and catch limits.

We suggested for two years. We saw suggestions for three years. It seems that tempering reactions to limited data inputs is going to be one of the steps that's needed. There is no -- to use an over-used phrase -- there's no magic bullet.

What we're going to see is increased flexibility trying to achieve that stability and opportunity through many small actions. It's accounting for data better, it's improving release mortality, it's tempering reactions to the data inputs, it's conditional AMs; things like that.

So, I think what we're going to see, and
have to continue to apply, is a multi-faceted approach from fishery to fishery because every fishery's needs are different; where you have some meat fisheries, you have catch-release fisheries.

I think we also saw that decreasing lag
time between data collection and application is going to be critical. And, as Chris indicated, there's some interest in trying to pilot some of these innovations, and that may be something that I would ask the Councils to think about.

Are there fisheries where we could take some of these ideas that are sort of low political risk fisheries and test some of these ideas out? Where if they work, great, we have some innovation; and if it doesn't, it's not a real problem.

So, I guess with that, I'll turn it back over to Chris, or Madam Chair. MS. MCCAWLEY: Thanks, I appreciate those concluding remarks. Yes, Chris, did you have your hand up?

MR. MOORE: Just one last question, and one last comment. So, we have the section -- I don't know what you guys would title it -- the Section 102 report that is going to come out at some point.

Do you think it would be available before our next CCC meeting? And, if so, I'd be curious as to what -- my other question, I know this is pushing it a little bit -- but what's going to be in that report (laughter)?

MR. OLIVER: The answer to the first question is, yeah, it should be. It's hopefully in final clearance of the department.

MR. RAUCH: And, if I could?
MS. MCCAWLEY: Mm-hmm.
MR. RAUCH: The answer to the second question is, what is congressional required to be in the report is what's going to be in the report. We're still working on it though.

MR. MOORE: So, if I could, Madam Chair? Thank you. So, it would be great if we had this as an agenda item for our May CCC meeting.

Also, if $I$ understood Adam correctly, you also have a response to Tom's comments regarding the legal case, may we have that as a possible addition to the agenda; a review of that case?

MR. ISSENBERG: Well, yeah, I mean we
can talk about the case generally. But, as I said, I mean, I think it's probably going to depend on the individual facts of any given fishery, stock that you're talking about. So, I'm not sure, you know, we're going to have general, legal guidance that's going to be a one size fits all approach to that.

MS. MCCAWLEY: All right, so. We have a request to put this on the agenda for the May meeting. Any other final concluding thoughts on this topic? All right, thank you Russ for wrapping that up. And thank you once again to the four presenters from this morning.

We're going to move into our next topic on the agenda. The next topic on the agenda is, When and How to Address Allocations with Assessments Based on the New MRIP Data. We have reports from four Councils. Three of those, I believe, are on the website. I believe we're going to start with the Minute Win It Council. Chris?

MR. MOORE: Thank you, Madam Chair. I
don't have a presentation. There's a document in the briefing material. I'll hit the highlights of that particular document. It's title, The Mid-Atlantic Fishery Management Council Allocation Review in Response to Revised MRIP Data. We have a number of fisheries, recreational fisheries, that we manage with our partners, the Mid-Atlantic Council, including summer flounder, scup, black sea bass, and bluefish.

Stock assessments incorporating the revised MRIP data for these species were recently peer reviewed. So, this point was made earlier, we're already right in the middle of operational assessments that use the new MRIP data.

Those new operational assessments, that information is available to us and we used to set our annual specifications for those species.

We also added a summer flounder
assessment. It was peer reviewed and accepted by the Northeast Regional Stock Assessment Review Committee in November of 2018 and accepted for
management use by our Council's SSC in February of this year.

We have summer flounder specifications for 2019, which were revised to reflect these new assessment results. So, we are actually using these new MRIP data to codify previous decisions involving specifications.

As I indicated, we have operational stock assessments for black sea base that were done, and we will be looking at those at our next meeting in Annapolis.

The Council and the commission are in process of developing joint $F M P$ amendments, will include reevaluation of the commercial recreational allocations for these species, in large part, to consider the allocation impacts of the revised MRIP data.

We have a bluefish allocation amendment that was initiated in December of 2017. We've started working on that again with the new revised MRIP data.

We also initiated an $F M P$ amendment in October of this year to consider the commercial, recreational allocations for summer flounder, scup, and black sea base. Scoping for that amendment will take place in early 2020.

Both amendments will include an evaluation of a broad range of alternatives for sector allocation, including, but not limited to, updating the existing allocation this year, with revised MRIP data.

It's expected that those actions will take at least two years to complete. Regardless of whether allocations are ultimately revised for these actions in the long-term, the Councils recently approved allocation review policy states that all relevant FMP allocations will be reviewed at least every 10 years. However, the Council may choose to conduct reviews more frequently. Council fisheries with smaller recreational components including Atlantic mackerel, chub mackerel, and spiny dogfish, have annual varying amounts deducted from the total
allowable landings to account for expected
recreational harvest.
An assessment update for Atlantic mackerel, incorporating revised MRIP data, is expected in spring of 2020 . A research fact assessment for spiny dogfish is planned for 2022. And, with that, I think I've said enough. Thank you.

MS. MCCAWLEY: Thanks, Chris. Questions for Chris? Yes, Carrie?

MS. SIMMONS: Thank you, Madam Chair. So, I guess, if you just take one species and explain -- so, the new historical time series with the MRIP FES, are you asking the Science Center to rerun those projections based on the historical time series, and just looking at no action in what the new allocation would be with the MRIP FES, based on the historical time series, and then projecting what the OFLs and ABCs would be -- are you looking at various different time series and looking at modifying the allocations moving forward?

MR. MOORE: So, the short answer is, we
haven't gotten to the part yet. We are identifying exactly what we're going to look at for these allocations.

So, we're just starting the scoping. We'll initiate scoping in December at the joint Council and commission meeting. So, the board and the Council meet in Annapolis to start talking about these things.

But it's really complicated with these new MRIP estimates. So, we went through operational assessments -- and, I'll pick one. So, I'll go on a black sea bass riff for a little bit (laughter).

So, we manage black sea bass with the Atlantic States Main Fisheries Commission. Black sea bass has done well. The biomass estimates that we have now indicate there are about two times above MSY.

We had an MRIP operational assessment basically incorporated the new MRIP estimates into that operational assessment which produced, resulted in, biomass estimates that were much
larger than what we previously had.
Using the old allocation -- which is, I think 52-48, or 51-49 -- commercial allocation went up significantly, and the commercial quota is not going to be constraining as a result of this new operational assessment. So, you basically have this huge bump.

Fortunately, it looks like based on the new recreational estimates that we have for black sea bass, when you compare that to the amount that they would get through this allocation, or old allocation, they would have to reduce their catch by about $30 \%$ for 2020 . So, think about that. You know, you've gone through an operational assessment. It indicates that things are great from a recreational perspective. But we're still looking at a reduction for this fishery that, as we indicated earlier, there's fish all over the place.

So, it's going to be a difficult
conversation. We can't change the allocation without an amendment. So, we're in a box, and
we'll be talking about that in December. So, stay tuned. It's an interesting position that we find ourselves in.

It also applies to scup and other species that we manage, and to some extent, summer flounder. So, the short answer is, we haven't gotten to the part yet where we are talking about revising the allocation years.

The interesting thing is, though, even with the new data, the changes in that allocation aren't significant. They're not. I think it goes from 51 to, like, 49 or 48 ; so, it's very insignificant.

MS. MCCAWLEY: Carrie?
MS. SIMMONS: Thank you. Just a quick follow up. Is that a historical time series, and how many years of data is that?

MR. MOORE: Julia could correct me, and I actually did the calculation, so I should know this (laughter). But I think it was 10 years, wasn't it? Yeah, I think it's '80; '80 to '89. So, yeah, they're old. It was a while ago.

MS. MCCAWLEY: Mike.
MR. LUISI: Thank you, Madam Chair. Just to add to that. So, something else that we're seeing that makes it difficult is, if we use the historical time series of the '80s, and we use the recalibrated numbers, like Chris said, there's very little difference.

But we've seen a trend form the 80 s to the current where the new MRIP data are increasing over time to make that difference much greater than it was back in the '80s.

So, that's where I think we would need to decide as a Council, how much weight do we want to give to the newest data in an evaluation of an allocation change. Or, do we want to just use the historical time series with updated information. So, those are the alternatives that, like Chris said, we haven't gotten to yet. But I expect that something -- using new and old information -- will be hybridized in some way as an alternative for what we're considering. Thanks.

MS. MCCAWLEY: Thanks. Any more
discussion or questions?
All right, we're going to move on to the next report. Next up is South Atlantic, and I believe, John Carmichael is going to give us that report.

MR. CARMICHAEL: You have our short and sweet summary document. What the South Atlantic is doing is, for our unassessed stocks, the SSC a few weeks back reviewed the revised MRIP numbers and they applied their ABC control rules and came up with ABC recommendations for the Council to look at that incorporate the revised information. So, at that time, the Council will decide how to approach the allocations. And if they want to use the same approach that's been used in the past, ours is also based on, for those stocks primarily, a historic period using roughly '98 to '09, I think, is the years that we were using. So, it's the more recent period than what Chris mentioned for the Mid-Atlantic in that example.

It's probably also one reason why our differences in allocations are much higher because if you looked at those comparisons, you see that it's kind of an increasing difference between the new and old MRIP as you move out toward the current time.

And then on our assessed stocks, the Council intends to look at those as the assessments come in, so we can get assessments with the new MRIP data to look at the allocation and consider how to address it.

There are a bunch of stocks that will be coming into the Council this year. They'll get four that'll run through our SSC in April and May and come to the Council in June; a couple more later in the year, and then into 2021.

And so, if the Council chooses to just use the existing approach in the reference years that we've used to divide the commercial and recreational, then they can just do that through a pretty efficient framework procedure. And in a lot of ways it's very similar to what we did with
the last MRIP calibration.
If they decide to look into some other allocation approaches, then that'll take a plan amendment and more time.

MS. MCCAWLEY: Thanks, John. Questions for John? Yes, Chris?

MR. MOORE: Thank you, Madam Chair. So, John, there was some discussion earlier in the year about your Council's reaction to the new MRIP data.

And, I hesitate to bring this up because it might cause some concern, but I'm just curious how that played out because initially there was some idea, at least out there, that your SSC had rejected assessments using any of the new MRIP data, but somehow that got smoothed out over time. So, I'm curious about what happened there.

MR. CARMICHAEL: Yeah, Chris. That's a good question. I'll be glad to clarify.

So, what happened is the SSC had representatives of the $S S C$ on several assessments that were looking at the new MRIP data, and they
basically didn't reject them, but they called a stop to the assessments that were underway.

They were concerned about the new estimates the calibration approach, really, a lot of the stuff that had been worked on through the MRIP process for a couple of years. But it seemed that once that information came to light and they saw how it affected actual catch estimates, there began to be a lot more concern with them.

And it was a bit of a timing thing. We had an SSC meeting where they looked at comparisons of new and old MRIP estimates; that got them thinking about it. Went into some assessments, saw some affects from those MRIP bureaus (phonetic). There's been a lot of discussion where you could call outliers; whether they are or not is a lot of scientific debate. But those occasional points you see in the MRIP estimates where one year just stands out from the others. And so, that folded into it.

So, the SSC asked for an evaluation of the new approach to MRIP, and the transition and
calibration efforts as well. And that led to them convening a workshop in -- I'm trying to remember when it was in the year -- a few months ago in the summer where they had the MRIP folks come and give kind of a detailed case study for a number of stocks, as well as review the entire process.

It took, oh, the best part of three days to go through it, and at the end of that, the SSC accepted that this was definitely a new approach. There were still some concerns about how the estimates would play out in individual assessments, but they wanted that addressed through the individual assessments.

The net result was a big delay in the assessment process over a good part of the year. So, the things that are stacked up for us in the spring would have been spread out more over this past year. And then not getting to those unassessed stocks, ABCs, until October of this year instead of earlier.

But they seem to have accepted the results now and feel they have a much better
understanding of the process in the approach, and really, the need for the changes in MRIP.

MS. MCCAWLEY: All right. Any more questions for John? All right. Thanks, John. We're going to move onto the Gulf Council.

MS. SIMMONS: All right, thank you,
Madam Chair. We have just a one-pager as well.
So, we have decided to wait until this information, the new MRIP FES landings data can be put into stock assessments.

So, we've done this for one stock now, that's red grouper. And as Dr. Crabtree mentioned, the stock is not in good shape. There were concerns about it.

In 2017 we asked for an emergency rule, interim rule, to reduce the catches based on concerns about the stock. And this is an operational assessment. And there were a lot of changes that were put into this operational assessment, including the MRIP FES landings.

So, I'll just note that this stock is not distributed Gulf-wide. It's in the eastern

Gulf; primarily off of Florida. Sometimes you see a few off Alabama, occasionally, but they are pretty limited in the range.

So, what we did is the first stock assessment with the FES landings that were calibrated back to 1986, red grouper is primarily a commercial fishery. $76 \%$ of the ACL is allocated to the commercial sector, with $24 \%$ to the recreational sector. And that was based on a historical time series from 1986 through 2005, which was the basis for allocation.

The red grouper commercial sector is managed under an IFQ program, an individual fishing quota program currently. And so the result of using this MRIP FES data with this current assessment resulted in revised sector allocations, and those new sector allocations -using that same historical time series -- would be $59.48 \%$ commercial, and $40.52 \%$ recreational. So, the Council passed a motion. They requested that the SSC review the red grouper projections based on the allocations resulting
from the MRIP FES landings data, using that same historical time series with the new calibrated data, rerun the projections, and have them review the revised OFLs and ABCs.

We are asking for that currently. We're working with the Science Center for that and then that's going to be discussed and deliberated on in January.

So, if the Council decides to just move forward with the existing allocation formula and simply update the current allocations with this new data, it could probably be done in a framework action, and then modify the ACLs.

If we want to look at different
historical time series and other modifications to allocation and other issues, other management changes, that will likely trigger a plan amendment.

So, that being said, I just wanted to mention this is how we're currently going to handle the MRIP FES landings. On top of that, this is the path we have right now: We have
supplemental surveys that have been certified by S\&T, need to be calibrated and certified back in time so that they could be incorporated into the stock assessment.

So, we're trying to work -- like I
mentioned earlier -- on logistics and facilitating that that happens with $S \& T$, with the states, in the next couple of years. And so, when that updated time series goes into the assessments, probably going to be looking at other modifications moving forward. We have a moving recreational index right now. I'll stop there. MS. MCCAWLEY: Thank you, Carrie. Questions for Carrie? Chris?

MR. MOORE: So, Carrie, I didn't get a change to read your summary. You said something about changing your allocations without a plan amendment using a framework? Or? MS. SIMMONS: Yes, I think we can. That's my understanding. I mean, we haven't gotten into the nitty- gritty yet, but if we just use the revised historical same time series with
the new MRIP FES landings, we run the projections, get new OFL and ABC recommendations, I believe we can do that through a framework action and new catch limits.

Now, we haven't started working on it yet and met. So, that could change. But I think that's possible.

MS. MCCAWLEY: Gregg?
MR. WAUGH: Thanks, Madam Chair. Chris, we've done that already. The last time they revised the MRIP numbers, we simply took our existing formula, updated the data going into it, and updated those allocations through a framework. But the percentage change was not significant, and I think there'll be some question when we look at this for additional species, if the change is significant, we may get guidance from NOAA GC; rather than do a framework, do an amendment, so that there's more opportunity for public input. But we've already done this once. You can do it via framework.

MS. MCCAWLEY: Roy?

MR. CRABTREE: Yeah, this is an ongoing conversation we're having with NOAA GC because it applies to both Councils. What do we have to do? It depends on how you think about it.

If the allocation is based on some period of time and what the landings were then, and you have new estimates of the landings, then you're not really changing the allocation or the basis for it; you're just calculating it based on the best available science.

I would argue, if you don't do that, then you are reallocating the fishery because now your allocation doesn't reflect the intent of what you're doing. So, I'd say on this one, exactly how we have to do it, we're still in the process of figuring out.

MS. MCCAWLEY: Chris?
MR. MOORE: I bring it up because after we thought about it and thought about the consequence of changing an allocation just using a simple formula, what a big deal this is, we concluded that we should go through an amendment
process to get as much public input as we possibly can. And, you know, we considered the potential of a framework, but rejected it.

MR. CRABTREE: Well, if I could, I mean, it comes down to, is it really a big deal if you have new estimates that are higher and all else is equal, then you change the allocation based on the new estimates, and it should essentially leave you in the same place you were in.

Now, things are rarely that simple, and the calibration is not linear over time. So that really complicates it. But it doesn't necessarily have to be a big deal because even if you change the allocation, you're also changing the ACLs and things are scaling. And so, I think you have to look at the circumstances of it.

But the trouble we're having is it looks like it's a big deal, although in fact, it may not be much change at all in terms of the practical implications of it.

MS. MCCAWLEY: Gregg?
MR. WAUGH: Thank you, Madam Chair. One
other piece of information that should come available late this year or early next year, is a GAO report.

They've been working with the Gulf and South Atlantic Councils looking at mixed-use fisheries and how we'd handle allocations. And it's taken quite an amount of our time, and they're asking good questions. They came to a Council meeting, met with Council members and staff, and the public.

So, we are awaiting that report to factor in to how we're dealing with allocations in the future as well. So, that'll be something that would probably be useful and informative to other Councils.

MS. MCCAWLEY: All right, any more discussion on that report? All right, we don't have an actual document, but I believe that New England, that Tom is going to speak to this as well.

MR. NIES: All right, I'll be very
brief. We only have two allocations for two
stocks in our groundfish plan at present.
We wrote into the plan when they were adopted relatively late. I guess they were adopted in 2010; we wrote in the plan that we would consider new catch information using the same formula and time periods when received because we knew that MRIP estimates were coming, and that changes can be made, at least in theory, in a framework document.

Council is going to consider making those changes at our December Council meeting. It's unclear right now, of course, which way they'll vote.

The changes for one stock are relatively minor. Taking it from about $35 \%$ recreational to, I think, 37.5\% recreational. The changes for another stock are a little bit larger than that.

MS. MCCAWLEY: All right, thanks Tom. Any questions for Tom? All right, anything else on this topic before we move onto the next topic?

All right, we are going to move onto the next topic which is the National Marine Fishery

Service Science Enterprise Updates. And, Chris, I don't know if you want to give a little intro before Cisco starts?

MR. MOORE: No, Cisco can take it away. MS. MCCAWLEY: All righty. I'm going to turn it over to you, Cisco.

MR. WERNER: Thanks very much, Madam Chair, and thanks for the opportunity to give you guys an update on where we are. And I'm not sure if I'm controlling it -- I am controlling it from here -- great. Thank you.

I'm going to cover a number of points. Some of them are updates, some of them are things that we're taking on right now, and some are a little bit looking into the future.

So, I'll cover some initiatives on
unmanned systems, on the general topic of molecular methods, and OMICS -- as it says up there. A little bit on artificial intelligence and where we're going on that, as well as some things that we are certainly keeping an eye on in terms of changes in species distributions.

All of which in some ways lead to considerations of next data acquisition plans, and next generation data acquisition plans, which means, how will we be conducting surveys in the future.

A little bit on modeling issues as we try to project expected changes, as well as a little update on ER for recreational fisheries.

An update on combined effort that we did both on surveys using unmanned systems, our conventional white ships, as well as molecular approaches.

It's a two year effort now along the west coast trying to do assessments both Pacific hake as well as the coastal pelagic species that are there; you know, sardine, anchovy, herring and mackerel. And this is a pretty ambitious, if you will, effort covering all the way from northern tip of Vancouver island, down basically to the U.S. - Mexico border, using all of these different approaches.

As I said, ship-based unmanned systems,
as well as new molecular approaches, to try to see if we can develop indices of these species and use them in assessments.

So, there's really two sides to this picture. The one on the left is the way we normally do things. We have a white ship with acoustic capabilities and trawl capabilities. We can see the acoustic signal, and then we do the trawls, and that leads us to some estimate of population, conditions, etc.

And on the right side of the picture is how we're beginning to move towards, can we use a combination of unmanned systems, and collection of water, and then analyzing what's in the water and trying to see what can we get out of what we refer to, environmental DNA.

So, you see the little picture of the fish up here, and the fish sheds DNA, it sloughs it, it excretes it, etc. And so, we capture -you can measure that -- and that gives you some sense of what's there and hopefully, with a little bit of additional work, you can also perhaps get
an index of abundance.
And so, that's what we're trying to do here. And the point of this picture is just to say, just like over time we develop indices of abundance using acoustic methods, or trawl methods, what we're trying to do is develop in index of abundance using these molecular approaches. But there's quite a way to go still on this.

I mean, there are a lot of issues in terms of what these molecular signals tell you. The relative importance of what you measure locally, versus what may have been transported by currents from somewhere else; how quickly they degrade, etc. And so, these are things that we need to still address and it'll be a combination of laboratory work, as well as field work, as well as collaboration across the country and internationally to try to see how we actually can make sense of what appears to be a very promising approach; but still, a lot of questions to answer.

And so, this slide here is lessons learned. We actually went out there and we jumped into the deep end of the pool, so to speak, to try to see, well, what can we do? And the answer is it's a lot more difficult and challenging than we thought it was.

I think it's fair to say initially we joked around that we'll just get a Dixie cup and get a sample of water and do a stock assessment. Well, it's not going to be as simple as a Dixie cup. It'll be a little bit more than that.

And it also talks about just how many samples you need, the difficulties of analyzing at sea. The issues of contamination, etc., that you have to worry about.

And actually, we collected about a thousand samples during this survey that just completed. It's going to take a while. I'm hoping March/April we might have a full analysis and begin to look at what are we getting out of these measurements.

And so, we learned a lot and hopefully,
this is just a first step in a continued effort like this so that we can, in fact, take advantage of these approaches.

Continuing on the topic of genomics, it's not just trying to develop abundance indices. There's a lot more to genomics than just trying to see if we can see how many things are there. There's also a question of using genomics for population structure. And example, I think Mike brought up how -- was it Bocaccio that you were looking at in terms of two different populations. This is something that's been around for a while but we're getting better at it.

There's using molecular approaches to tell differences in diet between what species are eating, particular in terms of changes in ecosystems and food web structure. And so that's important in terms of understanding what the energetics are under changing and evolving conditions, you know, oceanic conditions.

And then there's just a really
challenging issue having to do with
bioinformatics, and that's just, how do you analyze all of this. And this is recognized as an area where we, as an agency, need to invest.

We're working with other agencies; the U.S. Geological Survey, consulting with other folks in terms of how do we bring this together again, not just nationally, but internationally. So, it's something that is a first step in, again, what is probably going to be a 5 to 10 year horizon before we fully take advantage of these promises.

And I'm putting this up here because
Admiral Gallaudet has basically focused on three science and technology focus areas. One of them is OMICs that I just talked about. Another one is unmanned systems, which these two are examples of what we were doing along the west coast. And the third one is artificial intelligence.

And these three science initiatives, or science and technology initiatives, all of which will be underpinned by the cloud; you know, this high performance, computing, and the broader cloud
capabilities, are things that over the next couple of weeks we will be announcing these and pushing these out in terms of strategy documents and eventually implementation plans.

And this isn't just fisheries. This is across the agency that will require us working across line offices because it is a problem that we will need to work together in order to make advances along these three.

But these are, as I said, three focal areas that we'll be working with the Admiral and are already using it in fisheries.

As I said, they'll be these vision and strategy documents. They will have similarities between the three, between OMICS, unmanned systems, and artificial intelligence, and that is that we're going to have to rethink organizationally what are the best structures internally, in terms of how to bring these in. One of the research and innovation questions that we will identify as priority, either internally or in collaboration with other
agencies, and other partners, the importance of accelerating the transition of research to operations is one that, again, the example of, yes, we took all of these molecular samples off the west coast, but how do we translate that into operations? How do we use that data to actually be able to do assessments? That's a tall task still to be able to say that we're ready to do that.

I already talked about the expanding partnerships and also promoting proficiency in the workforce, which means training our folks as well as bringing in new capabilities to do this.

And I'll just touch very briefly on artificial intelligence because the one I hadn't in the previous example -- and there are already nice examples of artificial intelligence in place that $I$ think $I$ reported on in the past; in the Pacific islands, the use of artificial intelligence to detect cetaceans has really been a success story.

It's a collaboration with Google and

Google's artificial intelligence branch, if you will, where they collected hundreds of thousands of whale calls, and such, and were able to -using, again, these AI methods, these artificial intelligence methods -- to tell us what's out there in terms of the cetaceans population in the Pacific islands, or some cetacean populations in the Pacific islands.

I think I've also talked about this example of not looking at acoustical signals, but optically trying to capture differences between, say, salmon and pollock and how what's going into the nets and how to count them and so on. And how to tell them apart.

Again, this has been very successful, and the folks involved in this got a gold medal award -- I should highlight that -- from NOAA, in terms of the work that they did in implementing artificial intelligence for these optically based systems.

I'm working now to the fact that the way that we collect data, the way that we think about
data as a science enterprise, is something that we are going to have to deal with, we're going to have to embrace.

This is not unique to us. Just about any field in science or medicine, or anything like that, you know, the amount of data that's coming in and the ability to ingest it and analyze it, is something that we have to take on, and do systematically.

And it's this idea of the combination between hypothesis driven science and data driven science, when you just have these now sustained ways of collecting data, whether it's unmanned systems, moored systems, whether it's drifters, etc., we're just getting data all the time from everywhere. And in some ways, that's good because we know that things are changing a lot faster and we can't be everywhere, every place with our ships.

And so, we need to take advantage of these observing systems in terms of how to make use of all this data that's coming in.

And so, I put this picture up here because the little squares there are, you know, the way it used to be, you would plan a survey, it would be yellow, or you would plan an observation, a green one or something else in blue, and those are very focused approaches where you would say, well, you know, I have an idea, I'm going to carefully calibrate the instrument, I'm going to ground-truth the instrument and I have a hypothesis of what $I$ want to do.

Well, now it's a little bit different. Now, it's not just three things that I'm doing. There are things coming in from all over the place, so that's why you have all those yellow boxes and green boxes and so on.

And, the fact that there's so much data coming in from so many different sources means that you probably can't calibrate things the same way you used to do, or ground truth the ways you used to do because you're taking data from probably experiments that were designed for different things.

And so, it's not exactly what you were thinking about but there's no reason why you shouldn't be looking at it and see if you could use it.

An example here is this is a mooring off of the west coast; I'm going to say it's off of Oregon, and it's just meant as an example of the amount of data that comes in. Normally, you would say, well, I'll just go out there, put out a mooring, and then collect the data, and I'll look at it. A human can look at this and say, well, I can see that there's maybe a day/night cycle, I can see that things move up and down, and maybe different frequencies tell me different things. But if you think about it, you know, when you're actually getting this continuously, not just from one place, not just from a mooring, but from gliders, from whatever is out there, deep drifters and drogues, you have to rely on some way of this combination of the data driven part and some ability to extract information from the data using machine learning and AI methods, as well as
a human part that might tell you, you know, a machine might tell you, well, I can decompose what I see in terms of something that might be sole plankton, something that might be fish, and something that maybe the machine doesn't really know what it is.

And so, it really requires this combination both of hypothesis driven and data driven science in terms of how we make sense of this. And I spent a little bit of time on this thing because it's part of where we're going with this AI part of our science enterprise, if you will.

I mean, I think similar examples have been brought up in medicine, where an MRI or a Cat Scan, and you know, a machine will tell you something and maybe it's $30 \%$ right. A physician will look at it and it'll be $40 \%$ right and together maybe it'll be 80\% right.

So, it's really not really exclusively on machines, not relying -- you can't rely exclusively on humans given the amount of data,
but some combination of the two should allow us to go forward. So, that's the AI part.

I want to talk a little bit about the other things that we're seeing in the water, the shifts. And I put the example of the black sea bass out there because it's well known, and we know that over time species shift, populations shift, and this is just a very nice example. And they shift in response to changing environmental conditions, whether it be temperatures or something else.

One thing I'm getting here in terms of the importance of being aware of what's happening is the rate at which things are changing, and you know, the picture before, I mean, outlooks talk about changes and shifts that are happening to say on $30 / 40$ year time scales. This example here, from Bob Foye and others in the Alaska Center talks about not $30 / 40$ year time scales but shifts that are happening maybe on 10 year time scales. And sometimes even faster.

This example here -- here's the Bering Sea, the Chuckchi would be up here. This purple area is what's called the Cold Pool. This is a cold temperature which between 2010, 2017 it was still there; 2018 it wasn't there, which in turn, in terms of Pacific cod -- which is, again, identified by the little purple spots -- Pacific cod avoid the Cold Pool, they don't like the water minus 2 degrees centigrade.

But as the Cold Pool retreats, the Pacific cod went from its normal distribution when the Cold Pool is there, to something up here. And again, this is just a very, very quick shift that's happening. So, I think we have to be ready to be nimble about what we're seeing.

This is just one example. I think that there's probably other examples in terms of how quickly species can shift, and these are pretty significant distances, which in turn, will affect how we sample things. I'm going toward that too. Understanding how quickly things might change, should affect how we think about how we sample things.

And the other part is that responses are not just in temperature and shifts, in geographic shifts. But there's also shifts in the underlying food web.

And again, Mike talked about the changes between celery and cheeseburger in terms of what's out there, and this is a picture of exactly that.

This is what we saw after the warming in the north Pacific, is that we had a shift from species that were large, like this, and this isn't different size classes or ages of a particular organism. These are three different copepods, three different zooplankton, that under normal cold conditions, or cooler conditions, are larger and more lipid rich. So, they have more energy to bring into the food web.

It shifts to these smaller ones which are much smaller and have a much lower lipid content, which is that point about cheeseburgers versus celery, where there's less of that energy put into the system. And I'll come back to this because I think I've talked about in the past,
about how the Pacific cod change in the assessment reflects both a temperature signal, but also a change in the food web, which I'll talk about how we should begin to think about the two together. So, this brings me to next generation surveys and updates. I think the examples I gave before really speak to the fact that things are happening at different rates, in different places; plus, also we have different data acquisition capabilities. New messages that are coming in. And one thing that we have now, a conversation ongoing, is the generation of a new data acquisition plan. The last data acquisition plan was completed in 1998, so it's been over 20 years.

That data acquisition plan led to the white ships, which was a very successful effort in terms of us addressing the issue of over-fish and over-fishing. I think now we have different questions.

We need to look at be able to address how fish stocks are distributed differently, how
different conditions affect their vital rates, more explicitly, an ecosystem consideration of overlap of predator/prey. Again, forage fish and say they're prey, let is be cetaceans or other marine mammals.

We will have a change in fleet
composition in terms of whether it's our own white ships versus the partnerships that we can have with industry, and how we can use that. As well, as I mentioned, new technologies, and new analytic capabilities.

Which, I'll just jump real quickly to models and what we're doing here. And the point of this picture is that there's a lot of things that we have to look at. And the question is, what is the sweet spot of things that we need to look at?

So, this is a picture of time here going from weeks to centuries, and maybe kilometers, to basin scales on this side. In terms of the kinds of questions that we're asking, we're interested in things that happen inter-annually. Those are
places where we set annual catches and so on. You know, monitor closures, perhaps rebuilding plans, etc.

So, it's somewhere between things that happen on weekly timescales, and maybe things that happen on longer, interdecadal timescales. This is the part that we want to look at. Can we say what's going to happen I the next two to three years with confidence that allows us to, whether it's to forecast the temperature, or project a temperature, or project the food web?

And this is what's referred to as the S2S; it's the Seasonal to Subseasonal timescales, and as I said, it's the part where we -- how we design our surveys, how we do our stock assessments, how we establish harvest levels and so on; which is different from things that we need to know on a weekly timescale, or things that we need-to-know on century timescales.

And the blob that we're all familiar with is one of those examples. So, the question is, could we have forecast a blob? Could we have
said, hey, we're going to have something for three years out there that is going to cause us to think differently, because, it might just happen again? And the answer, well, it is happening again.

So, we know that we're seeing signals. It may be not exactly the same as it was between 2013 and '16, but we're seeing it again. And yet, can we forecast it?

So, that's really the question. Can we, or why can't we, or what do we need to do in order to forecast next events like this; whether they're in the Pacific, whether they're in the Atlantic, or they're in the Gulf of Mexico, or wherever?

And so, we started to look back in time, which is hindcast, and try to see, could we have done it? And the answer is, in some cases, yes; in some cases, no.

The black line here is the observed temperatures. All the different colors are pretty much the same ideas when you see hurricane forecast, you know, the ensemble of various modeling attempts. And you see sometimes, we

1 don't really catch it.

Maybe we did not catch the onset of this one, or the onset of this one. In other times, depending on when we start the model, we actually do see the return to normal, if you will, or something.

And the answer is that it depends on the kind of data that you have, the kind of physical process that's going on that goes into your model to initialize it; to kick it off. So, it's something that's mixed. That's what I'm going to say.

And it's something that we're working with the OAR, the Oceanic and Atmospheric Research, a sister line office, as well as with the National Weather Service, to try to see -because they're also interested in the Seasonal to Subseasonal timescale -- this two months to three year timescale, by virtue of what's referred to as the Weather Act. It's something that they're required to look at under that act.

So, it brings us together with other
line offices to answer questions that are common sweet spots, if you will; both for them and for us.

And so the question is, well, what would we have done had we known something like this with, again, the Pacific cod example that we've talked about before, that is a combination of heat and a combination of changing energy in the food web that probably led to this low recruitment of Pacific cod in 2017.

So, what do we do with that if we had that? And some of our colleagues in the Alaska Center are actually beginning to work on what we refer to as shadow assessments. You do your normal assessment, you provide; you say, this is what I think is going to happen.

And what they're doing -- this is Jim
Ianelli, Anne Hollowed, and a couple of others -is, I think in an appendix to the normal assessment they will include a, hey, what would have happened had we included environment? Or what would our prediction had been had be included
environment?
And the point here is that the zeros, or the circles, are the assessments without environment, or the normal way we do it; and the orange "Xs" are including environment.

So, in this case -- and I just picked one here -- they have pollock, Pacific cod, and arrowtooth flounder, the inclusion of environment in the case of pollock and Pacific cod would have produced a lower recruitment projection. But in the case of arrowtooth flounder, it would have caused a higher recruitment projection.

So, this is just beginning to happen as we begin to include environment in some of our approaches. Just like I talked with EDNA, this is just starting. We need to develop our own confidence in what we're doing, and making sure that these forecasts, and the inclusion of these approaches are robust enough.

But $I$ think it's at least important to have there so jointly between Councils, and regional offices, and science centers, we begin to
see, well, what happens as we enhance what we're doing and seeing if we can provide more complete information or add information to our work.

And now I'm going to jump to something completely different from the last three slides, which is $I$ just wanted to provide a brief update on work that we're doing with MAFAC, the Marine Fisheries Advisory Committee, and that's, how to include electronic reporting in recreational fisheries?

And, of course, you know, we do continue to see how it is that we can include electronic reporting with -- in this case -- you know, smartphones, in how we take into account the recreational fisheries.

And there was a proposed taskforce that, in fact, was approved at a meeting of the MAFAC maybe two weeks ago where the purpose of this taskforce is to provide us advice on generation delivery and use of electronic reporting to help us moving forward.

And the idea is that this taskforce
would assist us in providing usable, high quality, accurate data from these smartphones, if you will, on recreational fisheries, and how do we actually do it. It's a little bit tricky. There's a lot of things in terms of how to make sure that you have the right reporting rates, that there's no drop-off in the amount of data that you get, and the consistency.

And so, the proposed tasks that, again, were approved, included identifying and prioritizing data gaps, the goals and challenges to overcome; like I say, how do we actually make this a consistent reporting? And also, recommendations on what can we do in the coming years using this electronic reporting capability. And again, I'm pleased to say that the recommendations on working with MAFAC is that this taskforce now I think has been approved and we're going to be working on this thing for the next year or two. And so, I think I'll just end there. Just to remind you that the areas I covered -- anything from some of these new science
areas that are under development, but I think are necessary, given where we're going in our science enterprise. How do we rethink? How should we rethink surveys of the future? The kind of forecasting that we need to do. And the opportunity to work with line offices, with other line offices, because we're working on the same timescales.

And then, lastly, I just talked a little bit about electronic reporting. And with that, I'll stop, and thank you for the opportunity for the update.

MS. MCCAWLEY: Thank you, Cisco. Any questions for Cisco? Yes, John.

MR. QUINN: Thank you very much for the presentation. Picking up on your phrase "surveys of the future", I brought this up yesterday about the offshore wind coming on the east coast. It's a grave concern to a lot of people that the assessments -- we're going to have a problem doing the assessments. The survey vessels can't get in there.

So, maybe you could touch on that; whether some of this new technology could be used, or how you are going to address it? I know Dr. Hare is very concerned about it in the science center, we're told. Thank you.

MR. WERNER: Thanks for the question, and extremely, extremely important point. In the list of reasons why we need to think differently, I should have said different multiple use sectors of the coastal ocean where we need to sample. And, I think you're right.

Wind energy, of course, is front and center in terms of -- certainly, in the northeast, at this point. And, we're working closely with John on understanding what those impacts of the wind farms will be, and how to mitigate, or how to adjust to it, I should say.

So, in answer to your question of, can some of these approaches help us with that? Maybe, yes.

It could be that we could do different ways of sampling, whether it's with some of the
unmanned systems, in terms of being able to get into places that bringing a ship may not be as straightforward; maybe some of the molecular approaches.

So, the answer is, all of these are factors that we should look at as we think differently, not just because conditions are naturally changing, but also because we're forced to deal with other sectors using our oceans. So, yes. Thank you.

MS. MCCAWLEY: More questions? Yes, Chris.

MR. MOORE: Thank you, Madam Chair. Thank you, Cisco. I'm curious about the shadow assessments.

MR. WERNER: Mm-hmm.
MR. MOORE: Is that a west coast thing, or is that a west coast and an east coast?

MR. WERNER: Thanks for the question. No, it's something we have been talking about internally for a while, because they -- meaning the folks in Alaska -- started it because of a
particular project that they had, their A Kline (phonetic) Project, and I think that naturally led them to begin to say, okay, now we have a relatively robust understanding -- to put it that way -- of things that are happening in Alaska, and maybe they tried to include additional information, which actually I referred to as shadow assessment, they call it something else.

And what I mean by shadow assessment is simply keeping what we're doing but at the same time trying to see, well, what would happen if we had included additional information.

And I think this is something that we're not ready to jump into yet, but $I$ think jointly, honestly jointly, we should be looking at what information are we getting out of this over time? Is it really working? If it's working, how do we bring the two together and how do we find the right sweet spot of the two?

I think we should encourage more folks to begin to think about this as we learn more about the system, and in fact, in terms of how we
see so many changes going on.
So, right now it's a research area, but I think one that will probably be important, again, particularly the Pacific cod example, to me, is such a striking one where the explanations are in large part environmental that, gosh, if we just knew a little bit more maybe we could have seen something coming. But we're not there yet. Thanks.

MS. MCCAWLEY: More questions? Yes,
Bill.

MR. TWEIT: Thanks, Madam Chair. Thank you, Cisco, this was extremely informative.

MR. WERNER: Thank you.
MR. TWEIT: And kind of breathtaking too, in terms of the potentials out there. I as thinking about your point relative to trying to track population shifts, and our immediate response to that is, well, we just really need more white ship time out there. And that's still, to me, that's the solid ground response.

And yet $I$ interpreted the first part of
your presentation as saying that there's at least the potential in the -- I don't know what term future, I don't know how near- term or whether it's still long-term, but to maybe have some other tools that would serve as well for at least tracking some of these rapid scale changes, as the white ships have.

But I guess, I'm left wondering, right now, still, our only recourse is to say, whatever we can do to squeeze some additional ship time out is going to be really important as these -- I mean, it's not just the populations that are shifting, it's the whole ecosystem that's shifting on a really rapid scale.

MR. WERNER: Mm-hmm.
MR. TWEIT: Having measurements of that, having some index of that is going to be critically important to us.

So, I suppose I'm looking to you for some advice about, we can't just be patient and wait for these new technologies because we're going to lose a lot in the intervening time. But
at the same time, it looks to me like ultimately the new technologies may provide a better solution for us.

And so, I'm interested in your thoughts or your advice about how to get through these intervening years?

MR. WERNER: Yeah, I know, it's a great question and I'll just use this slide as an example because it might bring some of the points together.

As you know, we have limited white ship time, if you want to call it that, and we want to make sure that the white ships continue measuring where they were so as to not break longtime series, so that we understand what's happening there. However, we know that things are shifting and so also, you don't want to miss the fact that they may be moving.

And this is an example of the Pacific cod, but along the west coast we also had sardine populations shifting. Was it three or four years ago that we decided to change the way that we did
surveys, at least for a couple of years?
So, one idea that comes to mind here is, suppose you keep the white ship surveys the way they are, and let's say, again, as a "for example", they're down here. And I'm just going to say they're down here because it's an example of, well, this is where they used to be, and now they're up here, right? And, again, this is a hypothetical.

So, the cod that we used to sample down in the southern extreme of say, the Bering Sea, now is further north. Well, one thing that one could do in using these new technologies is, say you send unmanned systems -- drones of some kind -- you could almost think of them as scouting ships, if you will, or scouting expeditions; and let's say you had the drones up here and they measure acoustically something there.

And, like I said before, you measure something, that doesn't mean that you know what it is. You just know there's a signal there. And you can imagine saying, okay, I saw something up
there, $I$ don't have a white ship there so I can't trawl, but maybe there's a fishing boat up there, maybe there's an industry boat up there and we can say, do you mind taking a sample of something at a certain spot so that we can see -- is this me? (Alarm sounding) I guess I set my alarm, sorry about that.

So, you send them to a spot where you see an acoustic signal, and that, we'll say, save those samples and we can see what it was. Was it cod? Was it pollock? What was it?

And the drones, at that point, you might even imagine could take an example of seawater, and you could imagine doing some molecular analysis on it.

So, what I'm saying as an example of how we need to think differently because things are expanding and moving a lot faster than we've been used to, and we don't have the ship time to be able to chase where they might be, as well as continue to sample where we've always sampled.

I think finding that balance with
unmanned systems, industry, our own white ships, I think, is going to be an important part of this next generation data acquisition plan. We're just going to have to think differently how we cover more area, more quickly, because I think we sometimes are going to have to do it that way. So, I don't know if I answered your question, but it really does bring in everybody at the table in terms of how do we answer exactly that. What's there? Did the ecosystem shift? Did the water shift? What happened? MS. MCCAWLEY: Jim? MR. BALSIGER: Thanks, Cisco. The whole presentation was great, but following up on Mr. Tweit's question, you know, in Alaska the U.S./Russia border actually is not resolved, and we hear that Russia now is interested in resolving it.

And I think not so much for the Bering Sea itself -- and of course, that's important, as you can see your blue line for cod goes right up against the Russian border, and we struggled for
years figuring out how much pollock is sure to cross there, but now that cod's moved, we're wondering about that as well -- but probably more important is Russia -- I'm assuming this with little political insight, $I$ guess -- but, I presume that they're mostly interested because of the extension of the lines into the artic, and probably for they're exploration and pursuit of nonrenewable resources. But we have almost no information about what's up there in a couple of surveys.

So, I'm not sure what my point is other than the need for surveys, as everyone is pointing out here, is not going away. So, the data acquisition plan is extremely important.

So, I appreciate your presentation, but I'm pretty curious at what we can do at helping those data collections for the particular reason of the boundary.

MR. WERNER: Yeah, thanks Jim, and in indeed I've talked to Bob and others about what happens when they cross the boundary and how do we
get to work together and understand if they're seeing them or how many they're seeing. So, that's a conversation that will have to happen. Yep.

MS. MCCAWLEY: More questions, comments, concerns. Yes, Kitty.

MS. SIMONDS: So, Cisco, thanks for the presentation. In our part of the world, especially our territories, I'm concerned, looking at reduction in surveys that is happening in the rest of the country. We need to have really, and right away, independent surveys.

In the territories, the bottom fish fisheries are very important, and the difficulty has been developing ACLs that aren't the true catch.

So, we've had for 30 years surveys at docks, which haven't worked, and we have all tried to change the way data is collected. So, we just had this huge summit, finally, the NMFS and the Council, and what's really important to us is to have independent surveys, and not with these big
ships. We're talking about contracting with the fisherman and the boats out there to collect information to go fishing.

So, I hope that you guys will see your way clear to having these independent surveys in American Samoa, and in the Marianna's in the next year.

MR. WERNER: In the next year, okay, I was with you until that last part (laughter).

MS. SIMONDS: Well, not the year after, it has to be next year.

MR. WERNER: Yeah, because the way I was going to answer is that, as we think about this next generation data acquisition plan, I think that we need to frame, perhaps, some consistent national set of priorities of what's needed and why. And the "why" is because we need to measure things, because things are happening, whatever the "whys" are. And then very quickly after that going to regional aspects of, what is it that's needed differently in different regions?

My time scale was more two to three
years to get there, but I'll take the one year as a statement of the urgency and the importance of not falling behind.

MS. SIMONDS: Right, and obviously I can document why it needs to be done yesterday.

MR. WERNER: Yeah, exactly. Thank you.
MS. MCCAWLEY: Anything else? All right, thank you for that presentation, Cisco. Before we break for lunch, we talked about earlier taking some public comment; if there were folks that wanted to make public comments. I'm going to look out into the audience and see if there are folks that want to do that.

So far, one hand. If you are ready to make comment now, if don't mind going to the front up there between Bill and Anjanette, where there's an open microphone, to speak. And please, state your name for the record.

MR. FRIEDRICH: I've just got to put my glasses on so $I$ can see anything at all. My name's Tony Friedrich. I know everyone wants to go to lunch, so I will be as brief as possible.

I'm currently the Vice President and Policy Director for the American Saltwater Guides Association. I'm a former executive director for CCA Maryland. I've been a lifelong advocate for fisheries policy.

The Guides Association was formed in part as a response to the messaging we saw coming from recreational industry groups that were advocating for $S 1528$ Chart 200, Modern Fish Act.

During that time there were a lot of folks running around saying that they spoke for the recreational community. I'm very familiar with their policies; the ones that they were advocating for. And I came here to tell you that they don't speak for us.

The ASGA held angler meetings up and down the coast the last year. We really wanted to understand where anglers were coming from. Anglers in the northeast and the mid- Atlantic have seen how Federal management has worked. They've seen how management under ASMFC has not worked.

Under ASMFC, which lacks the requirements like annual catch limits, accountability measures, rebuilding, we're suffering. What we heard from anglers was that they wanted stronger Federal laws, more protection for forage species, and better enforcement, harsher penalties for poaching.

The one thing that we heard over and over, most saltwater recreational anglers in the mid-Atlantic and the northeast feel lost. They feel like their voice is not heard. They feel like they're losing their heritage.

The problem is that no one's advocating for the resource. Everyone wants their piece of the pie. At least up until now. John McMurray and I started the Guides Association to fill that void. The recreational fishermen are changing. The vast majority of us don't want to feel the cooler anymore, we want the experience. We want better science.

Anyone who's been around long enough to remember MRFFs knows that MRIP is a vast
improvement. Is it perfect? No, but we can make it better with more funding, more surveys, and continually trying to improve the data.

We want to be accountable as recreational anglers, and we're willing to work within the system to get closer and closer to achieving that goal.

In the mid-Atlantic and the northeast, we want ASMFC reigned in. It should not be used as a model for how Federal management should work. We aren't fools. We know that the Commission is the current place where once vibrant species go to languish in management flexibility limbo.

ASMFC is the poster child for how much can go wrong with state management. States are pitted against each other and susceptible to sudden swings of administration changes within each individual state. The numbers do not lie. Seventeen of 26 species managed by ASMFC are over-fished, depleted, or the status is unknown. Several years ago, I testified at the Senate Commerce Committee. Several participants
praised striped bass management is the way forward. I recall telling them that that statement would not age well. It didn't. Striped bass has declined steadily, and it's really because of a lack of accountability to do the right thing.

This is the key point. Many of the folks who supported Modern Fish Act say that they want more flexibility to try new management approaches. But those management approaches have been tried over and over again with terrible results at the Commission.

It is a Potemkin Village, ASMFC. That is an illusion built to make us think that everything is okay, until it isn't. If you don't believe me, take a look at the amount of comments that were received for striped bass.

Only about a thousand, out of millions of anglers, decided to weigh in on it; pitifully low. It's because there's no confidence any more in the Commission. People don't think it's worth five minutes to send an email to folks like you.

Why? Because they're ignored.
And the Commission solidified this sentiment in concrete with rebar two weeks ago by ignoring the fact that $70 \%$ of the comments wanted a specific option. It was barely discussed; not passed.

This is striped bass, not red snapper, not summer flounder. Nine percent of the people in this country, the fishermen, fish for stripers.

We don't need flexibility. We need management that allows us to count on fish being around next year, and the year after that. We're looking for consistency.

Thank you very much for the opportunity to speak. I'm here to tell you that recreational anglers do support conservation requirements and accountability, and the Guides Association is here to be a resource for you to provide you with a better sense of what recreational fishermen really want. Thank you very much.

MS. MCCAWLEY: Thank you, Tony. Is
there anyone else in the audience that wants to provide public comment? All right, I don't see any other hands. I think we can go ahead and break for lunch.

Please be back promptly at 2 p.m. We have a presentation from the State Department, and that person has a very specific time window that they're available to talk to us. So, we'll see you back here at 2 o'clock.
(Recess)
MS. McCAWLEY: All right. We are going to get started again with the agenda.

Next up we have Evan Bloom, who is Acting Deputy Assistant Secretary for Oceans and Fisheries for the State Department, and he's going to be talking about Biodiversity Beyond Natural Jurisdiction.

Evan, I'm going to turn it over to you.
MR. BLOOM: All right. Do I have to press something?

MS. McCAWLEY: It will turn green. SPEAKER: It's on all the time.

MR. BLOOM: So am I on now?

MS. McCAWLEY: Yes.
MR. BLOOM: Okay. Well, thank you very much. Good afternoon everyone. And thank you very much for having me here. I am sorry that I don't have a PowerPoint, but I did ask whether, you know, an official shrock or something could be put up there. So, there is one. But I'll proceed just to talk through this issue, and I'm happy to take questions that you may have.

Again, thanks for having me. I'm the Head of the U.S. Delegation for a set of negotiations that are now ongoing at the United Nations in New York that relates to High Seas Fishing and other issues related to biodiversity. And so I'd like to thank the Council Coordination Committee for asking me to provide some background on these negotiations, in particular on U.S. positions, and to answer any questions.

So, what we are talking about is the negotiation of an internationally, legally-binding instrument under the U.N. Convention on the Law
of the Sea, on the conservation and sustainable use of marine Biological Diversity of Areas Beyond National Jurisdiction, and that mouthful is typically referred to as BBNJ.

This is currently the world's largest scale oceans- related treaty negotiation, and the largest current U.N. Treaty negotiation of any kind. So, it's a pretty big deal in international legal circles, and international marine policy circles as well.

The discussions at the U.N. have been going on for more than a decade, and following a preparatory committee meeting in 2015 to 2018 the U.N. General Assembly adopted Resolution 72-249 under which the U.N. established an intergovernmental conference to negotiate the text of a new BBNJ Treaty. And an intergovernmental conference is more or less a diplomatic conference of a way of formerly engaging in a treaty negotiation.

This IGC has a mandate to meet for four two-week sessions, and the fourth and final
two-week session under that mandate is scheduled for March 23 to April 3rd of this coming year. So, I lead an interagency delegation at the U.N. of about 15 persons from agencies including NOAA, National Science Foundation, Department of Defense, Council for Environmental Quality at the White House, the U.S. Coast Guard, Maritime Administration, and the Patent and Trademark Office.

But there are more than 20 U.S. agencies that are participating in the interagency efforts that finalize U.S. Positions. And certainly the largest group in our delegation is from NOAA, and we get a lot of advice from those folks.

The U.N. discussions have moved rapidly from a sort of discussion mode with various ideas being proposed to something more akin to real text negotiations. We expect that Ambassador Rena Lee of Singapore, the President of the conference, to produce a revised negotiating text at the end of the year, of this year, or perhaps January.

As there is as of yet no agreed
language, and much of what has been discussed is highly contradictory, not to mention confusing, there isn't a good way to know what in the end will be in the final agreement, but those of us participating in the negotiations have some guesses, which is something we can discuss.

The instrument is designed to be what's
called the Implementing Agreement under the Law of the Sea Convention. That means it's supposed to be consistent with law of the sea. As you know the U.S. isn't a party UNCLOS, but the U.N. Fish Talks agreement is an example of an UNCLOS implementing agreement that allows for nonparties to UNCLOS to join.

Similarly, the U.S. can become a party
to BBNJ as long as the text provides that non-UNCLOS parties can join, and we expect that such a clause will be included in this instrument. So, let's talk about what's going on in negotiations, what is the BBNJ Agreement? It consists of four thematic areas which are part of a package-negotiated at the U.N. In theory, no
one of the four elements is more important than any other, and all four are supposed to move forward at the same time.

One part relates to so-called area-based management tools, or ABMTs, that part relates primarily to establishing marine-protected areas on the high seas. And it has a direct relationship to fisheries management in particular, because in attempting to regulate or limit human impacts on the high seas, it would have some relationship to fishing and existing fisheries management mechanisms.

Although deep sea mining, cabling and discharge from ships are all human impact that in theory would be regulated, mostly what delegations seem to have in mind is fishing, and in particular limiting fishing beyond what our RFMOs have done so far.

A second part relates to marine genetic resources, and this part the question is, should such resources be regulated in some way, including whether to limit access or to ensure sharing of
benefits? Developing countries support requiring anyone who commercializes products that incorporate genetic resources from areas beyond national jurisdiction to pay monetary benefit, such as a royalty.

As you can imagine this can quickly get us into issues related to intellectual property rights. We in other developed countries would instead prefer an outcome that promotes non-monetary benefits, such as sharing scientific information, and other results of government-funded research. There is a general agreement that marine genetic resource regime would not apply to fish as commodities. The third part relates to environmental impact assessments. EIAs are already provided for in Article 206 of the Law of the Sea Convention, and it sets a standard that the U.S. Already adheres to.

The discussions primarily relate to fleshing out implementation of that Article 206. This may be the most straightforward part of the
negotiations as many developed countries agree with us that the EIA procedures must be left up to states themselves, and there should be no international or U.N.-based oversight.

And finally, there's a segment on capacity building and transfer of marine technology. Here, key questions involve whether capacity building would involve mandatory payments or funding from developed to developing countries, or something more cooperative related to sharing information and possibly training opportunities. In the U.S.'s view any transfer of technology must be voluntary, and on mutually-agreeable terms. Many developing countries have a different idea.

So, given time constraints, I'll focus on the first area, ABMTs, and as I think that's likely to be what you're most interested in.

A major goal of the European Union and the NGOs is to have a centralized authority such as a BBNJ conference of the parties that will be able to set up marine-protected areas on the high
seas.

There is an active conversation about whether such conference of the party will have a kind of general authority to establish MPAs, including specifying management measures in a variety of cases.

For example, regardless of whether there is a relevant regional or sectoral body that could also handle the matter, and even if there is, whether if the COP decided that the regional or sectoral body doesn't act correctly or fast enough, whether that COP, the Conference of the Parties can act.

The U.S. position is that, well, COP might be able to identify, for example, specify a particular area where some sort of special protection is needed, it should leave any concrete actions, such as the establishment of management measures to the relevant regional or sectoral body. If there is no existing regional or sectoral body, our preference is that one be created amongst interested states, and not have
the BBNJ COP take any decision on management measures.

There are a host of procedural questions such as whether the COP would take decisions by consensus, and if not -- of if not whether states could opt out of decisions they did not support.

Another key question is how science is ultimately insurgent to the process? We that all decisions should be taken on the base -- on the basis of best available science. One idea is to have some sort of scientific committee that would review proposals and advise the COP. We don't know if that committee would be a select but limited group of experts, or a larger scientific and technical committee to which each party could send a delegate.

The General Assembly Resolution provides that the process and its results should not undermine, and that's a key word, "undermine" existing legal instruments and frameworks in the relevant global, regional and sectional bodies. That's a helpful sentiment, but there's no
agreement on what that word "undermine" really means.

So, where are we heading? Let me mention some overarching considerations. The U.S. has never been a proponent of these negotiations, and we aren't a proponent now. However, there is overwhelming support at the U.N. for finalizing a treaty. In theory the negotiations are supposed to conclude with an agreed final text in April, that is highly unlikely but it's not impossible. The decision about adoption of the text will be taken by two-thirds the majority of states after exhausting all efforts all efforts in good faith to reach agreement. That means that the U.S. can't block the treaty, indeed if G77 in China, which is the largest negotiating group, and it takes up more than half of the U.N., or perhaps many developing countries plus the European Union support the agreement by definition it goes forward.

We have argued that decisions in any conference of the parties should be taken by
consensus. However, that has not been agreed at this point. It's quite possible that a treaty will be agreed, if not in April, then in a year or so, which is in the international law terms, quite soon.

> I would note that the text from the Conference President that has been released so far contains a lot of options. It's only once those options start to narrow that we will know how good or bad the substance of the agreement is. The U.S. is attempting to be an active participant in the negotiations in order to maximize the likelihood of our influencing the final product. We ran for and are on the Bureau of the Intergovernmental Conference, for example. So as always, we welcome input from stakeholders going forward, that's the basic state of the negotiation. When we receive the new text from the President of the Conference at the end of the year, or maybe in January, then $I$ hope that all stakeholders will take a careful look at it, and provide advice to us on what you think is most in
the interest of the United States.
So, I'll stop there, and happy to take any questions.

MS. McCAWLEY: Thank you, Evan.
Questions? Kitty?
MS. SIMONDS: And so thank you, Mr. Bloom, for coming to our meeting. We are the Council of course that extended this invitation because most of our fishing is done on the high seas, and for various reasons. One being that there's some -- there were Legacy designations called Monuments that closed most of the Hawaii EEZ, closed most of the U.S. uninhabited islands there, parts of American Samoa, and part of the Mariana's Trench. And I can imagine, what are we saving of the Mariana Trench? I have no idea. So, I read that the U.S. -- the U.S.'s position in terms of BBNJ establishing any sort of commission that they would not -- that whatever their commission is, wouldn't have oversight or management responsibilities. That those would go to the established international commissions, for
example, the Western and Central Pacific Commission, VIETTC and the Atlantic Commission, so I just wanted to double check that that is true. The other thing is that we would of course love to have these commissions exempted but -- so that's another question $I$ have for you. I think, you know -- why don't you tell me what you think?

MR. BLOOM: Sure. Okay. Do I need to press this again or do I?

MS. McCAWLEY: No.
MR. BLOOM: No, I'm good. Okay. Thanks. You're absolutely right about the U.S. Position which is, we think that any sort of management decisions that relate to fishing or other matters should taken by the relevant regional or sectoral body, so it would go to WCPFC or any other similar RFMO, they're the ones with the expertise and they should take all of the relevant decisions that could limit any sort of behavior including fishing.

That is something that is not agreed,
and so a key question in the negotiations will be: What is the authority of this Conference of the Parties? And so we and Japan, in particular, have been very strong on this issue. It's sometimes hard to tell where the Europeans are coming from, because on the other hand they say, well, we don't want this COP necessarily to have too authority. And yet, what happens if those bodies don't act quickly enough? Or they don't act in a way that we think is conducive to protecting the planet, or this sort of thing?

Well, then maybe this centralized body, perhaps in New York, perhaps under the U.N., should be able to take some decisions. We've said, no, that's not desirable, but I don't know where that will shake out in the end, we'll see.

On the question of exemption, as I mentioned at first, the U.S. has not been a proponent of this treaty, we have not wanted it to go forward on any of its four particular elements. Yet, it is going forward.

The notion of exemption $I$ think would
not -- not only would it not be popular among the negotiating parties, but it really wouldn't get anywhere, because the basic theory of this is, some method of cooperation that is protective of the high seas as a whole.

So, we have thought that the best way of channeling the energy that is there, is to say, okay, well, maybe a centralized body could, with various protections, and the rules and procedure, and the scientific basis for acting, et cetera, could say that some area out there, that requires or should have -- the international community thinks that it requires some sort of special attention or protection.

Then exactly what should be done should be left to the relevant regional bodies, and those that have the scientific and other expertise. So it wouldn't be a directive from New York that you must protect that particular area, or what must be done. It's more of a kind of idea, or suggestion. Again, exactly how that would play out depends on the actual language in the agreement. MS. SIMONDS: All right. Well, one of our advisors came up with a very interesting suggestion, if we are talking about protection, and obviously we are talking -- and that includes U.S. protection of our fisheries. And how would this look if you -- to protect the U.S. EEZ, and I'm using ours in Hawaii because if you look at Global Fishing Watch, you will see that China, Japan, Korea, Taiwan, they're all fishing right on the edge of our EEZ, it's all of our EEZs including American Samoa and the Mariana. So, as the suggestion would be that there would be a closure right outside of our U.S. EEZs, where only we could fish, and no one else would be able to fish in there. So, that was one of our fishing advisors who mentioned this to the Council. I thought that was interesting. Don't you, protecting the U.S. interests?

MR. BLOOM: Well, now --
MS. SIMONDS: So then the foreigners would have to -- would have to be fishing beyond our 200-mile zone, which is where they are at
every day, and so that would be a -- you know, some kind of protection for U.S. fishermen. Not only talking about fishing, okay, not the other elements of the convention.

MR. BLOOM: Right, right. So, this treaty only applies to areas beyond national jurisdiction, which means beyond the EEZs.

MS. SIMONDS: Right. Right.
MR. BLOOM: So anything within the EEZs are not touched by this. In theory anything beyond and EEZ is high seas, and therefore a part of the sort of international regulatory scheme covered under Law of the Sea, so this instrument, whatever it is, is supposed to be consistent with Law of the Sea.

So, I guess the question would be, would that kind of idea be consistent? It sounds more or less like extending the authority of the EEZ beyond the EEZ rather than having sort of international control or rights. So, I'm not exactly sure how that would work. MS. SIMONDS: Right. Well, I think it's
something to discuss, we haven't discussed it a lot, but it might come up tomorrow, so.

MR. BLOOM: Okay. Might? Okay.
(Laughter)
MS. McCAWLEY: More questions? Yes, Bill?

MR. TWEIT: Thanks, Madam Chair. And thanks, Mr. Bloom, for this. That was really insightful. I'm wondering how you think this potentially intersects with the work that the Arctic nations are currently doing, which I understand is largely around the national waters in the Arctic, but still there's an expectation sort of above -- that's universal in the application is possible in the Arctic. Do you see and intersection between this, and that, I guess it's now actually signed, on Arctic Convention? MR. BLOOM: Yeah. That's a really interesting question. So my, part of the State Department also deals with Arctic policy, and we've had any number of discussions with other Arctic states, both the five Littoral states, and
the eight states of the Arctic Council who were particularly interested in the extent to which this BBNJ Treaty could have an impact on Arctic interests.

One of the reasons for that is even though it's likely that only states will be able to propose some sort of plans, or for protection, or MPAs, the NGOs will likely get states, perhaps, far from the Arctic to propose various protections for the Arctic, and then what would be considered somehow through this BBNJ system. So, the Arctic states are very interested in sort of gaming out what exactly would that mean.

With respect to the ABMT question, there
is no RFMO yet. There is an agreement among a group of states, including non-Arctic states as you know, that will -- once it enters into force set up a science body, and could move in the direction of an RFMO in the future.

So, is that the kind of regional body that a BBNJ system would contemplate deferring to if there were some proposal for and MPA that
relates to the Central Arctic Ocean. And remember it's not the areas within the EEZs that would be touched at all. It's only the relatively limited -- relatively limited area in the Central Arctic Ocean that would be affected.

So, again, all of this depends upon the ultimate language that is chosen for the agreement so we don't exactly know. But what we talk about is, okay, so if there isn't an RFMO yet, but if there was a proposal for an MPA in the Central Arctic Ocean, then there could be an acceleration of the diplomatic process related to the Central Arctic Ocean Agreement, Fisheries Agreement, and that could lead to creating an RFMO that would have capacity to take the decisions, and decide what's best.

The related question then becomes, well, who can participate in that? And then would it be open to every country. Can Venezuela join? Can North Korea join? Can Costa Rica join? Well, I don't know.

But ultimately under the theory that the
U.S. is advancing, that the regional bodies should make the final decisions, and not a centralized U.N. body, you'd want that -- whatever that Arctic thing is to be able to apply the science that it is capable of applying and if there's a limitation on fishing, it should be done by that body, and not by the BBNJ body.

MS. McCAWLEY: Yes, Eric?
MR. REID: Thank you, Madam Chair.
Thank you, Mr. Bloom. So, I've got a couple of questions, and then I'll leave it transparent. I'm with the U.S. commercial fishing industry wrapped in NAFO, it's another day job that I happen to have. So what would the ramifications be, if something like this would be for our involvement in NAFO? That's my first question. Do you want me to ask them one at a time, or do you want to just get them all out there?

MR. BLOOM: Well, maybe one at a time is
easier. And NAFO would -- if there were some issue within NAFO's competence and jurisdiction, then we would say that if some management decision
wasn't necessary, then we'd like NAFO to take that decision rather than have it be done by a centralized body.

So, what the NGOs argue, for example, and some of the European states argue is, the focus of RFMOs can be limited, they may not have a broad enough sense of an ecosystem approach, or they may have provisions in their constituent documents that limit how far they can go in considering broader issues related to other species management, or something like that. So, the NGOs would say there needs to be some residual authority in the central U.N. Body if, say, NAFO decides that it doesn't have full competence or ability to deal with the issue.

And so there's an argument that's now playing out in New York about what that would mean. I mean, we think that that is quite dangerous to take these issues out of the hands of the regional bodies, because the U.N. is a very political place, even though we say we would like this body to act only on the basis of consensus, $I$
think know that we'll achieve that in the end.
And so a lot of countries that may be even have nothing to do with NAFO, could decide things that are going on, and they could decide it badly. At the same time, you know, we are facing some headwinds with that.

MR. REID: Okay. Thank you for that response. And you mentioned about how dangerous it could be taking authority away from the relevant body, so I'm trying to get my head wrapped around, you know, the use of MPAs, and the use of the Antiquities Act in our internal waters, that essentially one or the other takes away the authority of the regional body. And I'm just trying to reconcile in my own mind, how we can impose that in our internal waters, and oppose it in international waters? And maybe you could help me out with that conundrum that $I$ have.

MR. BLOOM: Well, I'm not -- being from
the State Department my focus is international rather than domestic management, which you folks know a lot more about than $I$ do. So, I may not be
in a good position to respond to that.

And I certainly haven't been asked questions by other countries that say, well, you do something domestically therefore why are you arguing about something internationally. But maybe that will come in the future.

MS. McCAWLEY: All right. More questions? Yes, John?

MR. GOURLEY: Thank you, Mr. Bloom. I appreciate the update. You mentioned the ENGOs, are they the ones driving the bus? Or, is there a select group of countries? Where's the power coming from? Who is rolling this rock up the hill?

MR. BLOOM: That's a good question. So, there is a large group of ENGOs that are very strongly behind this, who see this, in particular, as a means of limiting overfishing. I mean, I'll say that relatively frankly. And it's an interesting dynamic because there were different constituencies for different parts of those four elements, right.

But the ENGOs really only care about the first one, they want the ABMT restrictions to limit fishing. They don't care so much about Marine Genetic Resources, which we haven't talked so much about here. But the U.S. and U.S.

Industry, certain parts of the U.S. industry, have very strong interests when it comes to Marine Genetic Resources, because the idea is to limit access to the high seas.

And so you could only go out if you promised that you will limit your science in a way that any discovery you make will result in royalties flowing back to the rest of the world, meaning developing countries. It has implications for innovation, and IPR issues, and all sorts of things, and it's quite distinct from the ABMT issues.

And ENGOs don't touch that prong at all. In fact they find it quite annoying that it's there, because they want to put all of their energy into creating or in protected areas.

You have European countries, in
particular environmental agencies, of European countries that are promoting marine protected areas in general as a part of an ocean's environment policy. So that's part of it.

You have a whole suite of Latin American countries who are behind these proposals, and over time, even countries that we normally relied upon for more or less a sensible approach to the fishing issues like Norway, for example, have kind of peeled off and said, well, we think we can get provisions in this that will be -- that will promote cooperation among RFMOs at the very least, and promote some sort of general conservation values that they would support. So, they've moved into the sort of proponent camp. Canada also used to have some doubts and now they describe themselves as a proponent of the agreement. So, developing countries care perhaps less about the MPAs, with some exceptions. So, the Pacific Island States have shown great interest in these issues, in part for economic reasons that they see, of setting up the kind of
protective cordons that you were talking about.
You know, I think we understand that they have that in mind. But the developing countries also have this strong interest in marine genetic resources, capacity building, technology transfer, these other sort of things which are often part of $U . N$. Treaty negotiations on any subject, in climate change, you name it, these issues kind of start being sucked in.

So, it's hard to name all of the countries that are supporting it, but in general you hear very few voices that are urging caution, but it's kind of, it's us, it's Japan, it's South Korea, or it's Iceland, Russia and sometimes China, for the most part.

MR. GOURLEY: I just wanted to make a comment. It seems like if the true reason is to stop, prohibit less in overfishing, that perhaps, you know -- to me, a better way to look it is for the countries that are current fishing the high seas is to adopt the U.S. Fishery Management Measures, and let's stop overfishing that way,
rather than the NGO prohibit no take, no nothing. I mean, there's other ways to achieve the stated goal without closing the area down.

MR. BLOOM: I think the U.S. position is consistent with what you've just suggested. Yeah. MS. McCAWLEY: Kitty?

MS. SIMONDS: So, I just wanted to add, when you were talking about the different interests, and talking about the Pacific Islands and the former trust territories of the United States. In addition to $\$ 20$-some-odd million that the former trust territories receive from the U.S. every year, the U.S. canned-tuna industry they're paying somewhere between 13 - and $\$ 15,000$ a day to fish in those Pacific Island areas if they want to fish for tuna. So, it's for them, it's all economics. That's what it's about, money.

MS. McCAWLEY: Anybody else, other questions? Yes, Bill?

MR. TWEIT: Thanks. I was wondering what, if any, role the difference in sustainability, global sustainability
certification organizations, like MSC, have been playing in this? Part of the reason $I$ ask is because we see that sometimes principles that developed in the international arena end up becoming a part of the criteria used for sustainability certification.

MR. BLOOM: I'm not aware that they've had any role at all.

MS. McCAWLEY: More questions? All right. I don't see any more hand in the air. Thank you, Evan, for coming over here --

MR. BLOOM: There's one more, over here, no?

MS. McCAWLEY: No -- yeah, go ahead, go ahead.

MR. RAUCH: How does NOAA's position on the BBNJ line up with the state? I mean, you're all basically holding hands. Is that correct? Is SAM, is NOAA, holding with the state Department on this?

MR. BLOOM: (Laughter) The State
Department is leading negotiator, but we have
representatives, we provide a lot of feedback on positions that they take. I have seen where NIBs and NOAA have seen almost the unending flow of documents on this issue. And so we are working closely together.

I would say, as the Leader of this, the interagency process as well as the delegation, that we have a pretty harmonious group, especially when it comes to the ABMT issues, but also across the board, I don't think there's any delta between us and NOAA. In fact we rely on their expertise to try to figure out -- they're pretty complex issues when it comes to how these provisions would and could be drafted. And so that's why, you know, we have a lot of NOAA members on our team, and so we're always working closely with them. MS. McCAWLEY: All right, any more questions or comments? All right, thank you so much, Evan, for coming over here and chatting with us about this.

MR. BLOOM: Sure. Anytime.
MS. McCAWLEY: All right. Thank you.

Next up on the agenda, I believe back to Cisco on the response to Council Research Priorities.

MR. WERNER: Okay. Thank you very much. And this is perhaps is a conversation that started at the Sitka Meeting, maybe it was 18 months ago or so. And I'd like to think that, first, there's been a lot of progress since that meeting, where the issue really was how do we line up priorities, how do we understand each other's priorities, and arrive at some, you know, common way forward. And this presentation could be quite short. I'm just going to say that, and as I said we have overcome some of the issues that were rightfully pointed out at the meeting in Sitka in terms of perhaps better communications. A lot of it has to do with the work that is happening within the science centers in terms of formalizing what they're referring to as their priory-based resourcing and sharing that -- those priorities with Councils, with regional offices.

And eventually going all the way to the geographic strategic plants where, again, there
has been additional opportunity for understanding each other's priorities, and perhaps coming to a joint set of priorities.

So, let me just go quickly through this.
You'll also see that before coming here we canvassed all of our science centers to find out specifically what actions they've taken, and hopefully these line up with what you feel is taking place in that conversation.

So, real quickly, you know, to start at the end, our staff, you know, participate in the various Councils' teams, committees, you know, and where research priorities are defined and discussed. And as such, you know, they're involved either in receiving the information or helping to coproduce whatever those priorities might be, understanding, again, the joint priorities of both of us, and or of all of us. As I mentioned the geographic strategic plans that, you know, people have been working on for the better part of last year, include those discussions very specifically and openly in terms
of how those priorities are achieved. And so that -- our understanding is those documents, for the most part, are done, they're first drafts, and hopefully we'll have a chance to see them, I'm not sure when, in the next few months in any case.

And then, you know, there is -- given still the multiple regional priorities, Councils, centers, regional offices, commissions, there's still room for improvement.

And that's really, perhaps the last two points. You know, that while we made some -we've taken some very concrete steps in terms of how do we line up our priorities, there's still more to do, either continuing along the path that we've, or perhaps formalizing even further as need be.

And so $I$ just very quickly wanted to go -- just highlight as I said, as we canvas our science centers in terms of how this conversation and prioritization is going, I'm just going to go through them. It's very short, just a couple of slides.

The Northwest and Southwest, since they work closely with the -- in this case the Pacific Council, they've had recent conversations with the PFMC staff, and about, you know, how to collaborate and identify research priorities in advance. I guess of the targeted research priority plan update in 2023. So, I'm guessing that there is a cycle of when the next research priorities for the Council, the Pacific Council will be in 2023, but that these conversations are ongoing. We're not going to wait until 2023 to see if they line up.

The Southeast Center, you know, working with the three Councils, you know, takes those Council research plans to help guide their priority-based resourcing that I talked about before, the PBR, which again building on, as I said, you know, the conversation was 18 months ago, because we, internally, have formalized how we do our prioritization, we now have that additional aspect of working with the Councils to include that in the prioritizations.

And that kind of dovetails into what the Northeast Center does, in terms of when they set their priorities, they actually include the Council priorities as part of how they rank some of the projects that -- or the projects that they're evaluating.

So, again, that's an explicit step here that the Northeast does. In other places it may not be as explicit as counting points, or criteria, but it's certainly implicit in the other centers.

The Pacific Island, there's a Council five-year research party -- plan, and they, meaning the Pacific Island Science Center, uses those criteria when drafting their own science plans, when they develop their activity plans, and actually, you know, when they meet with Council staff to discuss whether the Center is addressing those research priorities that the Council has. And hopefully, during the question-discussion section, you can tell me if in fact that that is what's happening, or if we need
to further it even more.
In the Alaska Center, you know, they're engaged in the development of the research priorities which the Alaska Center, you know, has quite structured a set of priorities and ranking process, but the Alaska Center works through the participation of the scientist in the various bodies, to understand or help develop some of those priorities.

And just like every other center, you know, uses those priorities in how they develop their final Annual Guidance Memorandum, or AGM, as well as their activity prioritization process.

And so the last step is basically -- or
the last slide is basically the same as the first one, you know, we have taken some steps towards formalizing these discussions but, you know, we could take more based on inputs that we might receive today. You know, including how to develop feedback mechanisms in terms of whether in fact, that conversation is being properly included and reflected in the work that's being carried out.

I guess I'll be curious to see how -you know, if there's any comments on how the geographic strategic plans have evolved, you know, from your standpoint, and how -- you know, whether that's actually been a successful way of adding even more conversation, or more discussion to the priority setting.

And then finally, you know, I know that our Science Center folks are committed to working to advance the research priorities that the Councils have, and include them in our research projects.

So, I think that's it. As I said, it's pretty quick, but is one that $I$ felt we were quite responsive to the comments and recommendations from the Sitka CCC Meeting. And as I said, I think we've taken some pretty concrete steps, but I'm open for continued tweaks, and continuous adjustments from the Councils. Thank you. MS. McCAWLEY: Thank you for the presentation. Questions or comments? Yes, Tom? MR. NIES: I'll start. Thank you,

Cisco. I am glad to see that we're getting some responses on the issues that we raised, I think the first time at Sitka, or maybe shortly before Sitka. But $I$ do have a couple questions. I'm not really familiar with the Center's Annual Guidance Memorandum that you've mentioned. Is that something that could be shared with the Councils? I don't believe we've ever actually seen what their guidance is. I'm not sure if that's the case in other regions or not.

MR. WERNER: Sure. Very quickly, and probably there is -- you know, between the Science Center, Council interactions, and so on, but what we have is a process where every five years we write a strategic plan, or a science plan that the Centers say, well, over the next five years this is what we anticipate is going to be important for us to do. And that of course lines up with NOAA and Fisheries priorities.

That I've-year plan then every year we adjust it depending on what emergencies might happen, and all that, and again, you know, whether
it's warming, or shifting species in the Northeast, or similar issues on the west Coast or, you know, coral bleaching in the Pacific Islands. So, every year theirs is a need to say, well, yes, we have a five-year plan, but these are the priorities that this year are emerging, or at least we feel are emerging, as well as taking direction from priorities of the administration, in terms of what we might need to be responsive to in terms of -- in terms of what the administration - you know, Congress, et cetera, direct us to do. That AGM, the Annual Guidance Memo, there's a draft that usually is written in like February, and the reason it's there is because it's roughly when the President's Budget comes out, and so that gives some indication in terms of, again, the administration priorities that we need to be responsive to.

And also maybe has a sense of which way the budgets might go, et cetera. So that draft, I understand is shared perhaps at times with some of the Councils, and I'm walking on this ice here.

And I'm looking around at some of the Councils whether that's true or not. So, maybe, you know --

So, that draft is shared, and comments both at the Councils and regional offices, and then it's probably formalized by the time there is a better sense when we get some idea of how the various Senate and House marks might go narrow it even more.

But usually the AGMs are available -might be available in draft form sometime in February, and certainly they're posted publicly, I'm going to say, usually by May/June is roughly the timeframe. They're posted on the websites, on the Center websites usually by May/June.

And yeah, Kitty, please?
MS. SIMONDS: Yes. So, since Sitka where we were all wondering where our research plans go, we have been working with the Center, so we take our five-year research plan, and we choose projects from those plans, research projects, and then we send them to the Center to be included in
the AGM.
So then when that's done, the AGM comes back to us to see if we are satisfied or not, and we can argue about whether or not they missed something, you know, or whatever. And so that's how we get our research priorities into the AGM. That doesn't mean that it covers all of our research priorities, but we do work together, and we meet annually, together, the staffs, just on research in general. About what the Center is going to be doing, what we would like to see them do.

But I think what, we have to get organized is the monitoring of the projects. We haven't really set that up, because the Center does report at every Council meeting, but not necessarily. It's a general report, so we have to figure that one out, about monitoring those research projects that are in the AGM that we are interested in.

MR. WERNER: Thanks, Kitty. And perhaps one message that might be coming out of this is to
try to establish some consistency in the communication that happens between, you know, the Science Centers' Regional Offices, you know, Councils in terms of sort of the general understanding of what those priorities are, and like you said, perhaps also to follow through on them.

And right now, maybe it's not fully consistent in terms of how we do it across the various bodies, but that's perhaps a message that we can work on over the next year. Thank you for that.

MS. McCAWLEY: Any more questions? Tom?
MR. NIES: I do have one question, another question that's sort of a crossover I think between the science side and perhaps the management side a little bit. My recollection is at Sitka one of the things we talked about and discussed was the possibility that Council priorities should be given more of the visibility in the various grant programs that take place.

S-K Grant, for example, Bycatch

Reduction Engineering Projects, those types of things, so that projects that can be specifically tied to an existing Council priority might get some kind of credit for that. And I don't know if that's been followed up on or not.

And I couldn't tell from your presentation whether that's been explicitly done, I know that there are some applicants who will mention that in their projects that they are doing it or proposing it to adjusted Council priority, but $I$ don't know if there's any actual encouragement to them to do that, or if there's any formal discussion in the evaluation to the reviewers to -- you know, somehow give credit for that particular thing.

MR. WERNER: And perhaps I'm going to open this up a little bit and perhaps some of my colleagues at the table here, since some of these S-K and others are not strictly under the science side, right, in terms of -- is that something that was envisioned to be part of the conversation of the geographic strategic plans where, like you
said, the regulatory science and Council side all come together?

So, can I ask for any support in terms of whether that's the intent, perhaps, of the geographic strategic plans to expand the conversation beyond specific research projects?

MR. OLIVER: I don't think that was ever the specific intent of the geographic plans, I think your point though that it might an ancillary benefit of it, is a good one.

MR. WERNER: Right. Right.
MR. OLIVER: And I would say to the question -- it's Tom, right? That I think that happens to some degree implicitly, whether there should be a more explicit mechanism. And it's a good question, Tom. And I don't think we've explicitly done that, but I think, depending on which funding source it is, that's often taken into account, or other funding sources from my experience in a North Pacific, the NPRB funding and our Pacific Research Board often relies pretty heavily on those Council research priorities in
the North Pacific.
I'm speaking as an example, but to transfer that explicitly to our various grant processes I don't think we've explicitly done that, but $I$ appreciate that implicitly that's occurring.

MS. McCAWLEY: Jim?
MR. BALSIGER: I think Chris, the way Chris said it is right, these are -- you know, they're not exactly your normal strategic plant, but nonetheless they're on a fairly high level. So it doesn't identify specific projects, it does reference in the Alaska one, that does reference Council's research priorities, and to go through a list of challenges, and opportunities that, if you look through them, you can clearly see that they're from the Council's research priority list, most of them probably, not all of them.

And so I suppose you could have an appendix that said, relative to these challenges that involve the Council, here's the project we are working on. But that's not where these plans
are right now. But it clearly recognizes -- you know, a couple of pages that recognizes the need to coordinate with the Council, and with other agencies, and other state entities. And so the whole idea of them is to figure out how to
approach those problems that have been identified, at the Council mostly.

MR. WERNER: Thanks.

MS. McCAWLEY: Kitty?
MS. SIMONDS: We do have a separate pelagic research plan, and which we developed a couple of years ago, since somehow the pelagic program was dropped from the Center. And so we worked on it, we worked on it together, went through Council and the SSC, so I do have to thank the NMFS for supporting that new plan with us. And also, I mean, with our Center and the Southwest Fishery Science Center. So, that's like -- that's on a different track. We meet on that separately as opposed to the five-year research plan. MR. WERNER: Great. Thanks.

MS. SIMONDS: Oh. One last thing about the geographic plan, so the Council needs to review the draft -- you have a draft now, but the Council hasn't reviewed that draft, and so we did -- we did speak -- the Regional Administrator and I, that we were going to have that opportunity between now and December to review that strategic geographic plan. Thanks.

MR. WERNER: Great. Thank you. MS. McCAWLEY: Jim? MR. BALSIGER: I was just going to add what Kitty said, because we haven't shared that with the Council, but we talked to them about it, but we are still working on it, between the Headquarters people, and Silver Spring, and the Center people in Seattle, and Alaska, and the Regional Office.

So, just today I have something that looks like it's very close to the end, which has been updated to include a section in aquaculture, so it's still being developed and it will go to the Council soon.

MR. WERNER: Thank you.
MS. McCAWLEY: Thank you. More questions or comments? Yes, Phil?

MR. ANDERSON: Just a couple of
comments. We are about to undertake a process to revise, revamp, streamline our document, we suspect that we will want to collaborate with both the Northwest and Southwest antennas as we do that, so we're looking forward to that. And to make it more, hopefully a more useful document, I would also advocate that as opportunities present themselves for the Science Centers to report to the Councils relative to activities that they are undertaking, that they're in line and consistent with our research priorities.
I'm not sure that there was an
opportunity or a place to do that earlier today in your presentation, because $I$ think that was more a kind of forward-looking, at some new innovations, so probably wasn't necessarily a good place to do that. But as the centers have the opportunity to update us on how their work is going in terms of
being in alignment for that, is occurring with our research priorities. I think that will be a good thing.

If I'd seen the Annual Guidance
Memorandum, I don't remember seeing it, but if that is something that could be made available that would be helpful.

MR. WERNER: Okay.
MR. ANDERSON: Thanks.
MR. WERNER: Thanks, Phil. We have a face-to-face Science Board Meeting in early December, and I'll make this point to our Science Center Directors that there is -- that we should seek some consistency not just in sharing early versions of the AGM -- the final versions of the AGM, but also perhaps at Council meetings when there's a State of Senate Report that -- you know, perhaps just a part of it that addresses exactly what you said about activities and the relationships, the priorities of the Council, in an explicit way, not in and implicit way. Thanks. MS. McCAWLEY: Yes, Carrie?

MS. SIMMONS: Yes. Thank you, Madam Chair. I don't think we've ever seen a memo that you're talking about in the Southeast region, but it sounds talking to Dr. Crabtree, that that's something that could be shared with us. MR. WERNER: Yeah.

MS. SIMMONS: As far as the geographic plans, you know, we commented on them, I think it's a good plan, I think it's a higher level plan and each individual Councils, research and monitoring priorities, which I think that is why it's important that we keep those separate. Because we are altogether in the Southeast with that geographic plan, yet we have more detail on our research and monitoring priorities. So I think those are kind of the important distinctions that they do overlap, but you keep that distinction with each Council. So, that's my feedback on the geographic plan.

MR. WERNER: Yeah, great. Yeah. Thanks very much. And as you know with the change in leadership at the Southeast Center, you know,
there's maybe a little bit of catch up still going on in terms of the sharing of the documents, and so on. But as I said, I'll try to seek consistency from all of our centers to make sure that those AGMs, and such, duly are communicated. Thank you.

MS. MCCAWLEY: More questions or
comments? All right, thank you.
MR. WERNER: Thank you.
MS. MCCAWLEY: I think that as a good discussion. Thank you, Cisco.

MR. WERNER: Thanks very much.
MS. McCAWLEY: All right, next up on our agenda is Bill, who is going to cover CCC input, for Committee of Fisheries 34.

MR. TWEIT: Thank you, Madam Chair. I did sort of at the last minute put together a PowerPoint to kind of help out a little bit with the walkthrough on this, so even though it's not posted, I'm hopeful it can be available afterwards.

So, I think most folks are aware that
the FAO's Committee on Fisheries meets every other year, and so there's a meeting coming up this summer in Rome at the FAO Headquarters, the U.S. delegation does include the position for CCC representative, and I had the pleasure of serving as that representative for the previous one COFI 33.

I did inquire a little bit as to who the leaders of the U.S. delegation would be for this year, and typically it's State Department lead, closely assisted by somebody from NMFS, from the international section. And it's my understanding that NMFS hasn't determined yet who their lead would be, but I thought I'd check with Sam. MR. RAUCH: We determined. I just didn't know the answer. MR. TWEIT: Ah. MR. RAUCH: It's Cheri McCarty. MR. TWEIT: Okay. And she is well experienced with the process. MR. RAUCH: Yes. MR. TWEIT: So that's great. I asked

Mr. Bloom if he knew who the State lead was, and he wasn't certain, but thought it would likely be Deidre Warner-Kramer, Kramer- Warner, I can't remember which. And she is also certainly experienced with the process, so that's good news. So, I intended to cover today in my reminder to the CCC about what's coming up, is a couple of different things, the summary of agenda items which were -- I went over at our previous meeting in May, so I'll just briefly touch on those again. Strictly from the perspective of what $I$ think is likely to be on the agenda from COFI 34, for the upcoming.

And then some overview on how the CCC should engage at this point in order to ensure that we have a well-prepared representative. So, our task today is to provide guidance on likely major issues, at least begin the process of designating who the CCC representative would be, and then talk a little bit about advanced preparation for that person.

The issues that I think are likely to be
on the agenda for COFI 34 based on the discussions at COFI 33 cover a broad range of subjects in terms of fisheries, and $I$ haven't listed them in any particular priority, or any other sort of order. It was just how they came out of my notes. But the FAO is continuing to work on their code of best practices for aquaculture, and so I would assume that that will be one of the primary subjects.

Trade at COFI 33, t4here was concern expressed about increasing barriers to global trade that was before the recent tariff wars have really affected seafood trade, so I would expect that there will be a lot more discussion about trade at this one than there was at the previous.

Addressing IUU issues, is always on their agenda, both implementation of the state management measures, and ensuring that those continue to be implemented by as broad a range of countries as possible. And the global record, the global database on transport of seafood was just initiated at 33, so there will probably be some
discussion about how well that's working.
Climate change, at 33 there was a major report released by FAO on climate change and fisheries, given what we've seen globally in 2019 in terms of the effects of climate change, it seems to me to be quite likely that it will remain a high on the agenda.

And emerging area is this discussion of abandoned, lost, discarded fishing gear. I think it's likely that there will be some discussion of at least voluntary guidelines on gear marking. It's the first step for addressing this issue which is closely linked in with both impacts to marine mammals, but also just marine debris and plastics pollution in the ocean. There was also initial discussion marine mammal mortality recommendations, the U.S. position at the time had not been finalized, so I imagine some additional work has been done on that, and they'll need to be the U.S. position developed for COFI.

Another issue that was just being
floated, there was not actually considered in COFI 33, was this concept of trial guidelines, which I think is sort of the best practices to minimize the impacts of trawl gear on the environment. If my memory serves me correctly, that was an initiative that was being pushed by the EU, and the U.S. Delegation's initial reaction was, well, we haven't even seen these. This is a big deal in the U.S., we'll certainly need to see them in advance. I don't know if they have actually been circulated at this point, but I think that's something, that's an area that certainly the CCC representative should be prepared to keep an eye on.

Another, that's really growing in
focused at the FAO is the issue of small scale and artisanal fisheries. 2022 has been designated as the International Year of Artisanal Fisheries in Aquaculture, so I would assume there'll be some FAO COFI planning on how that's going to proceed. The Marine debris issue, I've already referred to, to some extent. Biodiversity, we
just hard he discussion from the State on the current state of BBNJ but that's something that COFI keeps an eye on as well. And then finally, labor conditions, also a growing concern.

The EU is very focused, as well as some other countries were very focused on developing FAO guidelines regarding labor conditions. At least initially if some of those would have made it pretty difficult for, for instance, salmon harvested out of Native communities in Alaska, out at fish camps where every age in the family works at the fish camp, would make those difficult to enter into the international trade, just because that some of the emphasis on child labor, that didn't seem to be consistent with the practice of a lot of fishing families.

So it's one those that, even though it seems pretty remote the idea of the slave-like conditions that began this, the guidelines themselves could end up having repercussions in our domestic fisheries as well.

So, a pretty broad range of issues, that

I think will likely be on the agenda that will need to be -- first off, discussing whoever represents us will need to be discussing first among the U.S. Delegation in advance of the meeting for the U.S. Position, and then tracking what happens in all those at the meeting.

So, at this meeting $I$ think we'd suggest, in order to give our representative plenty of time to really engage with the U.S. Delegation, I would suggest that we at least begin the process of designating the representative. And then a little bit of discussion about establishing expectations for what that representative will do. This seems like it goes without saying, but $I$ found it a little intellectually taxing and challenging -- remember that I was there representing all eight Councils, and the CCC, and trying hard not to look at this issues just from my North Pacific Council lens. So I think just reminding ourselves that that's their function. Which I think I'll use for a representative being a CCC member just because
-- if you're just a Council member, it's kind of hard to track with Councils that are operating in completely different marine environments, and all of way across the nation and some of the challenges they are facing, we'll get a better sense of it at the CCC.

> I recommend that expect that our
representative review some of the prior reports to the CCC regarding previous COFIs, and certainly my material is available. And try to discuss with our prior representatives sort of how things went, so they walk in with a sense of, just what the flow is like, that to expect, how to prepare to be engaged.

I would hope that we would continue to have written reports afterwards for the CCC record, and I would hope that we, at the CCC, sort of keep an eye on maintaining continuity, not necessarily in terms of the person, but in terms of what we expect of our representative.

As I've said already they need to participate in the developing of the U.S.

Position ahead of time, the U.S. is a very influential player at COFI. I was with impressed with how influential we were, and I think that's a great thing, but it does mean that if we at CCC don't pay attention to how those U.S. positions get developed, they have a good chance of influencing -- having a major influence on the outcome of the meeting.

And then finally, I've already gone through the tick list of the items that I expect will need to be monitored, I'm sure there will be others though.

That's sort of my overview, and I
thought at this point, Madam Chair, to just kick it open for general CCC discussion as well as questions.

MS. MCCAWLEY: Are there any questions, discussion or Bill? Anyone? Kitty?

MS. SIMONDS: Well, I just want to thank Bill. Because in the old days -- excuse me -- the '90s and the 2000s, Miguel and I would take turns going to these meetings, and for us it was really
important because we were doing, you know, saving the birds, saving the turtles, saving the sharks in our regulations in the'90s. Then after that there weren't very many issues that I was interested in, and I don't know about Miguel, but it's very important that someone represent the Councils at those sessions.

For example, they just -- COFI just
finished a meeting, a future meeting of the fishing industry so, you know, the tuna industry, all sorts of industries went to that session, and the week of the 21 st is a session on science and management for the future, everything is about the future.

So, I mean, I encourage people to go to these sessions as well, especially that one. I think we are sending a scientist to that one. And one of our SSC members, Ray Hilborn, is going to be there at that meeting. But it really is important.

So, Bill, even if you're the only one that wants to go, you need to go, we'll pay your
way.
MS. McCAWLEY: Yes, Miguel?
MR. ROLÓN: A minor point, but my
experience was when $I$ represented the Council they looked at me and, asking me what the he'll I'm doing here. So, I was lucky because the Ambassador, Dave Balton, at that time knew me, and I was able to participate every morning at the sessions that we agreed -- and those sessions we discussed, as you know, what we were going to discuss.

Also my experience at that time, the other countries were not that interested in participating in COFI, I had to be worrying whether they have an issue to discuss and, you know, then mostly they were no interests, but I like what you did, because that way it forced us to think about these things, and send the information to whomever is going to represent us at the meeting.

But the other thing as we -- have you been able to open a channel with the (inaudible)
states; and the delegation, to be able to talk to them before the meeting, or during the meeting?

MR. TWEIT: I think that both you Miguel, and Kitty, really paved the road pretty well. I found -- well, and certainly both Bill Gibbons-Fly, who wasn't leading the delegation because he was chairing the whole meeting, but also Deidre Warner-Kramer, both certainly are strongly influenced by Dave Balton's view of how we should be engaged.

And so I've found that -- I still had to work a little bit to make sure that I was included, but it wasn't difficult. Once I sort of made it clear that $I$ was there and actively interested, they really did incorporate me in all the U.S. meetings, I did never feel excluded, and I certainly felt like $I$ was very listened to. So, I think, both of you did a great job in sort of preparing the ground, and now I think it is productive to have somebody from the CCC go, because we will be listened to, and we will actually have an influence on the outcome.

MS. McCAWLEY: Kitty?
MS. SIMONDS: Well, yes, and if you're invited to any of the negotiations. I was on the straddling stocks negotiations in the'90s, so I was in New York for several weeks at a time, and the State Department Rep would give each of us a job. We would choose a country to deal with, and so -- you know, they had us working all the time, things sort of changed, they don't necessarily do that, but that was really helpful for us to learn how to deal -- how to actually negotiate too, as well.

MS. McCAWLEY: Bill?
MR. TWEIT: Kitty brings up a good point that I meant to mention. So thank you for reminding me. There's a lot -- in addition to the main COFI session, there are a lot of side sessions going on every day, and the U.S. Delegation just essentially divvied up, who was going to what. And I got assignments too, it wasn't as if they said, oh, and you can do what you want.

No. I was told which ones I was going to go to, and told how I was going to report back on those. So I was there sort of furiously
scribbling notes at several of those side sessions. So, you are now just as you sort of experienced in those negotiations, you're treated as a part of the workforce.

MS. McCAWLEY: More questions, comments?
Yes, Dale?
MR. DIAZ: Yeah, we'll just mention that at our last Gov Council Meeting we did have a good bit of discussion that originated for our law enforcement panel, about how do you do fishing and how big of a problem it is, as far as the volume of red snapper that's being taken down towards the Texas/Mexico border in the U.S. waters. So, it is a big issue, and it's very important.

MS. McCAWLEY: Yes. Good points. FWUC has been involved in IUU fishing as well. Other comments, questions, discussion? Yes, Miguel? MR. ROLÓN: Are we ready to follow Bill's suggestion and pick the person that is going to represent the Council at this time? Or should I allow that to happen later, after meeting.

MR. RAUCH: Miguel, I think in terms of the rotation, it falls to the South Atlantic, and I think our Chair and Vice Chair are discussing about who will go, who is available, so may not be able to make that decision right now, but in the very near future.

MS. McCAWLEY: Okay. Any more discussion needed right now. Bill? I appreciate you bringing this forward, Bill, and carrying the torch here.

MR. TWEIT: And just to reiterate, that I'll be happy to pass on all the materials that I have from the meeting to whoever is going next. And I certainly will be happy to help orient them through the process.

MS. McCAWLEY: That sounds great. All right; so we are little ahead of schedule here. Next up on the agenda is the NS1 Technical Guidance Workgroup Update.

SPEAKER: Let's take a break?
MS. McCAWLEY: Yes. Well, actually let's go ahead and take our 15-minute break, then we'll come back and do the NSI presentation.
(Recess)
MS. McCAWLEY: All right. We're going to get going again. Next up we have Stephanie Hunt who is going to give us an update on the NS1 Technical Guidance Workgroup.

MS. HUNT: Good afternoon. Hi, everyone. I'm Stephanie Hunt. I am a Branch Chief for the Policy and Guidance Branch in the Office of Sustainable Fisheries.

My Branch covers things such as tracking stock status around the country, analyzing legislation that The Hill puts together and producing National Standard 1 Guidance. And as such I'm here today to talk to you about our technical guidance work related to National Standard 1.

So, I'll just give you a quick update on the work that we're doing, and I'll go into a
little bit more detail on the carry-over and phase-in tech memo that is with you all for review now.

So, we last produced technical guidance for National Standard 1 in 1998, over 20 years ago. That was the Restrepo et al. document, and surprisingly that document still stands, and it still provides really good advice, but there've been a lot of scientific advances since that time, and we've revised the guidelines twice since then, in 2009 and 2016. So, it was time to produce additional technical guidance.

We formed a Technical Guidance Workgroup with representatives from the Science Centers, our Regional Offices, and Headquarters' Offices, and we also have members of your staff on this workgroup. And we are producing a variety of work products, which I will go through.

We divided the workgroup into three subgroups, and I'll go through each of them. Subgroup 1 is chaired by Rick Methot, and it's covering a couple of different issues. Here are
the folks that are on that group.
The first project is the most
significant project and they've been working on this for a while, it's a tech memo on estimation of $\operatorname{FMSY}$, BMSY and their proxies. So you all know that MSY is the basis of fishery management in the United States, so these reference points and their proxies are really important, but direct estimation of $F M S Y$ and BMSY has been really challenging and so the Councils often times use proxies.

And there's been a lot of research on these reference points and their proxies, but the research has not been summarized and updated since the Restrepo et al. documents. So the purpose of this tech memo is to provide guidance and lessons learned from direct estimation of FMSY and BMSY. It will provide guidance on calculating proxies for these reference points. And it's going to look at some additional considerations such as spatially explicit reference points.

There is also going to be a section on
the paper on spawning potential ratio methods. So SPR is the most commonly used method for calculating proxies for $F M S Y$ and BMSY, and there's been some confusion around SPR, and some of you remember that back in the '90s, the agency disapproved using SPR rations for overfished determinations.

And as with other things, there've been scientific advances on this topic, and there's some science that suggests the SPR may be appropriate in some circumstances for overfished status determination. So the tech memo will describe the circumstances, data requirements and assumptions for using SPR for overfished status. They've been working on this for a while, they made a bit of progress since I last updated you at the main meeting, and particular they've been working the SPR section. They're hoping to have a full draft done for internal review in early 2020, and we're hoping that we would be able to get you all a draft to look at in the summer. Members of subgroup 1 are also working on a light paper catch accounting. So there are a variety of catch accounting procedures in use around the country, and this white paper is meant to -- described some of the issues related to catch accounting, and to describe best practices for accounting for total catch in the stock assessment process, but also in setting harvest specifications.

I mentioned this project to you in May, and we haven't done a lot of work on it since, there have been other priorities that have taken up the time of the main authors, but they expect to get back to it January. And if we make good progress, we'll be able to share it with you in the summer or fall.

So, that's Subgroup 1. Subgroup 2 is chaired by Dan Holland from the Northwest Fisheries Science Center, this group is the furthest along, in fact they produced a draft tech memo on carryover and phased-in provisions in NS1, which is with your SSCs, for review now.

So you'll remember that in 2016 when we revised the guidelines we added provisions to allow for carryover and phase-in as a way to increase stability and flexibility in fisheries management. Some Councils, regions and stakeholders have expressed considerable interest in these tools and provisions, but recommendations on how to develop and apply them are lacking. So this tech memo is meant to provide examples of carryover and phase-in that have been implemented in fisheries so we can learn from past experiences, describe some possible approaches to design and implement carry-over and phased-in provisions, and identify characters of fish stocks, and fisheries management approaches that may impact the benefits and risk of using these provisions. So this one, as I said, was sent to you in August for your review, we've been doing webinars with most of the SSCs, and answering questions, and getting some really good feedback so far.

And we have a deadline for January 15
for any final comments that you have, and we'll look forward to getting your comments. I'll go into a little bit more detail on the content of this tech memo, since it's out with you for review.

On carry-over the National Standard 1 guidelines allow Councils to carry over a portion of unused ACL from one year to another. There are two basic approaches for implementing a carry-over provision. One is through an ABC Control Rule, and another is just simply doing it on a case-by-case basis.

So the guidelines themselves describe a couple of considerations for using these through an ABC Control Rule. One is that the Council should consider the reason for the ACL average. And the Council should evaluate the appropriateness of carryover for overfished stocks, or stocks in rebuilding plans. So, the NS1 guidelines layout those considerations; and the draft tech memo goes into additional factors that should be considered.

A couple of them include, if you do this through an ABC Control Rule you should describe how underages will be accounted for when they are in a multi-sector fishery. You should establish limits on the amount of under-harvested ACL that can be carried forward. In addition, it recommends that you consider simulation analyses to ensure that overfishing is prevented.

So those are ways to do this through a control rule. You can also do it on a case-by-case basis outside of the control rule, and this is already done in several fisheries. For example, you could rerun the projections that were used in the last stock assessment with new catch data, and that would be accounting for the quota that wasn't used, and providing new catch advice. You can also look at scenario planning within an assessment to evaluate a wide range of underages that might occur, and then set potential OFLs and ABC based on those underages.

And then when you know the catch levels that occurred, and what underages occurred, the

SSC can take that information and provide advice. So, it's a way of, basically, preplanning for underages, and allowing carryover of those. So, moving on to phase-in, similarly, the guidelines allow changes to catch limits to be gradually phased in over time, not to exceed three years as long as overfishing is prevented. So, as with carryover you can do this through an ABC Control Rule, or you can do it on a case-by-case basis. The guidelines provide some considerations that need to be considered. One is that the phased-in catch level needs to prevent overfishing every year. So, for example, the catch level can't exceed the OFL in any year, and you should also, as with carryover, consider the appropriateness of this provision for overfished stocks or stocks in rebuilding plans.

And then the tech memo describes some additional factors that you should consider than what the guidelines describe. For example, the tech memo says that phasing-in decreases but not increases will have the effect of changing the
average buffer size, and you need to consider this and potentially increase it to maintain an acceptable probability of not overfishing.

Also maintaining buffer between the ABC and OFL is advisable, especially if there's no buffer between $A B C$ and $A C L$. Similarly to the carry-over provisions this tech memo notes that simulation testing is a good idea to ensure that any phase-in does not result in overfishing.

And then to go into ways you can do this on a case- by-case basis, outside of the ABC Control Rule, the SSC, if they note that there is considerable uncertainty in the catch or recruitment variability or other factors they can go ahead and recommend phasing in catch reductions or increases. This is done, for example, in some of the Alaska FMPs.

In addition, another way of doing it is through a forecast -- through a stock assessment where you project whether you can safely phase in a reduction without risk of overfishing. So those are two ways you can do it outside of an ABC

Control Rule, and those are described in more details in the tech memo.

The final section of the draft tech memo describes additional characteristics of fish stocks and fisheries that might impact the risk and benefits of carryover and phase-in. For example, the life history characteristics of the stocks, if you're looking at short-lived stocks, you might need to apply cautions because they are already at risk, at greater risk of overfishing, understanding the spatial dynamics of fish and fisheries is also important to evaluate the risk of carryover and phase-in.

When you're looking at jointly-targeted stocks or fisheries that have bycatch issues, you need to recognize that carrying over catch from one year to the next will shift the target stock, but also shift the target of the bycatch, and you need to consider that.

Another issue that is outlined in the tech memo is the idea of allowing carryover provisions while not requiring paybacks for ACL
overages can lead to catches exceeding the ACL's on average, and that could be a problem.

So those are some of the ideas presented in the tech memo there are many more, and we are very anxious to get your feedback so we can wrap this up and have it available for folks that are interested in implementing these provisions.

The last thing I'm going to touch on is Group 3, this group is Co-Chaired by Jim Berkson and Marian Macpherson. They are exploring effective ACLs in data poor situations. So some of you are more aware of this than others, it's really challenging to implement effective ACLs in data poor fisheries. And during the last round of guideline revisions, we included new language clarifying that Councils can recommend alternative approaches for developing management measures, and reference points for data poor fisheries while still complying with the Magnuson Act.

So this group is essentially looking at
how we can use that flexibility. They are specifically focused on identifying which stocks
this might apply to, so which data poor stocks would be most appropriate for this provision. They are looking at recommending alternative approaches for defining and managing to an ACL that still comply with the Magnuson Act, and preventing overfishing.

> And we are looking at identifying
assessment approaches that may be used to generate valid assessment -- valid estimates for certain types of data poor stocks.

So this tech memo, is still in
development, we've had a lot of discussions internally about it, and it's presenting a variety of ideas. We are still working through it, but we do hope to present this to you at a future Council CCC Meeting. We don't have a great sense of the timing on this one yet, though.

So that's the work of the NS1 Technical
Guidance Workgroup. I'm happy to take any questions you have.

MS. McCAWLEY: Thank you, Stephanie. Questions, comments? Yes, John.

MR. GOURLEY: Thank you very much. You mentioned that guidance was going to be developed for when we can use $S P R$, we are going to be -well, in response to our last bottom fish stock assessments we are going to be separating out our BMUS into a deepwater complex and a shallow water complex, and it appears that we might need to use SPR for the shallow water complex, so we would appreciate the guidance so that we can go ahead and incorporate it. This is going to be done -start very soon. So, maybe next week, you could have it done and sent over?

MS. HUNT: I thought you were going to say next year. We could meet you next year. Yes, so our timeline on this is to get a draft ready by the beginning of 2020, and then hopefully reviewed by the summer. But we've definitely been engaging with folks in your region. In fact, a lot of the methods that they've used is part of what's driving our analysis of this.

MR. GOURLEY: We have a lot of stocks
that are data poor, and so we do have use for
this, definitely. Thank you.
MS. HUNT: You're welcome.
MS. MCCAWLEY: Other questions, comments? Tom?

MR. NIES: Thank you, Madam Chair. I've got three or four, if it's okay if $I$ just go through all of them.

MS. McCAWLEY: Mm-hmm.
MR. NIES: Thank you. Stephanie I wonder if you could go back to your slide 6 that will help queue these up a little bit.

MS. HUNT: You have to tell me when I get there.

MR. NIES: It's in Subgroup 1, what they're doing, that one.

MS. HUNT: Right there.
MR. NIES: So I guess I've got a couple questions about what this workgroup is producing. And the first question is, is there any discussion in this workgroup of what might be appropriate reference points in a fisheries ecosystem plan? It looks -- it appears from the slide that
everything is focused essentially on single stock -- single species, single stock reference points. Are they discussing the concept of how to set an EBFM reference point?

MS. HUNT: Not in this subgroup. This subgroup has a long list of ideas that they wanted to pursue, and we're having a hard time getting going, and we all got together and focused -decided that this would be the priority to start with, but $I$ think the $--I$ think potentially some of those ecosystem ideas will be ticked off next. The EBFM Workgroup is meeting this year, and they're taking a look at the list of ideas that we had generated as part of this, and they may try to tackle some of them through that workgroup.

MR. NIES: I'm taking notes. All right, the next question is on the same slide. I'm struggling a little bit, I'm not sure if it should be on this slide for the sulogroup or the data poor slide. We have a number of stocks now, we've got a number of stocks where the assessments have
failed and we've struggled to define reference points under the empirical approaches that we are using despite catch advice.

It's not clear to me whether Subgroup or Subgroup 3 is actually addressing that particular issue. The overfishing point might be relatively easy to address. In some cases if we have a yield-per-recruit relationship, but we've struggled a little bit with the overfished in defining OFLs, and we've actually had a number of stock assessments come out where the peer review says, we cannot define an overfishing level, which of course freaks the lawyers whenever we try and submit those specifications.

So, is that being addressed by this group or the other group?

MS. HUNT: I think it's best addressed through this group, the situation you're describing because it isn't data poor, per se, you have a lot of information. The group is looking at, if you can't directly estimate FMSY and BMSY what would be appropriate proxies, so it seems
like they should be providing some information that would be helpful.

But I think it would be -- I would recommend that we have a call with some of the relevant folks to make sure that your specific issues are being addressed, part of -- you know, we want this to be useful, and I think having some examples of on-the-ground problems will help them. So, it's something we've been talking about, we've got folks from the Northeast Center on this group, so we could get somebody from GARFO and the Center, and a couple of members of the subgroup together to understand -- better understand what the issues are, and to make sure that, if we can, we provide advice that is useful. MR. NIES: Thank you. On the next slide you talked about the Catch Accounting Workgroup, or Subgroup, whatever it is. You know, there was an interesting discussion today during the Recreational Fishing session, where I believe it's the Mid-Atlantic Council and perhaps AFMSC are considering how to incorporate uncertainty in the

MRIP estimates into monitoring of ACLs and I think it would also be a question perhaps that it's stock-assessment related. Is this Catch Accounting Workgroup looking into that issue at all?

MS. HUNT: No. They're looking at things like, you know, predation and how to account for, like shark predation, taking fish off hooks how -- how you account for that, scientific research and things like that.

MR. NIES: And my final question that $I$ think relates to the same -- to the first subgroup actually that, you know, I believe we have a participant who is participating in this workgroup, and one of the issues that has been raised, and I'm not quite sure where it's at, is whether this workgroup is getting into how to make the reference points decisions and the use of management strategy evaluation consistent with each other.

You know, the Agency is promoting the use of MSEs to test a lot things that we are
doing, or proposing, and one of the questions is, that he has raised, as if we have any MSY proxy that's approved based on some stock recruit relationship, do you now constrain the operating model in your MSE to only that particular recruit relationship -- stock recruit relationship, which, in some respects some people would argue really isn't consistent with the concept of MSE, but if you want your MSE to be consistent with your reference points, it's a question whether that should be constrained.

Now it's his opinion anyway, and I guess our Council's opinion that that type of issue would be something that perhaps this working group should talk about, and I'm not sure the other members of the working group agree. But do you know if that's been raised at all?

MS. HUNT: I do not know. I don't know.
You've stumped me but $I$ will take that question for the record and get back to you.

MR. NIES: So I'm batting 250, so there we go. Thank you. MS. MCCAWLEY: Are there other questions? Yes, Mike?

MR. BURNER: Thank you, Madam Chair. And thank you, Stephanie. And thanks for the difficult, technical work here, it's helped our Council directly. In September, we considered a phased-in approach for one of our ground fish stocks, ultimately decided not to pursue it at this time, but having that technical memo in hand, and having Dan Holland at our SSC certainly helped, and we provided some comments there. Looking ahead to the two papers coming out of the Subgroup 1 regarding BMSY, and the other on total catch accounting, you mentioned summer of 2020. I was wondering what sort of review period there might be there, because not only would our SSC be interested in seeing that, but our full Council as well. And we can start penciling that in for our September meeting, or if June was more appropriate, I wasn't sure.
I know it's kind of difficult to look
that far out of when exactly those drafts would be ready, but the earlier we can plan, the better it will work for us. Thank you.

MS. HUNT: Okay. Thanks for the input on timing. I don't think we have set that kind of a timeframe. I think it is challenging to have like a six-month review process which is what we are dealing with the carryover and phase-in. It's hard to get these things completed with that timeframe. But we can check back in, in the spring and see where we are, and figure out when it's appropriate to get it on your Council calendar.

MS. McCAWLEY: Other questions and comments? Yes, Carrie?

MS. SIMMONS: Yes. Thank you, Madam Chair. Thank you for your presentation Stephanie. I have question on slide 15, I guess, it's maybe the extra slides you didn't get to.

MS. HUNT: Oh.
MS. SIMMONS: Can you explain the gulf snapper and grouper-tilefish, IFQ 10 percent used in FMPs carryover?

MS. HUNT: No. I definitely can't explain that. That's why I took these slides out. (Laughter) No, actually -- yeah, I haven't studied up on this, and there has actually been an email exchange going on about this example, and I haven't followed it, literally, over the last two days. So, would you like me to follow up on anything else in particular, or did we capture it wrong?

MS. SIMMONS: I don't -SPEAKER: No.

MS. SIMMONS: Yeah, I'd like to capture your answer, but I'm not sure in the essence of what the guidelines are suggesting is that's really what's occurring.

MR. CRABTREE: I think what that's referring to is the provision in the regulations that at the end of a year, if you're on an IFQ trip, and you go over and you can get it to the connector so, it's not a carryover in the sense of unused quota's carryover. And I was kind of surprised to see in there as well. But I'm pretty
sure that must be what it's referring to. MS. HUNT: Right, so we did provide a bunch of examples in the tech memo, so we'll take a look at this one. And as I said, there's been an email exchange about it, and I don't know where that landed. So, I'll take a look at it.

MS. McCAWLEY: Other questions,
comments? All right; thank you, Stephanie, for this presentation.

MS. HUNT: Thanks.
MS. McCAWLEY: All right. Next up on our agenda is a presentation about the NMFS website. And that is from Rebecca, is it Ferro? MS. FERRO: Yes.

MS. McCAWLEY: All right. Thank you.
MS. FERRO: Okay. Let's go, and we'll see if it works. Thanks Anjanette.

MS. RILEY: (off mic)
MS. FERRO: Okay. Thank you. Hello, everyone. Good to see you all again. It's been 18 months. I think $I$ had a better view of you all in Sitka, to be honest. But that's okay. And
good to know you're ready for happy hour, we are ahead of schedule, so I'll try not to drag this out too much for you, and allow you some time to ask some questions.

> So, since we were last together, I'm going to give you an update on everything that's we've achieved in the past months, some updates on our customer satisfaction data, where we are at with improvements and how we are prioritizing those, some user testing with our fishermen at the moment that we are working on, and some other site improvements on some of our key landing pages that I think you'll be most interested in.

But before we get started, I actually
wanted to share a short video that we did this year, for our visitors to help them kind of know better how to navigate this site. Of course when you're changing your site around you move their things around and people have trouble finding things, so we did this video hoping that it would help them with their navigation and search.

Is there a play button here Anjanette?

It's a short video it's less than two minutes. There's a couple of things that we did to help users find items on the new site, and so we did this video and we also created a site index, and I'll show you that a little later on too.

SPEAKER: (off mic)
MS. FERRO: Do you want to get down to the footer?
(Off-the-record discussion)

MS. RILEY: Sorry.
MS. FERRO: Can we start from the beginning?

MS. RILEY: Yes.
MS. FERRO: Thank you. Yeah, everybody is awake now.
(Video playing)
SPEAKER: Welcome to the New NOAA Fisheries website.
(End of video)
MS. FERRO: Thanks, Anjanette. Okay, so let's get started. Where are we in the migration process? We are three years in, we are starting
our fourth year, we are about 70-75 percent complete.

Since we last met, the Pacific Islands Regional Office Science Center, Alaska Region and Center, and Southeast Region and Center have all completed their migrations, they are all in the new site which is actually showing up in our usability research and data from the customer satisfaction surveys that we are getting. And in the works, sites that have been redirected already to the new site but there still a bit more content to migrate, that's the Greater Atlantic Region and West Coast Region, they hope to be finished by the end of this year. And then in the remaining schedule we've got the Northeast Center who -- or which is hoping to wrap things up next March, and the Northwest Center, and the Southwest Center are hoping to finalize and turn off their old sites by August of next year. An update on our goals, we originally were hoping to increase our traffic by 10 percent annually after migrations are complete and we are on track with that actually. We did -- I've checked in with all the sites that have finished their migrations thus far, and since the final migrations for the Southeast Region happened in June, our traffic is up about 10 percent across all the completed migrated sites.

The other interesting think that we are seeing is that we have more mobile visitors now than we have in the past. We are up front about 25 to 50 percent mobile traffic, and that is likely because this is the first time we've had a mobile-friendly site, and also the Google algorithms in search engines, actually prioritize mobile-friendly sites. So that works out in our favor.

Our baseline data for our customer satisfaction score started out around an average of 69 across our sites, back in 2015 it ranged from 49 for one particular site to as high as 76 on another site, so we are seeing our score for this current year, 75 plus, and that is actually above -- mostly above the government benchmark,
which is 75 for just desktop, and 84 for mobile.
And that 5 percent jump between desktop and mobile is actually pretty average trend across all sites. And what $I$ think you'll be interested in though, is our recreational fisherman's scores are up, 74 for desktop, 77 mobile, and where we are still yet -- we still have a lot of work to do is with our commercial fishermen, the score is still about the same, 55 for desktop, but it is up for mobile, so there's some interesting trends there, and I'll drive a little bit deeper into that.

You'll notice in the corner up here, we got a Webby Award this year, which is the best of the Internet in the Science category, so we were excited about that. We've also gotten a Muse Award, which is for design, and Acquia Award for government partnership, and just a couple weeks ago, the site got an award for W3, which is accessibility on the Internet. Who knows, maybe there's another award out there, I'm not quite sure, but we are working on it.

Here are some interesting Google analytics trends. So this is where you see that our mobile traffic is about half of all of our users, including our new users. What's interesting is the differences you see between our desktop users and mobile users. The desktop users are visiting more pages, that's that third column that you're looking at up there; 4.7 million about.

And they're spending more time on pages, so we are putting out a lot more current news feature stories, et cetera, new content coming up, so the desktop users are definitely on the site longer. And that makes sense. If you're on your phone you're mostly scanning.

Here's the charts, you see the blue line, is our new site, and then the purple line is the Federal Government benchmark. So you can see that we are mostly above average with Federal Government websites.

That's desktop, this is mobile saying we are above the Federal Government average for the
most part on mobile trends -- satisfaction trends.
This is just quickly to show you our satisfaction scores across the site are pretty consistent from quarter to quarter, folks plan to return to the site, say, information was easy to find, for the most part. There are some exceptions, user exceptions and we'll get there. Here is where we get into our specific audiences. And I apologize, this is hard to see. The bars are actually the number of visitors for each site, so you can see our general public is the biggest bar there, followed by recreational fishermen, followed by students, educators. I think the eighth bar over is our commercial fishermen audience. So our commercial fishermen audience, we had 70 respondents.

What you see at the bottom are our satisfaction scores, so there's the line for the 2019 scores, and the line for the 2015 scores and we put in some arrows there to show that the customer satisfaction scores across most of our audiences have improved, so, with the new site.

So where we still have work to do is with the commercial fishermen, and I'm going to dive into that. So, that's desktop.

This is mobile audience, and what's interesting on this slide is that suddenly our commercial fishermen audience has moved from the eighth slot -- the audience in the eighth slot to the number four slot, and the satisfaction score for commercial fishermen in this category jumped 11 to 12 points. So that's another just interesting factoid that we've noticed here. So, what are we working on in terms of overall improvements? So, like clearly that we do have some usability issues we need to tackle, we are continuing to look at the 4 C satisfaction data, but what we have going on right now, is the user testing with the fishermen, and so we have worked out some specific tasks that we are asking them to complete.

We have our user experience experts getting on the phone with them and actually asking them to complete tasks to see how they're doing,
how they are moving through the site. We've finished the testing with the Alaska Group, and it was truly a bell curve where we had users that were very happy with the site, users that were very unhappy with the site, and those in between that when, you know, we were asking them to complete a task, it took them a little while, but they eventually found that, and it turns out once they find their page they bookmark their page anyway.

So we are taking all that feedback, we are going to be interviewing some recreational fishermen, commercial fishermen for higher charter, both in -- the southeast is next, they are our next group to target.

So, once we get all that feedback, we'll take that and start working on improvements to site to address some of the issues that -usability issues that they're having. We are working on search engine optimization, we've had an expert provide us some input and do an audit of our new site to tell us
how we should be improving to increase the rankings of our content in search engines, so when our user goes to Google, which 60 percent of all our users come to our site from a search engine, they can enter it in, and make sure that our content is rising on that first page of your results in a Google search.

The audit was maybe 50 pages long, those persons, there's a wealth of information and we probably learned more that Google knows more about us than we really want Google to know. So, we've got our work cut out, as far as it could be a multi-year plan, so we're trying to prioritize these improvements now, as we move through the audit.

We also had our desktop on mobile
usability audits done. Those improvements were slipping in to our sprint process as we go. One of the next big improvements that's on our list to do is overhauling the internal site search so when you go to our site and there's that site bar up in the right- hand corner, and you type something in,
we needed it to be more robust.
So, for example, users who are trying to
find a publication by a particular author, they can enter in that author's name and that publication would pop up. That's how robust we want that search box to work.

These are some of the questions that we're asking our fishermen, test subjects I guess, and so just asking them to complete some specific tasks. We worked with our user -- subject matter experts in the Alaska Regional Office to help us devise some questions for our Alaska fishermen and the same for the Southeast. Particularly in the Southeast we know we want to ask some permit questions to make sure that they're finding their permits, and then just other generic questions about their use of the site.

So I'm hoping to click into some of our -- thank you, Anjanette. Do you want me to come up there?

MS. RILEY: You can stay there.
MS. FERRO: Okay. Let's show them the
site index. I think that's something new that you all haven't seen. We created this -- you know, you can only have so many links and dropdown menus in the global navigation, so this site index, we just have so many topics that we cover. We created the site index so that users could dig into like some of those sub topics and get to -- I don't know, dive into specific sub- topics.

Do you want me to come up to the site? MS. RILEY: Oh. It wasn't showing on the page.
(Off-the-record discussion)

REPORTER: Use the microphone though, please.

MS. RILEY: Can you help us, please? We need to be able to see the website now. Sorry. MR. KELLY: Do you want that on the screen?

MS. RILEY: Yes, please.
MR. KELLY: Okay.
MS. FERRO: Thank you. Okay. So this is -- sorry guys.
(Off-the-record discussion) MS. RILEY: Is it working?

SPEAKER: Here you go.
MS. FERRO: Thank you. All right,
technical crisis averted; people. We are still on track for happy hour too, so that's good. This is our deeper dive site index that we created, so you can see we've added additional topics here, we can't -- we don't have room for the -- in the global navigation for all of these topics, so this is a way for users to scan additional topics to click into.

The other place where I think you'll find some differences is in our rules and regs landing page. We've reorganized this so that it's organized by our regional -- our regions, and there's links into -- it takes the user to, directly to notices and rules, whether that was open for comment, regulation management plans, bulletins, especially -- all those specific things to regions. And then resources are done here as well, so you can click into your regional
management Councils, or other related high-level topics are there too.

Under fishing and seafood we've done some updates where we've organized the content better for sustainable fisheries where it's high level, status of fisheries across tier management and science, where $I$ think you'll be most interested to see the changes though in our resources for fishing which takes you to commercial fishing, as well as recreational fishing. So, if $I$ were to click in here, we've got content for commercial fishing, rec fishing, subsistence fishing, and our fisheries by region. This content goes to specific regional landing pages where you can see all the fishing resources that we need there, or other topics as well.

Clicking into fisheries by region, we go into a page, each region has a sustainable fisheries page like this one, and it helps users get to specific content. Now each region -content varies from region to region, so there was
some -- this allowed some flexibility for each regional office to add the links that they needed to various different kinds of resources.

And likewise, you can go into a region and get to this content as well, if you are most likely to search things by region at a high level. So this is another way to get there. Other resources, we've got permits. This is also organized by region.

And I think that was mostly what I wanted to share with you all today. I think I'm ready for questions. Do you guys want to see anything else while I'm up here I can?

MR. GOURLEY: We need some (inaudible) and the little dots.

MS. FERRO: Oh, right here?
MR. GOURLEY: The little dots, yeah.
MS. FERRO: We need some Mariana dots?
I will take that back to our graphic designer.
MS. McCAWLEY: Jim? I remember, and she talked about you guys, okay, so it's our turn. Hurry up, quick, let's just look at it then.

MS. FERRO: All right.
MS. McCAWLEY: So, Miguel?
MR. ROLÓN: I'm curious because I'm ignorant about this, but do you know about the management plans in the Caribbean? I have one in Latin, integre accusamos duo (phonetic). It feels like I'm in church. I don't know what this is all about, maybe a mistake, or maybe it's like for something else.

MS. FERRO: I'm sorry. Can you repeat the question?

MR. ROLÓN: About the management plans.
MS. FERRO: Oh, the management plans, okay.

MR. ROLÓN: For the Caribbean.
MS. FERRO: Let me go looking. Here?
MR. ROLÓN: Yeah.
MS. FERRO: Management plans, we are missing one?

MR. ROLÓN: Yeah, and that one, "integre accusamos duo." What is it?

MS. FERRO: Oh, yeah. I don't know.

MR. ROLÓN: I feel blessed --
MS. FERRO: Oh, it's a test. Good catch. Thank you. We need to get back and look at those, yeah.

MR. ROLÓN: (off mic)?
MS. FERRO: Yeah. I know it is, it's a place holder, it's one of the original test pages that didn't cleaned out. Sorry about that. We'll delete that.

MS. McCAWLEY: Kitty?
MS. SIMONDS: So, I noticed that you had a category that said fisheries and sharks. So are sharks not fish? I mean, it's just unusual that you would be -- yes, that.

MS. FERRO: It's a keyword, sharks are a keyword that attract a lot of attention, especially for the general public audience, they are part of the same fish group, it's just adding a keyword there.

MS. SIMONDS: Yeah, yeah, okay. Political placement --

MS. McCAWLEY: Other questions or
comments. Tom, and then Eric? SPEAKER: All right, let's see what he says, and I'll see if $I$ can go (inaudible). MR. NIES: Thank you. I guess I've got
a question about maybe the design criteria for the webpage. Was there a decision made to remove useful documents? And what I mean by that is that, you know, I've searched for a number of documents that $I$ used to be able to find on various Regional Office web pages. And now it seems like they're not there. Some of them are still available on the Regulations.gov webpage, but that takes a pretty good effort to really dig those out.

I mean, an example I used, you know, as Mr. Witherell and I were talking a few weeks ago about supplemental information reports, and I was looking for one from the North Pacific which used to be on the Alaska Region webpage, and now it's not anywhere that I can see, except on the Regulations.gov webpage, which took me, who, I consider a fairly experienced web user, you know,
probably a half hour to figure out. So is that a design principle that you adopted not to have things that are on the web somewhere else?

MS. FERRO: So, a couple of things that we took into consideration when we started this project. One was as a communications tool, we wanted to focus on current content, and get away from treating the website like a filing cabinet, but that is not necessarily to get away from maintaining important documents that are useful and audiences need to get to.

So, we had an inordinate amount of PDFs to migrate over. I think it was like 55,000 PDFs across all of our websites. As part of this project all of those PDFs have to (inaudible) accessible when they migrate into the new site, so that could be an issue that has been slowing folks down, migrating older documents.

They're also looking at the traffic to those documents to prioritize what they're moving over, so the most visited documents get priority migration order. I do know a lot of the regional
offices are migrating a lot of that historical documentation attached to amendments, and rules, and notices over. So it could be something I would probably check in with the Regional Office and just ping them and let them know that you're interested in those documents.

MS. McCAWLEY: Tom?
MR. NIES: Just to follow up, and I don't know if this is something that would be easy to do or not. But you know, a lot of times the Federal Register notices from the past, whatever reference to a webpage which no longer exists. And I understand you can't go back and correct the Federal Register, but is there any way that, you know, rather than to file a "not found" answer, there could be something that says -- even something as simple as, go look at the NOAA Fisheries webpage.

MS. FERRO: So, there should be a redirect for all old sites, got into the site, and what we've asked our Regional Offices and Centers -- all the office sites to do is to identify redirects, specific redirects that we would want to put in place. And that could be what's so needed is to determining some extra redirects that maybe need to go to a specific place on the new site.

MS. McCAWLEY: Any other questions or comments? Eric?

MR. REID: Yeah, I mean I'm not the -when it comes to computers I can beat the hell out of it, because $I$ don't know how to use it half of the time, but it's a little bit hard to navigate. I mean, the website is beautiful but, you know, I'm trying to do it right now, and if $I$ put in fish and sharks, and I put menhaden for New England, and the Mid- Atlantic, and I put find results, I get, no species match your filter criteria.

I figure menhaden was a pretty simple one, that's what it is. I looked for -- was it Bocaccio, because I don't know anything about Bocaccio. But $I$ couldn't find anything about that either, it's a little bit hard just to get through
it. You know, I look for landings data, that's my big thing, and it's really hard to find.

MS. FERRO: I don't know if I spelled it
right, but $I$ will tell you that we don't have all of the fish species in here, what we started with was -- were all the species that were on FishWatch.gov, so now the regions are trying to prioritize the next layer of -- level of species that need to be migrated in, and they have to create profiles for all those fish species, so that's might be why this one doesn't have a profile yet.

MS. McCAWLEY: Okay. Other questions or comments about the site? All right, yes, Marcos? MR. HANKE: Thank you. Thank you very much for taking into consideration most of the recommendations at Sitka; thank you very much. The only thing is that $I$ tried to put the hat of people that have never been into fishery, right? MS. FERRO: Mm-hmm. MR. HANKE: We have to assume that they know that the Caribbean Council, and other

Councils under this region. I remember very clear that we discussed the need of having a Council bottom, direct button, or something to press up ahead in order to facilitate the Council -- to fine a Council.

The Caribbean is still a little bit deeper into the weeds to find it, and I can see many people not finding us, on this scheme, even it got way better, and I want to say thank you, to you.

MS. FERRO: Okay. Thank you. We've tried to put the links to the Regional Fishery Management Councils in a lot of different places, so like on our old site we have our Fishery Management Council, this is the first tab here under Partners, but then there are multiple ways to get to our -- to get to the Regional Management Council's -- that we've added to all of the tabs here, I think. So, every single one, including here, so what would happen is, if we click in -let's just try to find -- I'm going to try then, Southeast page, let's do that.

So, the Southeast we've got three management areas, the Caribbean, South Atlantic and Gulf of Mexico. So this is our Caribbean landing page, and I'm thinking somewhere on this page, right there, is a link to the Caribbean Council webpage. So, it takes the user first to the Caribbean content that Fisheries offers, and then we should have a link to the Council on that page. Does that work for you?

MR. HANKE: For me it works, but I'm just putting the hat of somebody that has never been into the site, they don't know that NOAA is divided -- they have partners so they have the Southeast, and different regions, you know, and on our neck of th woods people know that the Council is there, because this is the meetings that they are attending. They're going to look for Councils, for Caribbean, CFMC Council in our case and --

But anyway it's much better, it's very functional. Thank you very much.

MS. FERRO: You're welcome. I just
typed in "Councils" just to see what would come up, and it takes -- recommends the partner's page, but then takes you directly to the Regional Management Councils too.

MR. HANKE: Thank you.
MS. McCAWLEY: All right; other
questions or comments? All right, Rebecca, thank you so much for the presentation.

MS. FERRO: Thanks everyone. I'll take your comments back, and add to our list of improvements.

MS. McCAWLEY: All right. Unless
there's any other business for today, we are going to adjourn for the day, and we will convene again in the morning at 8:30. Gregg has an announcement.

MR. WAUGH: During the CCC Committees and Workgroups, we'll be leading off with the Habitat, and I don't think there are any action items there. Communication Group, there won't be any, but we sent around some revised language that Mike put together as requested on the electronic
monitoring, so please look at that. We'll be looking for some CCC action tomorrow.

And then the CMOD, the Fishery --
Regional Fishery Management Forum, I don't believe we made a final decision on that. So, look that stuff over, the cost information, and we'll want to pick that up. And then finally the terms of reference, take a look at that. There are some changes there we want to approve that. That will help us move along more quickly in the morning. Thank you, Madam Chair. MS. McCAWLEY: Thank you. Any other business for this afternoon? All right, then we stand adjourned for the day.
(Whereupon, at 4:46 p.m., the PROCEEDINGS were continued.) * * * * *

## CERTIFICATE OF NOTARY PUBLIC

DISTRICT OF COLUMBIA
I, Mark Mahoney, notary public in and for the District of Columbia, do hereby certify that the forgoing PROCEEDING was duly recorded and thereafter reduced to print under my direction; that the witnesses were sworn to tell the truth under penalty of perjury; that said transcript is a true record of the testimony given by witnesses; that I am neither counsel for, related to, nor employed by any of the parties to the action in which this proceeding was called; and, furthermore, that I am not a relative or employee of any attorney or counsel employed by the parties hereto, nor financially or otherwise interested in the outcome of this action.


Notary Public, in and for the District of Columbia My Commission Expires: March 31, 2022

