SOUTH ATLANTIC FISHERY MANAGEMENT COUNCIL

DOLPHIN WAHOO COMMITTEE

Hilton Garden Inn/Outer Banks
Kitty Hawk, North Carolina

December 4, 2018

SUMMARY MINUTES

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Dr. Mike Larkin
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Dr. Clay Porch
Dale Diaz
Erika Burgess
Nik Mehta
Rick DeVictor

Other observers and participants attached.

The Dolphin Wahoo Committee of the South Atlantic Fishery Management Council convened at the Hilton Garden Inn/Outer Banks, Kitty Hawk, North Carolina, Tuesday morning, December 4, 2018, and was called to order by Chairman Anna Beckwith.

MS. BECKWITH: Folks who are on this committee, it is myself, Chester, Dr. Crabtree, Jessica, Art, David, our Mid-Atlantic liaisons, our New England liaison, which is not here, Doug, Kyle, Chris, Tim, Steve, and our Coast Guard representative, and so pretty much everybody except Spud and Mel, I think. Does anybody have any suggestions or alterations to the agenda?

Seeing none, the agenda is approved. If anybody has any corrections or additions to the minutes from June of 2017, which is the last time we met, we welcome those. Seeing none, the minutes are approved, and I will turn it over to Mr. DeVictor to give us the status of commercial and recreational landings.

MR. DEVICTOR: Thank you, Madam Chair. I will go over commercial landings, and this is in your briefing materials, Tab 4, Attachment 1a, and that is commercial landings through November 5. We have updated landings on the screen there, and that's through November 27. Just going over commercial landings for dolphin and wahoo, for dolphin, the 2018 ACL is just over 1.5 million pounds. Landings, as of November 27, is at 531,137, which is 35 percent of the annual catch limit. Moving over to the right-hand side, in the column, you can see where it ended up last year, which was 43 percent. Moving on down to wahoo, the 2018 ACL is 70,542, and the landings is at 41,262, and that is 59 percent of the ACL. Last year, 96 percent was landed, and then we're going to have Dr. Larkin call in and run through the recreational landings.

DR. LARKIN: I will go through the dolphin wahoo recreational landings. These landings are summarized using MRIP. The 2017 landings and the ones before that are final. The landings estimates are data from Wave 1 through Wave 4 of 2018, which is January 1 through August 31 of 2018, and all these landings include MRIP as well as the headboat landings.

There is a bullet that I forgot to put in this one, but I have it in the next presentation, later on this afternoon, but, in 2018, we switched the effort component of the survey from a phone survey to a mail survey, but we have conversion factors, and so, without making this too confusing, the landings that I'm showing you now are equivalent to the phone survey landings, because that's what we used to set up the ACLs, and so that's what I'm showing you now.

Then here is the landings, and the format I will give, and the next presentation this afternoon will be the same exact format, and this is a good starter one, because it's pretty short, and so you see the 2017 landings, and then you can see that both dolphin and wahoo are below their ACL. Then the 2018 landings are -- These are actually preliminary landings, but, anyway, currently, right now, what we have for 2018, they're also below their ACL, at 33 percent of the ACL for dolphin and 16 percent of the ACL for wahoo.

This format is the same as the other presentations that I will give as well, but this is the landings broken down by mode of charter, headboat, private, shore, and then the total. In the gray, shaded area is when the stock was monitored using MRFSS, but then you can see in this case, for mahi-mahi, we -- In 2014, the ACL is reset, and we started monitoring it with MRIP in 2014, and so that's what the gray and the non-shaded area means, and that's this table, is showing the landings by mode.

Then this here is a figure showing the landings broken down by mode, and so blue for charter boat and red for headboat, green for private, and purple for shore, but there were no shore for mahi-mahi. The landings, you can see the year there on the X-axis, and the Y-axis over on the left is the landings. Over on the Y-axis on the right is effort, with the red line being the MRIP effort and the orange line being the headboat effort, and so these are just general effort angler trips or headboat angler days, and they are not specific to mahi-mahi there for the region.

In this case, it's the whole Atlantic coast, and the stock is monitored, and we monitor the landings from the whole Atlantic coast there, and so this is a summary of the effort for the entire Atlantic coast as well. Then those dashes up at the top are the ACL. You can see that these bars have been below the ACL since the ACL was implemented in 2012.

Now for wahoo, it's the same setup. We are monitoring it in MRFSS and then, in 2014, it switched over to MRIP, and then this is the landings broken down by mode of charter, headboat, private, shore, and then total. Then the same format with the figure there, and you can see there was a brief overage in 2012 above the ACL, the dashed line, again, being the ACL, but then, in recent years, you can see all the landings below the ACL, because those bars are below those black dashes that I'm showing you there. Then that's it, and just dolphin and wahoo, and I'll be happy to take any questions, if there are any.

MS. BECKWITH: Are there any questions for either of those two presentations?

MR. DILERNIA: Could I ask that the table demonstrating the recreational mahi landings be projected again? There we go. Okay. If I look at the 2018, 2016, 2015, I see a very thin red line. There's that thin line between the blue and the green, and does that represent the headboat landings during that particular year?

DR. LARKIN: Yes, it does. You can see that it's so small relative to the other one that it's so hard to see, but, yes, those are the headboat landings.

MR. DILERNIA: Thank you very much for that. That was my question, and I do have a statement, if you would allow it, Madam Chairwoman. Recently, the Mid-Atlantic Council held a workshop with law enforcement regarding better understanding of law enforcement issues and developing a better cooperative relationship between the for-hire fleet and the council and the agency, and one of the issues that came up during that meeting was the fact that, currently, it is illegal to clean mahi at-sea. If you have a mahi permit, which comes from the Southeast Region, it's illegal to -- You cannot clean the mahi until you get to shore.

Now, if you understand the fishery in the Mid-Atlantic region, the mahi-mahi fishery exists anywhere from four to six hours offshore, or maybe more, and so what the headboats are faced with is, if they leave while -- They catch the mahi very often while tuna fishing offshore, and so, when they leave the fishing grounds and return home for a six-hour trip, the crew maybe spends an hour cleaning the boat and then, the next five hours, the crew is idle.

At the same time, there may be twenty or twenty-five passengers on the boat with five to ten mahi each, and, because they're not allowed to clean them or cut them, those fish remain un-cut. Once they arrive at shore, then they're allowed to cut them, but, after a six-hour ride home, to then expect

the passengers to wait around while all of these mahi are filleted or cut, it becomes they don't do it, and it becomes unreasonable, and so what the for-hire fleet asked at the Law Enforcement Committee meeting, and so this is not an official request yet from the Mid-Atlantic Council, because I have not --

I chaired that Law Enforcement Committee meeting, but I haven't presented the findings yet, but just as a matter of keeping this council informed at this point, the for-hire fleet has asked that the Mid-Atlantic Council ask the South Atlantic Council for permission to have mahi cleaned at-sea when that activity is occurring in the Mid-Atlantic region. Again, it's five or six hours offshore, unlike where mahi may be only a half-hour offshore or an hour offshore in the southern part of their range.

We're five or six hours off, and we're steaming home, and they're idle. The crew is idle. They hit the dock, and the folks don't want to wait around to have all those fish cleaned, and so the for-hire fleet is willing to adhere to any regulations to have those fish cut at-sea, such as leaving skin on the fillet, retaining the rack so that there's accurate count of the number of fish, although there is no possession limit, and so they're willing to do whatever caveats or constraints the Region or the South Atlantic Council would put on them, but they would like to have the permission to cut these fish at-sea, and so that is something that I would say to expect to get a request from the Mid-Atlantic Council in the future. I offer that information simply as informative, or sharing information, but I think the Mid, in the future, will ask this council for the ability to do that, to cut those fish at-sea. Thank you very much.

MS. BECKWITH: Okay, and certainly this council has some background in the discussion of filleting of fish. I think, if you guys were going to bring us a request like that with ideas, such as retaining the skin on the fish, retaining the racks, and maybe one of the requirements that we put in -- When we did this prior was it was two fillets equals a fish for a fish count, and so taking those things into consideration when that request comes before us might help move that discussion along, and so we will wait for that request before formally dealing with it at this committee.

MR. WAUGH: Mike, just to be clear, for 2018, that's using the new MRIP methodology, but converting it back to the old currency, if you will, that we're using to track the ACLs, and is that correct?

DR. LARKIN: Yes, that's correct.

MR. WAUGH: Okay. Thank you.

MS. BECKWITH: Mike, I guess, out of curiosity, I would like, eventually, to see what the numbers look like using the new calibration. I think we keep being asked what those numbers are, and we don't have a frame of reference right now to explain that to folks, and so, maybe for the next opportunity, a comparison of what they are using the old currency versus the new currency would be helpful.

DR. LARKIN: Just to prepare you, from what I've seen, they're much higher.

MS. BECKWITH: Right, but I think, since the MRIP numbers are now available, it stands to reason that we should be able to have that comparison, so we can answer those questions for our constituents.

DR. LARKIN: Okay. I've got you.

MS. BECKWITH: Okay. Is there anything else? Seeing none, the next thing on the agenda is a discussion of frigate and bullet mackerel, and I'm going to pass it over to John to give us an overview, and we'll see where we are.

MR. HADLEY: Thank you, and I'll just give you just a very brief overview to begin. Then I'll hand it over to Steve Poland for his presentation, but, really, what we're going to discuss here is the Mid-Atlantic Fishery Management Council's request to the South Atlantic to consider the addition of bullet and frigate mackerel to the Dolphin Wahoo FMP as an ecosystem component species, looking at the significance of these species as prey for dolphin and wahoo, and so Steve will go into a little bit more detail on the Mid-Atlantic's request and then some of the dietary studies that have been done that look at the bullet and frigate mackerel in the gut content of dolphin and wahoo.

Then I'll pick up from there and go over what other councils have done, looking at tackling unmanaged forage species. Then, really, the decision-point here that we're looking for today is just to come up with a response to the Mid-Atlantic Fishery Management Council. Is this something that the committee is interested in pursuing and gather more information, or is this something that the committee is not interested in pursuing, and so that's kind of the decision-point at the very end, but, with that, I'll hand it over to Steve.

MR. POLAND: Thank you, John. I am fully aware that I stand between us and lunch, and, as a big guy, I appreciate that concern, and so I'll try to get through this with brevity, but with the attention to detail that it deserves. Real quick, I'm just going to go over the background of the Mid-Atlantic's actions and their request to the council and then get into the pelagic food web as we know it in the South Atlantic and what we know about the species and then report on two studies, one more recent and one a little more long-term, of dolphin wahoo diets in the South Atlantic. Then, after that, I will take any questions on the diet information that I present.

Before I get into this, I want to preface this talk with I am presenting this information as I'm wearing my scientist hat, since I guess I've done the most recent and relevant work on this issue, and so, right now, I'm not a council member. I am presenting this information as I did it and reviewing what Rudershausen and a few other folks have done. Then, afterward, I will put my council hat back on and jump into the discussion.

Quoted here is the purpose and need in the Mid-Atlantic Council's unmanaged forage fish omnibus amendment, and, really, what it boils down to is they were concerned about the development of new fisheries and the expansion of existing fisheries on the forage base of some of their council-managed species, and so they decided to move forward with a comprehensive forage fish amendment, and this was an omnibus amendment, and so it touched on all, or most, of their fishery management plans.

The major actions it included was it did designate taxa in the amendment as ecosystem component species, and it will manage chub mackerel under discretionary authority, but then there was some later actions, where they're actually looking at doing a chub mackerel FMP, and it would require EFPs for any new fisheries that would develop on any of these EC species, and so the reason that the South Atlantic Council was requested to consider the two Auxis species as ecosystem components in the dolphin wahoo plan is because, in the final action, NMFS disapproved the inclusion of Auxis as EC species, citing National Standard 2, and, basically, the Mid-Atlantic Council did not provide sufficient enough scientific evidence to show that Auxis species constituted a significant portion of the diet in any of their council-managed species.

Another kind of layer to the onion of that too is NMFS also cited the Mid-Atlantic SSC's definition of what a forage fish was, and that was inconsistent with -- NMFS felt like that was inconsistent with how the Mid-Atlantic Council was applying that to those two species, and so the Mid-Atlantic Council felt that Auxis still warranted protection, and that's when they reached out to us and sent us a request, I think back in March, to consider management under the Dolphin Wahoo FMP.

With that, I'm just going to give a brief overview of what we know of the prey community out in the South Atlantic Bight, and it could really -- The prey community can really be categorized by four different prey groups. First is the sargassum-associated prey, and this is any prey that uses that sargassum habitat, the filefish, pufferfish, juvenile fish, and also juvenile fish of some of our council-managed species, and so dolphinfish, and even HMS-managed species. You will see billfish and stuff hanging out out there under that sargassum, and you will find it in the diets of our managed species.

Surface-schooling prey, flyingfish, and bullet and frigate mackerel can also be grouped in this category as well, but this really just is -- It's fish that spend most of their time at the surface, and they really don't have a depth component in their life history, and so things like flyingfish. Schooling prey are not necessarily associated with the surface, and so this is where I would group bullet tuna and other herrings and jacks and squid, and so these prey will come up to the surface from time to time, but they will also dive down and interact with that mesopelagic community. Then small aggregations of crustaceans, and so amphipods, stomatopods, isopods, and so just small crustaceans, and they can be anywhere in the water column.

Auxis, there are two species of Auxis, Auxis thazard and Auxis rochei. You often hear them called bullet and frigate tuna, or bullet and frigate mackerel, and I will probably use both of those interchangeably. The life history information on these species is limited, and there's a little bit of information on their maximum size, and not a lot of information on size at maturity or stock dynamics or anything like that. They are schooling fish, and they do feed on invertebrates and other small fish, and this is one of the things that NMFS cited in that final rule, as far as excluding these two species from the Mid-Atlantic's action, was that these species prey on other species that they designated as forage, and so they didn't feel like they were forage fish, in the sense of the Mid-Atlantic Council's SSC definition.

For the rest of the talk, I will be highlighting two different studies. The first one is actually my thesis work, and the field sampling was completed, I think, six years ago. Then, after this, I will get into another study by Rudershausen et al., which looked at the same species, but in a little different temporal way.

The objectives of my study were to, first, describe the diets of each of the species within the pelagic community, and I set out with the goal of describing everything, but that is difficult, because, one, we didn't collect enough blue marlin to really describe their diets fully, and I couldn't get funding for a large research vessel and unlimited days at sea to target blue marlin or anything like that, and so a lot of my focus was on the primary species in the area, the primary species in the area that the commercial and recreational fisheries interact with and land, and then opportunistically sample whatever I could out of the community, and so the four primary species I looked at were blackfin tuna, yellowfin tuna, dolphin, and wahoo.

The second objective was just to examine the predator/prey size relationships and infer anything we can about the trophic niches, and so, basically, where these predators fall out on the food web and any changes, as far as that hierarchy in the food web, over the ontogeny of the predators, evaluate competitive interactions between and among predators, and describe the structure of the U.S. South Atlantic, and so what does it look like? What does it look like from season to season and over time?

My methods for fish collection, I focused on fishing tournaments in North and South Carolina, as well as opportunistic sampling at charter docks, fish houses, and when I could get out there from time to time on my own, or anybody that was willing to carry me on as a mate for a couple of days. Since all the sampling was opportunistic and focused on the fishery and when the fish were being landed, of course, my sampling distribution is definitely skewed toward the spring and summer and early fall months, because that is, one, when fish are available, and, two, when there is the most activity in the fishery.

I was able to collect a sufficient number of samples, for at least a few of the species, to describe their diets across all four seasons, but, the ones that I was not able to, I was at least able to describe their diets across at least two or three seasons. I used two different methods, and stomach content analysis is pretty self-explanatory. You get a fish and cut the stomach out and dump everything out and ID it. From this, I collected information on the species that we saw as well as the size, weight, collected morphometric measurements on prey, and used descriptive statistics to look at relationships of different prey species and predator diets and stuff.

Also I used stable isotope analysis, and stable isotope analysis allowed us to look at community structure as well as infer a little bit on the diets of some of the predators that we did not sufficiently sample in a large enough sample size to really describe their diets, and stable isotope analysis basically looks at the presence of various stable isotopes at different elements in fish tissue and, from that, you can identify unique chemical signatures in predators and prey, and, from that, you can infer connection and interaction, not only between different predators, but predator and prey.

We looked at about 1,200 -- We sampled over 1,200 diets, a little over 1,100 of those actually had prey remains in the stomachs, and there was a lot of diversity, almost a hundred different species of fish across numerous families, and there was a lot of squid, a lot of crustaceans, and so there's a lot out there, and a lot of stuff available for these predators to consume. One thing to note, and you see there's a picture down in the bottom-right, and those are oranges. We did find a lot of different trash in the diets of these fish, and, really, mostly in dolphinfish. Dolphin tend to eat everything, non-discriminately, and oranges, chicken wing bones, Snicker bar wrappers, and we even found a Gatorade bottle. There's a lot of trash out there.

The next series of slides just reviews some of the results from the diet component of the analysis, and so here are the four primary predators that I had sufficient sample sizes to characterize their diet over the seasons, and you can see, with dolphin and wahoo, given the diversity of the diet in dolphin, their diet remains fairly consistent throughout the seasons. There were some variations in the amount of different prey, or the amount of particular prey items in their diets, but, for the most part, their prey remained pretty consistent.

I just wanted to point out too that, for the remainder of the talk, this lighter blue that you can see in the bottom-left with wahoo, that lighter blue represents Scombrids, and so the two Auxis species are grouped in this Scombrid group. Most of the Scombrids that we recovered from the diets were Auxis. However, there were a few other different Scombrids, false albacore and skipjacks and even a little yellowfin tuna, but, for the most part, a lot of the Scombrid prey was bullet and frigate mackerel.

For dolphinfish, they had the most diverse diet among all the predators. Over a hundred different genera were identified, and a lot of the diets were dominated by flyingfish and sargassum-associated prey, and we're all fishermen, or anglers, in this room, and so anybody that targets dolphin knows they hang out around weed lines and eat everything around them.

Size relationships of predator and prey, we definitely saw larger sizes of prey in the diets of dolphin, as dolphin grew. However, the average prey size did not increase substantially across the size range of the predator. However, the upper bound of prey size did increase substantially over predator-prey size, and it's most likely due to gape limitations, and so a small dolphinfish can only open his mouth so much, but, as it grows larger, the mouth gets bigger, and it can eat more things, and one thing that we did notice is, as the dolphinfish got larger, they became even more piscivorous. There is piscivory all throughout the size range, but, as they got larger, we started to see more specifics. There is a lot of cannibalism in dolphinfish.

You can see, from this figure, at about that 100-centimeter mark, once dolphinfish get to about 100 centimeters, or about three feet, fork length, they start to eat other dolphinfish, and, by the time they get to the largest size range I had, 25 or 30 percent of their diet is constituted by other dolphinfish. Scombrid did occur in the diet of dolphin, starting at about ninety centimeters, but did not really constitute a substantial part of their diet.

Wahoo were the most piscivorous of all the fish that we investigated. 97 percent of their stomachs had fish remains in them, and Scombrids were the most dominant prey, mostly bullet and frigate mackerel, in wahoo, and, for most seasons, this ranged anywhere from 30 to 50 percent of their diet was constituted by Auxis.

The size relationship of prey in the diets of wahoo, we saw an increase, a substantial increase, in minimum and maximum sizes of prey consumed by wahoo, and, again, this goes to that gape limitation. As they get larger, their mouth can go bigger and catch bigger things, and there was a lot of evidence for wahoo that they selectively forage, and so it's one of the fastest fish out there, with a big, toothy mouth. It has the ability to select what it eats, and it seemed like that selection was mostly larger fish, mostly Scombrids.

The next two slides are just a brief synopsis of the stable isotope results as it relates to the community structure out there in the pelagic community, and so, again, stable isotopes use two

different elements. I used carbon and nitrogen. Carbon lets you infer a little bit on the base of the food web, where primary production occurred, and nitrogen lets you infer on the trophic position or just the relative position of that fish in the food web.

This is a cluster analysis that basically takes the information on carbon and nitrogen and clusters that information together and parses it out to similar groups, and so it allows you to take a large dataset and really kind of parse it out and see what kind of groupings really fall out in it. I was happy that the groupings that the stable isotope analysis and the cluster analysis from the stable isotope data -- The groupings that it identified really followed with the types of prey groupings that we saw in the diets, and so your prey base kind of all fell out into one group, and these were sargassum, a lot of your filefish, scads, that kind of stuff.

There seemed to be a mid-level predator group that had Auxis as well as larger crustaceans and squid as well as smaller wahoo and dolphin and blackfin and yellowfin, and then you had your top-level predators, your sharks, your billfish, and your larger individuals of wahoo and dolphinfish and blackfin. You can see those groups right there, and so it was really good to do this and see that it confirmed what we were seeing in the diets.

This is just another way to look at that information. This is a biplot of carbon and nitrogen values, the carbon along the X-axis and nitrogen along the Y-axis, and so you can interpret this as, on the Y-axis, the further you go up, the further you go up the trophic food chain, more or less, and so, here, you can see that prey base down here, and your sargassum-associated prey and mid-level predators, and so that's where you see Auxis and a lot of your squid and smaller individuals of dolphin, wahoo, blackfin, and then your top predators.

I just want to point out, at the very top, you see a false albacore, which is very interesting, and I don't believe that they're a top predator. I just think that's an artifact of this stable isotope analysis. That's one of the issues running through a stable isotope analysis, is species that does an inshore and offshore -- If there's a lot of movement, they're really feeding on a couple different communities, and that can really kind of muddy up the signals you're seeing there, and so I really think that's what we're seeing there with false albacore. It's a lot of that coastal influence on the elemental signatures we're seeing.

From that, the conclusions, there is evidence of generalist foraging among all the predators, and this is probably due to just the limited resources of prey out there. I mean, there's a lot of diversity in prey, but you've got to think of fish out in the open water, and the only habitat that's out there is whatever is floating on the surface, and there is big stretches of just water, and so I say limited resources in the sense that they've got to be opportunistic. They've got to take the opportunity when they see something to eat and chow down on it. Given that, there were a few species that did contribute disproportionately to the diets, squid, flyingfish, and bullet and frigate mackerel.

Next, I will go over a study conducted by Rudershausen et al. The objectives of this study were very similar to mine, to look at comparisons of diet overlap among blue marlin, wahoo, yellowfin tuna, and dolphin, and look at it a few different ways. Temporally, to look at that interannual variation, and so variation from year to year, and then historic versus present diet, and so look at if there were any shifts in diets from this study and historic studies from decades past and then see how that compares to other regions, to other oceans, the Pacific and Indian Ocean.

The same methods as mine, and they collected fish from tournaments and looked at the diets. However, Rudershausen et al. only looked at diets from fish collected at the Big Rock Blue Marlin Tournament, and this tournament is a weeklong tournament in Morehead, and it occurs every year, and it's going well into its fifty-plus year. This provided a unique opportunity of -- They're able to get a snapshot in time every single year, the same week every year, to look at these diets, and so they really can't say anything on seasonal trends in diet, but it lets them get at that more long-term trend in diet.

They used a principal components analysis, and this is just a descriptive statistical analysis that allows you to take a cloud of data with a lot of different variables and draw two lines through it that explain the most variation in that data, and so, basically, you have a big cloud of data, multiple dimensions, and we're talking on the order of twenty, thirty, forty different dimensions, stuff we can't comprehend without a little extracurricular help, but, basically, you have this cloud of data, and you draw two lines through it that explain the most variation in that data. Then, with those two lines, or those two axes, you look at how -- In this case, you look at how your predators fall out on that line and see if it helps explain anything you're seeing in the diets.

Real quick, this is their sample sizes from the report period of 1998 to 2009, and I did want to note that they have sampled this tournament continuously since 1998, and I did talk to Rudershausen and Jeff Buckel a few weeks ago, and they do have intentions of maybe updating this analysis and publishing another paper with another decade of data.

For this report period, it's similar samples as me for dolphin and wahoo, and similar results for dolphin and wahoo, as far as the major prey categories. You can see right here that, for wahoo, instead of Scombrids, they actually called them mackerels, but this darker blue portion of the bar above wahoo, but the mackerels are bullet and frigate mackerel, mostly.

Getting into the PCA analyses that Rudershausen et al, did, and so looking at the temporal comparisons for dolphinfish, and so you can see the two principal components, the X-axis and the Y-axis, and, again, these are just the two axes that explain the most variation in the data, and so, over that, they have overlaid where the mackerels and flyingfish and cephalopods and other prey fall out on those axes.

The red circles are where the dolphinfish for a particular year fall out in that PCA, and so the way to interpret this is you see where those dolphinfish -- Do they load on one side or the other, or do they associate with some of the primary prey groups that came out in the analysis, and you can see, for dolphinfish, a lot of it -- A lot of the dolphinfish associated with what they call structure fish, but sargassum-associated fish as well as other dolphinfish, and there is a year there where they seemed to find more cephalopods and a couple of years where they kind of loaded a little bit more to the mackerels.

It's the same interannual analysis for wahoo. You see, on most years, they loaded down there to the mackerels, except for that one year where they loaded a little bit closer back to the center, and I did want to point out too that it only looks like there is three or four squares for wahoo, but this is ten years of data, and so there is a lot of squares stacked on top of one of another down there loaded towards the mackerels, and so what this shows is that, year in and year out, mackerels showed up quite frequently in the diets of wahoo.

This is looking at historic studies with the present Rudershausen et al. study, and so other studies that occurred in the area or in other ocean basins, and the citations are down there in the bottom-left corner. The Manooch et al. study did occur in North Carolina, but this shows pretty consistent diet over the three different decades that were sampled, and they are represented here, and it's consistent with what we saw in the interannual analysis, that dolphin mostly load up to those sargassum fish and other dolphinfish.

The same type of analysis with wahoo. They only included two historic studies, and, again, the Manooch and Hogarth study occurred in North Carolina. The Vaske et al. study, I think, occurred in -- I want to say that was Trinidad or Tobago or somewhere like that, but you can see that both of those studies loaded towards the mackerels, and so, in both of those studies, mackerels constituted a large proportion of the diet.

Looking at spatial comparisons for dolphin, and so this is looking at different studies in different areas, and this is the North Atlantic and the North Pacific, a lot of similarity there with dolphin, and, again, associated with the sargassum prey and other dolphinfish.

Interestingly, for wahoo, there seemed to be a big difference between the North Atlantic and the South Atlantic. In the North Atlantic, wahoo mostly -- A lot of the diets were explained by the presence of mackerels, but, in the South Atlantic, flyingfish seemed to really fall out as an important prey, and so that's interesting. I don't know enough about the worldwide distribution of bullet and frigate mackerel, and I think that's something that a lot of people don't know about, but this could certainly be explained, potentially, by there might not be bullet and frigate mackerel down there. We know we have flyingfish here, but, for whatever reason -- Given what we know about the selectivity of wahoo, and both flyingfish and mackerel are available here in the North Atlantic, but, for whatever reason, they seem to select mackerel in their diets over flyingfish up here, but that doesn't hold true in the South Atlantic, and so that might mean that there might not be mackerel available down there.

The results for Rudershausen et al. are substantial diet overlap between blue marlin and wahoo. The only reason that I cite this is because that overlap occurred because of their reliance on the Auxis species, the bullet and frigate mackerel, and I didn't present any of the blue marlin diet information, one because we don't manage blue marlin, but I just wanted to point that out, since that relationship seemed to be really driven by the presence of bullet and frigate mackerel.

Diverse diet from year to year and over multiple decades for dolphin, and there is really no evidence of any changes in diet over time, and there are remarkable similarities in the diets across oceans for dolphin, but not so much for wahoo. In their paper, they even went as far as making a pretty strong statement that Auxis play an important role in oceanic apex predators, and I did talk to Paul and Jeff a few weeks ago, and they did say that they were very careful not to throw out any terms like keystone prey or anything like that, just citing the fact that, in a marine environment, especially a food web like we see in the pelagic environment, there is so much diversity out there and so much opportunistic feeding that they didn't really feel comfortable to make that type of definitive statement, but they said that, functionally, Auxis -- It seems like wahoo and the billfish really do select on those prey.

Another just interesting tidbit, from the discussion in the Rudershausen et al. paper, is, at that time, there was a -- I think they had just completed the Ecopath/Ecosim model in the eastern Pacific,

and the name of the authors of that paper escapes me right now, but, in some of the diagnostics of that model, they calculated an index of sensitivity, and so basically how sensitive the model results were to the presence of different prey in that food web, and, in that model, they had Auxis as the second-highest prey, as far as its sensitivity to the model results, and so they cited that as further support that Auxis play a major role in the food web, at least in the eastern Pacific. With that, I will take any questions on any of the information that I just presented on the diets of dolphin and wahoo.

MS. BECKWITH: I am thinking, since it's 12:00, let's take any clarifying questions, and then we can come back and have further discussion after lunch.

MR. SAPP: It might be more of a clarifying statement, but, in forty years of experience, and always wanting to look into the diets of everything we catch, we definitely see the frigate mackerel down there. An example is we had a twelve-pound mahi last week that had a substantial, pound-and-a-half or two-pound, frigate mackerel in there, and it's always in wahoo, without fail. They're in there, and it seems that, with the flyingfish, it's always the larger, blackwing flyers. I seldom see the lighter, clearwing flyers, or smaller flyers, in the bellies, but that was an excellent presentation, Steve, and I appreciate it.

MR. POLAND: Thank you, and I feel like every good fisherman should always look in the stomachs of whatever fish they land. I do it, at least, and everyone else should.

MR. BELL: Thanks, Steve. Great job. Squid species, particularly with dolphin that was in there, were they deeper-water pelagics?

MR. POLAND: No, a lot of the squid species we saw in dolphin were squid associated with the surface, and so mostly loligo, and some Ilex, and there were none of the crazy, diverse squid that we saw occur in yellowfin and blackfin tuna. I know I was talking to David a little bit earlier about squid diversity, and that's something that I tried to run from after I got done my thesis, because looking at those little bits is -- Oh my god, but, yes, a lot of the prey that we saw in dolphin was associated with the surface.

We really didn't start seeing a lot of the mesopelagic prey until we started looking at the diets of blackfin and yellowfin, and we really didn't see a lot of it in wahoo, but pretty much all we saw in wahoo, like Art said, were flyingfish, and mostly bullet mackerels and paper nautilus, which was pretty interesting, because everything else that wahoo consume are fast-swimming prey, bullet mackerel and flyingfish, and then, all of sudden, you would see this little paper nautilus, and I could just imagine just a little paper nautilus just kind of going along, and it was a nice little snack.

DR. LANEY: The question, Steve, is similar to what was just asked, and it would be interesting, and I don't know whether you did this or not, but did you go through your list of prey items, and could you, if you didn't, identify those that we might consider obligate sargassum associates? I think that would be an interesting exercise to do, and I say that from the perspective of the council's obvious concern and interest in sargassum and thinking that -- I know there's been some past studies, and I know Larry looked at that from the Beaufort Lab, historically, but that would be an interesting exercise, and it also would build the case for why sargassum is EFH.

MR. POLAND: I think I definitely could, but, if I was going to go down that route, I would probably -- Because what I did in the results and discussion of my thesis is I just kind of qualitatively identified what I thought was sargassum-associated fish, but I know -- I can't remember the researcher's name at UNC-W, but it's been a decade or a decade-and-a-half ago now, but there was a student that did a thesis on the prey community associated with sargassum out of the Wilmington area, and they did a really good job of documenting all the diversity out there in that environment, and so, if I was to go back and look at my diet information, I would probably just pull that thesis and see everything that they found associated with sargassum and then go back and pull that out of my stuff, but, yes, that certainly could be done.

As far as the community analysis that I did with the stable isotopes, I just lumped everything together that I identified or classified as sargassum to get that sargassum community signature, and there was not a lot of variation in the sense of the range of stable isotope measurements that I was getting, and so that was evidence that a lot of that sargassum-associated prey is pretty consistent and being probably mostly -- It's primary and seconder consumers and mostly foraging on that primary production of sargassum and the associated other primary producers around sargassum. That's a long-winded answer, but, yes, I could do it.

MS. BECKWITH: Okay. I suggest we break for lunch and come back at 1:30.

(Whereupon, a recess was taken.)

MS. BECKWITH: I think we're good. Tony has a conference call at 2:30, and I was going to let him speak to the Mid-Atlantic's request of why we're having this discussion today before he has got to step away from the table.

MR. DILERNIA: Thank you, Madam Chairwoman. I think the background information, as I'm reading it here off the board, is very well presented. I think it's an excellent description of -- The staff member that wrote this I think should be congratulated. They did a very good job of really summarizing the issue.

Originally, bullet and frigate mackerel were going to be species that we in the Mid-Atlantic wanted to manage under our omnibus forage fish amendment, and we had every intention of, in a sense, freezing the footprint. In other words, to recognize what's been caught in the past and to prevent an expansion of any of those fisheries until there was adequate evidence that an expansion of those fisheries would not do significant harm to the species that relied on them or to the entire ecosystem.

Overall, the agency approved our forage fish amendment. The two species under consideration here, bullet and frigate mackerel, the agency turned back to the Mid-Atlantic Council, and the reason the agency turned them back was the agency's opinion was that, while it was a forage fish amendment, these two species did not present -- The Mid-Atlantic species that we're managing did not rely on bullet and frigate mackerel as a forage base, and so they turned it back towards us.

There was a discussion between the Mid-Atlantic Council and the HMS Division of NMFS regarding -- We were asking the HMS Division of NMFS to consider making an amendment to their plans to include bullet and frigate mackerel, because it's clear that many of the HMS species are dependent upon bullet and frigate mackerel as a forage base.

Unfortunately, the HMS Division denied our request, and, again, because there was a desire on the part of the Mid-Atlantic Council to manage these two species, I was then directed by the leadership of the council to introduce a request to this council. As the liaison, to request that this council consider this council managing both bullet and frigate mackerel, because it's clear that they are a valuable forage base for dolphin and wahoo, and so that's where you are here at this point.

Where you go with that, that's going to be all up to you, and it's your decision, but I just thank you for the opportunity to present the background on this and how we got here to this point. Again, thank you for your consideration and for allowing me to speak at this point, because I do have to break away in about ten minutes or so for a conference call as the New York delegation prepares for its Mid-Atlantic Council meeting. I will be happy to take any questions.

MR. BELL: Tony, you said that HMS turned you down, I guess, and what was their rationale?

MR. DILERNIA: I can't tell you. I don't really know, but I just know they punted it back to us. We said it's clear that the critters you manage eat these things, and we want to do something, and they said no.

MR. POLAND: I had the same question as Mel. We think too much alike.

MS. BECKWITH: Okay. Any other questions?

MR. CONKLIN: Aren't the majority of those mackerels landed up in Gloucester, and wouldn't they be managed by the North Atlantic already, or am I wrong?

MR. DILERNIA: We have evidence that -- As we investigated this fishery, there are landings that come from the New England region, the Mid-Atlantic region, the South Atlantic region, and the Gulf. The last thing you want is a four-council FMP on a critter that has very low value in the first place. I mean, the resources that would have to be spent to manage it on a four-council basis is unreasonable.

At the same time, I emphasized to the Mid-Atlantic Council that the species are caught down here in the South Atlantic, and the South Atlantic -- I am one for managing the fish that are in your area, and I don't like always imposing our regulations on a different region, and so I wasn't an advocate, really, of imposing the Mid-Atlantic regulations into the South Atlantic, but we're not allowed to manage them at all at this point anyway, and so it's up to you folks if you want to manage them, and I'm not sure where you want to go with it, but they are an important food source for the critters that you manage.

MR. CONKLIN: So no one manages them, or someone does?

MR. DILERNIA: Nobody does.

MR. CONKLIN: No one does, but I know there is a huge fishery. I mean, that's a huge bait fishery, and it seems like they should be managed by where the majority of them are brought in.

MR. DILERNIA: Dewey has asked me what are the landings, and I'm not sure what the landings are, but our intent was not to prohibit the fishery, but simply to freeze the footprint, freeze the

fishery, at what it was at that point and to really prevent the expansion of the fishery, unless we saw that the expansion of the fishery would not do harm to the ecosystem.

MS. BECKWITH: To Chris's question, is there some information about where these are being caught commercially versus recreational catch? I think some of that information was in the documents.

MR. HADLEY: I pulled a slightly different time series than what was in the Mid-Atlantic document, but -- Give me just a second here to orient myself on the landings. It was fairly low. It was around 1,700 pounds per year, but it was about -- This is over the past five years. The Mid had a much longer time series, and I just went to the Atlantic Coast Cooperative Statistics program and queried their database, but, over the past five years, it was about 1,700 pounds a year.

There were some episodic events in there, where it was higher, and, all reported commercial landings from this query, the landings primarily came from the Mid-Atlantic and New England regions, and they were reported as frigate mackerel. Bullet and frigate mackerel do look similar, and so it is possible that both of those species were included in those landings, but that is at least the initial data query and the results of that.

MS. BECKWITH: I think, in our area, the only fishery that I know of that really would interact with these is the ocean gillnet for mackerel, and so I don't know of any other species. Did you have a follow-up question?

MR. CONKLIN: So you guys just want us to endorse your --

MR. DILERNIA: We can't manage it. The agency will not let us manage it, and so, if we want to put -- If the fisheries system wants to protect bullet and frigate mackerel at this point, it has to come from a council that manages something that feeds on them, and so that's why the default was to speak to you folks, because of the fact that they are prey for dolphin and wahoo, and I think you saw that from the presentation earlier today, and I am not advocating do it or not do it. I am not advocating that, but I'm just giving you the background information to help you in making your decision.

MS. BECKWITH: All right. Let's back up a second. Let's put this conversation in perspective. I think the discussion that we have to have as a committee today is, one, are we interested in any protection for bullet and frigate mackerel as an ecosystem component for dolphin and wahoo within our Dolphin Wahoo FMP, in what form would we like to see that, are there any additional species that are important enough to their diets that we might also want to consider, for example say flyingfish or something like that, and, if that's the case, then we can move this forward in a simple way of asking staff to come back to us with some additional information on what are the most important dietary components to dolphin and wahoo that we might be able to protect as an ecosystem component and what are the commercial catches or recreational -- Get into some of those questions and give us a little bit more information.

We don't actually have to make any decisions if we want to move forward at this meeting, but what we do have to say is are we interested in moving this idea forward, and so are these -- Is protecting frigate and bullet mackerel, or potentially anything else, important enough of an idea

that we want to consider saying that they are ecosystem component species and then deciding what level of protection that means by including them into our FMP, and so let's just start there.

MR. BREWER: In answer to, or at least my thoughts, to the question that you just posed, it's that, yes, there is interest. Number two, I don't know what other forage fish might be important for us to look at. I don't know that -- Let me go back for a second. We are talking about regulating forage fish, and these fish are prey for two primary species that we manage up and down the coast, east coast, of the United States. I think that we are the logical group to do this, if it is to be done.

Now, my second thought is this. The State of Florida has long, and I think it may be decades, of experience with regard to forage fish, and it dates back to at least twenty-something years ago, 1994, I think, when we had what was commonly -- The misnomer that it was commonly known by was the net ban amendment, and, in that amendment, the purpose of that was to protect forage fish. That forage fish was mullet.

What had happened in the state is mullet roe had become incredibly valuable in Japan, and so you had gillnetters going out, and they were decimating the mullet, stripping the roe out of them and throwing the fish back in the water, and the State of Florida, or the citizens of the State of Florida, wanted to regulate it, and there were numerous attempts that were made to go through the legislative process and the cabinet, all to no avail, because what had happened was that industry had become so large and so profitable that it swayed the legislature, and it swayed the cabinet, and nothing got done.

It created such an outrage that eventually it went to a constitutional amendment in the State of Florida for our constitution, and it passed. In my county, it passed by 83 percent. Now, this was not a limitation on taking mullet. You can still take mullet. You can take them with a seine, and you can catch them, and you can do all kinds of things with mullet, but what happened was the gear that was being used was so efficient that it was decimating a very important fish in the State of Florida.

You have seen somewhat of the same thing happen with regard to menhaden. In menhaden, some large players were able to make a lot of money on menhaden and influence the politicians and stymy a lot of the efforts to protect menhaden. I think that what we do here is important. We're not going to be saying, no, you can't catch these mackerels, but you can do like a program, I think that's been pretty successful, and it was established in the State of Florida, whereby, if you've got a fish that is not yet being commercially destroyed, and someone, and particularly forage fish, and if someone wants to come in and try out a new gear, in other words develop a new fishery, there's a whole program that you've got to go through so that you can demonstrate to the FWC that whatever it is that you're doing is not going to adversely affect that fishery.

I think that's what's important for us right now, because these fish are not being exploited, but they are subject to, because of their schooling tendencies, they are subject to exploitation, and they are subject to industrial fishing, and so, yes, I think we should go forward, absolutely we should go forward, and I don't think we need to stop people from catching these fish, but we need to make sure that gear types that are used to catch these fish are not going to decimate them, and that's all I have to say.

MR. HEMILRIGHT: I had a few things to say, but I will pass on this. I was listening to Chester's comments about menhaden, and I was curious about what the science on menhaden -- What's the stock size or the stock status of it, versus something like that, where there is 1,700 pounds, or an average of something caught like that, and, if this council does decide to go ahead with the implementation of an amendment, I ask that they would do Amendment 38 to blueline tilefish before they do this amendment, please. Thank you.

DR. CRABTREE: That was an interesting perspective on history from Chester, although I would strongly disagree with a great deal of it, but that's not really the point, but I think we do need to recognize that this is not at all an analogous situation to mullet. Mullet was a targeted fishery with a large landings, and you can't manage a targeted fishery through an ecosystem component, and menhaden is the same. Menhaden has long, long been a targeted, directed fishery, and it's managed in that way, and so this isn't that at all.

With an ecosystem component, the regulations do allow for you to protect the associated role of the species in the ecosystem and take steps to minimize bycatch of it, and I think built into that determination is there is not an extensive targeted fishery for it. Now, from what I've seen, I haven't seen much evidence of a substantial targeted fishery towards any of these species, but I don't know that we've -- I haven't seen anything about flyingfish, but I think the landings for one of these mackerels were fairly low.

I do suspect there are people who cast-net them and use them as live bait and those kinds of things, but this isn't a mullet situation or a situation where we're trying to manage a fishery, and, in the case of menhaden or mullet, the discussion then becomes how conservatively do you want to manage the fishery in order to allow a larger forage base, and that's not at all the case here.

MS. MCCAWLEY: I also thought that Chester's explanation of our rules was quite interesting. That's not exactly how the SAL program works, but, if we end up going down that path or someone has questions, I can explain that, but I guess one of my questions is, and Roy began talking about it, is what protections really does establishing these two species as ecosystem component species, what does that really get us? That's really unclear to me right now, and so I'm having difficulty making a full decision until I understand that.

DR. CRABTREE: Well, I don't think that's -- That would be to be determined. As I said, the guidelines allow for you to adopt management measures in order to, for example, collect data on the EC species, minimize bycatch or bycatch mortality of the EC species, and I think this is the more to point one, but protect the associated role of the EC species in the ecosystem. I think what the Mid looked at was a trip limit, or something along those kinds of lines, and so I suppose you could do those sorts of things with it, but you will have to figure that out, I think.

MR. GRIMES: It's an important point that there are limits on what you can do for ecosystem component species. You are not specifying all the management parameters, the MSY and OY and things that are in the Magnuson Act for fisheries that are in need of conservation and management. The first step is demonstrating that, no, it's not in need of conservation and management and so what then are you going to do to restrict harvest.

I read the Mid-Atlantic rule, the Federal Register notices associated with that, and, in the case of the Greater Atlantic Fisheries Office, they disapproved these in part because they weren't major

bycatch species, whereas the other forage fish that they were regulating were bycatch species, which brings in -- You can regulate bycatch. In order to minimize bycatch, to the extent practical, you could limits on the amount of bycatch of this species that you could bring in, and so the argument is you're not directly regulating that species, but you're minimizing bycatch for a managed species.

I haven't heard -- Chester had said you weren't looking to prohibit harvest of this species, which would be a good thing, because that would be -- If there is no tie to bycatch, then what's the basis for zero harvest, and I know that's separate from your first step of do you want it an ecosystem component and then what do you want to do with it, but I think Jessica is exactly right that you need to have some idea of what you want to do with it, because, if you want to do too much, ecosystem component is not going to get you there.

MS. MCCAWLEY: Just one more point, and Shep hit on it some. I don't understand how this was considered a violation of National Standard 2 when the Mid-Atlantic tried to do it, and how would it not be a violation here, because National Standard 2, to me, is not having enough scientific information available.

MR. GRIMES: The way I interpreted that from the Federal Register notices relates to just it was talking about bycatch, and there was no evidence that these species were -- Excuse me. Not bycatch, but not only bycatch, but they weren't forage fish for the managed species. The other species that they were protecting were forage fish, and they were caught as well, and, also, all of these species are caught in much higher volumes in those trawl fisheries in the Northeast than we're talking about here.

MR. BELL: The first question, in terms of -- I was interested in kind of fleshing this out a little bit more, which is kind of some of what has happened in this discussion, but I think, if we were sort of to move forward in any way, it would be simply to kind of further lay out the concept of how it would work, how the authority would work, what are the options, what would we do in terms of -- Then other species, based on what Steve presented, I thought, well, you could certainly -- Just in the general context of what would fit in the ecosystem piece of dolphin wahoo, it would be some of the other species like squid, and perhaps flyingfish, but I was kind of interested in hearing more about it.

The reason for that is we spent a lot of time, and I know I was at the SSC meeting, and we talked about ecosystem-based management, and I'm still having a hard time wrapping my head around how ecosystem-based management would work when it gets to us. How does the council actually do something that's sort of ecosystem based? Well, this might be an example of kind of a small step in the direction of considering components of the ecosystem in the overall context of the management plan that we have already, and so I was comfortable with sort of moving forward, in terms of just asking staff to perhaps give us a white paper or something, just kind of fleshing some things out, the concept and how would it work, but not committing to anything, obviously.

MR. GRINER: My first concern is that we don't know anything really about these forage fish, and we don't have any data to tell us much about the stock size or whether they're in trouble or not in trouble. All we really know is that dolphin and wahoo like to eat them. They are not targeted, 1,700 pounds incidentally caught, and they're not bycatch in any fishery.

The only bycatch there is to them is in the stomachs of the dolphin and the wahoo that we catch, and that's the only bycatch, and so, to look at them as an ecosystem role, that ecosystem management is going to be so data-intensive that we are not anywhere close to having the data needed to even manage them as an ecosystem part, and so I really -- I mean, I understand the importance of them, but I really can't see how we can manage them in any way, shape, or form, other than kind of what Chester alluded to, is we don't allow -- We have no trawl gear, and that would be the only way that you could really have a directed fishery toward these, and so I'm not really sure that we can do much of anything with these.

MS. BECKWITH: I'm going to let Steve make his point, and then I'm going to turn it back over to John to go through some of the examples of how different areas and regions have actually done something with this concept of ecosystem components, and that might give you some clarification.

MR. POLAND: Thank you, Madam Chair. I guess I'm going to try to hit on a couple of different things. First off, I appreciate Jessica's question about the EC species and what exactly does that mean, and that's a concern that I have. Just stepping back, I feel like we need some more questions answered before we go down this road, or even make a final decision of if we want to step into the arena of managing forage fish or just particular prey items in a complex like that. I need to know what tools we have in the toolbox, and it sounds like, to me, as an EC species, we get to design our own tools for that, and so I think that's an opportunity that we have here to really tailor this to what I need.

To Tim's about there is no directed fisheries here, and there is no gear, or there is no trawl gear, at least, we have seen a few landings here in North Carolina, and I talked to our commercial statistics staff, and we added codes for bullet and frigate mackerel in February of this year, and so we only have landings from February, and so the last seven, eight, or nine months, with all the steps of QA/QC and data verification, and there have been some landings here, especially up here in the northern Outer Banks, and it seems to be coming from coastal gillnet fisheries, most likely targeting mackerel and croaker and that kind of stuff, and so, I mean, I think the gear is out there, and there is the potential to land these fish, but I have other questions that I would at least like investigated before we move forward, and so is there a market for these fish? Is there a potential for a market to develop on these fish?

What do we know about bullet and frigate mackerel, as far as stock dynamics and life history? We don't know a whole lot, and I think a lack of that information shouldn't preclude us from acting, and I think we can certainly take this opportunity to identify a couple of species, or a suite of species, that seem like they are important to some of our council-managed species and at least prioritize those species, as far as research and monitoring.

To speak on the ecosystem-based management aspect of this, there is certainly a gradient of how ecosystem-based management can work. I mean, you certainly have your Cadillac ecosystem models, where you can model every little aspect of the ecosystem, every little input and removal and that kind of stuff, and use it as a predictive tool, but then there's also aspects of ecosystem-based management where I think this falls in, and that's where you acknowledge that there is some interaction there, there is some importance there, that might help explain some future trends that we see in landings, or at least need to be accounted for when considering other regulations within the environment out there that might have consequences on your managed stock that you wouldn't

really be able to forecast or understand if you don't acknowledge that these are those other connections.

I definitely support the action of maybe asking staff to develop a white paper and kind of look at some of these questions and just giving us a little bit more information on the table before we make our decision, but my biggest thing is I need to know what's available to us to act, and so what can we do and what's appropriate, given the fact that dolphin and wahoo are not overfished and given the fact that we don't know anything about bullet and frigate mackerel, where they are in the environment and how many there are and things like that, and so I certainly feel like, first, we should respond to the Mid-Atlantic. Then, second, kind of take some time and really think this out and flesh it out, before we just either move forward or throw it out with the bathwater.

MS. BECKWITH: Wilson, I didn't want to skip you, but I do want to give John a chance.

DR. LANEY: Just a short, pragmatic question, Madam Chair, and that is -- Maybe Dewey could shed some light on it, but I was just wondering, should the council decide to move forward on this, whether or not all the information that the Mid-Atlantic pulled together in their efforts might be useful to the council and get staff further down the road than starting from scratch.

MR. HEMILRIGHT: I'm sure it would be useful, but I expect it's very, very limited, and I think that some of the conundrums we had -- I know that our discussion at the table was a limited amount of data that there is on that, and so I'm sure, anything that the Mid has, that you all can use or whatever like that, but it's very limited.

MR. HADLEY: I will say that the Mid-Atlantic staff has been in contact with us and helping provide background information in any way, and they have kind of gone down this road, to some extent, and so we could certainly pick up from where they left off. Very quickly, I will run through some of the other examples of how other councils and state agencies have tackled this.

We have talked quite a bit about the Mid-Atlantic's unmanaged forage omnibus amendment, and, really, this was -- The intention was to sort of freeze the footprint of existing fisheries for unmanaged forage species, and what the Mid-Atlantic did is they identified seventeen species or groups of species and designated sixteen of those as ecosystem components, and this was a comprehensive amendment, and so they were designated as ecosystem components in all of their fishery management plans. That amendment established a possession limit of 1,700 pounds for all of those EC species combined, along with permitting, transit, and reporting provisions. Then there was also a method in which new fisheries, essentially through an exempted fishing permit, a mechanism for new fisheries to develop in a timely manner.

The Pacific Fishery Management Council also recently underwent their comprehensive ecosystem-based amendment, CEBA-1, and, here again, it's the same idea of kind of freezing the footprint. This amendment prohibits the development of new directed fisheries on forage species that are not currently managed by the council or other states until the council has had an adequate opportunity to assess the science related to the proposed fishery and any potential impacts.

The Pacific Fishery Management Council was very clear that it's not a permanent moratorium on fishing for forage species, and, instead, the council adopted Council Operating Procedure 24, which outlines a review process for any proposed species. Essentially, here again, there would be

an exempted fishing permit, where a new fishery could, for lack of better words, have a trial run, and, afterwards, if no long-term -- If the fishery went well and there were no long-term negative impacts, the idea is that a species would be added as a fishery management unit under MSA requirements, and so you're looking at developing harvest specifications and identifying essential fish habitat for the species and providing gear specifications, et cetera. Here again, in this amendment, there was a bycatch allowed for all of the EC species that the Pacific Fishery Management Council identified.

The North Pacific Council has also added -- Initially, in the 1990s, through their Gulf of Alaska and Bering Sea and Aleutian Islands Groundfish FMPs, they prohibited directed fisheries for several previously unmanaged forage fish. The North Pacific Council revisited this in 2010 to maintain the prohibition on directed fishing for forage species and designated them as ecosystem component species, there again still allowing for when these species are incidentally caught as bycatch.

We touched on it earlier, but FWC has certainly done a lot of work on forage species, and monitoring has been ongoing for decades, and there is a special activity license in place to prevent the development of new fisheries using gear types that may have detrimental effects. Applicants must provide detailed information about proposed gear, with testing and use monitored under the licensing conditions. Any new gear types must be approved by the FWC before going into large-scale use. Additionally, the FWC adopted a resolution confirming the importance of forage fish and a commitment to continue to monitor and manage forage species.

Moving over to the west coast, the Oregon Department of Fish and Wildlife also implemented a forage fish management plan, and this is very similar to what the Pacific Council did, and the plan covers identified forage species that are not currently managed or regulated, and it prohibits new directed commercial fisheries from occurring, while still allowing bycatch. Also, this plan follows a similar process as outlined in Council Operating Procedure 24 from the Pacific Management Council, and that is a mechanism to allow new fisheries to develop.

Finally, the Washington Department of Fish and Wildlife published a forage fish management plan, and this plan is really more of a guidance document that they use to incorporate forage species, management of forage species, and encourages ecosystem management and a precautionary approach to forage fish management. I won't go over the -- We went over the Habitat Protection and Ecosystem-Based Management AP recommendations, and so I won't go over that again. With that, I will turn it over, and that's a very kind of high-level view of what other councils and state agencies have done.

MS. MCCAWLEY: I just want to go on record and say that I am against freezing the footprint in some type of omnibus amendment or prohibiting the development of new directed fisheries. I think, if we're going to talk about bullet and frigate mackerel, and maybe one other species, like flyingfish, I could possibly get onboard with that, once I fully understood what making an ecosystem component species would mean, but I am against some kind of overall omnibus amendment or freezing it at the current footprint.

MS. BECKWITH: Okay. Anybody else?

MR. GRIMES: I just wanted to point out that, under Magnuson, we have requirements for council notification for development of new fisheries and new gear, stuff that's already in place, and so some of that exists under Magnuson already, some of what we just heard relative to the State of Florida and elsewhere.

MS. BECKWITH: Okay, and so we would be looking here for a path forward, and what I'm hearing is that there is some interest in consideration of this, in a very limited fashion of identifying a few of the most important species to dolphin and wahoo, and having some information come back to us on those species and what it would mean to make them an ecosystem component of the Dolphin Wahoo FMP.

MS. MCCAWLEY: I think I could get onboard with that, but I guess I'm kind of confused about what would be going in this letter. What is the content of the letter back to the Mid-Atlantic Council right now, or do we just tell them that we're looking into it and then there's a more detailed letter later? What are we thinking goes in that letter right now?

MS. BECKWITH: Yes, that would be my assumption, is the letter would just acknowledge that the South Atlantic has considered it and we're moving forward with some information gathering and future discussions and we will keep them apprised.

MR. BELL: Basically, the letter just says that we're not telling you no, and we're not telling you yes, but we're interested in learning a little more about it, and we'll get back to you.

MS. BECKWITH: Does that sound like an acceptable path forward for folks? Okay. All right. I think that's that for that, and, when John is ready, he's going to walk us through Amendment 10 and sort of where we are with all the other stuff that we have completely ignored in dolphin and wahoo for the past year-and-a-half or so or two years.

MR. HADLEY: All right. Really, the intention here is just to bring everyone up to speed on Dolphin Wahoo Amendment 10 and other potential items for a future amendment that the committee and the council have identified in the past. Just to remind everyone, the development of Dolphin Wahoo Amendment 10 occurred in March of 2016, when the council directed staff to develop a joint amendment with the Snapper Grouper FMP as well, and so this is Dolphin Wahoo 10 and Snapper Grouper Amendment 44 to examine different ways to reallocate or share quota between the commercial and recreational sectors.

One of the major driving events for Amendment 10 occurred in 2015, when the commercial sector met the ACL and was closed on June 30, and it remained closed for the rest of the year. In this same year, the recreational sector underharvested its ACL, harvesting about half of the recreational sector ACL, and, in the end, approximately 6.7 million pounds of the total ACL went unharvested.

Of note, since 2015, there have been a couple of amendments that have gone into place, the first being Dolphin Wahoo Amendment 8 that went into effect in early 2016, and this increased the commercial sector allocation for dolphin from 7.54 percent to 10 percent. In the end, it ended up increasing the commercial sector ACL by about 375,000 pounds. On June 30, Dolphin Wahoo Framework Amendment 1 went into place, and this established a 400-pound commercial trip limit for dolphin once 75 percent of the commercial ACL is reached, with the intention of avoiding an in-season closure for the commercial dolphin fishery and kind of extend that season, if need be.

In the meantime, since 2016, neither the commercial nor the recreational sector have harvested their respective ACLs, and, also, that trip limit has not been triggered yet, and so the council eventually split Dolphin Wahoo 10 and Snapper Grouper 44 and continued to develop the amendment. Actions were added that were to revise the ABC control rule to allow carryover of unharvested ACL from one year to the next, and an action was added to eliminate the operator card requirement in the dolphin wahoo fishery.

Also, actions were added that would re-examine the definition of optimum yield in the fishery, with the focus on potentially using annual catch targets, and also an action was added to re-examine allowable gears in the fishery, to accommodate a request from New England lobster fishermen that the council modify regulations to allow harvest of dolphin and wahoo while in the possession of lobster pots. The crux of that request is lobster pots are not allowable gear in the fishery right now, and so, if those are on the deck, possession of dolphin and wahoo is not allowed, and so that was really the background of that request.

As a reminder, at the March 2017 meeting, in response to anticipated major revisions to recreational data coming from the Marine Recreational Information Program, the council decided to stop work on the amendment until revised recreational data were available, and here we are now. The recreational data are available, and so we're looking for guidance on how to move forward.

A quick recap, and, if people want to get into the details of each of the alternatives under the actions, we can. I have them in an appendix, but just a very quick overview of what is in Dolphin Wahoo 10, or as it was left off in March of 2017, the Action 1 revised the optimum yield definition for dolphin. Action 2 modified the recreational annual catch target for dolphin. Action 3 established a commercial annual catch target for dolphin. Action 4 allowed adaptive management of sector annual catch limits for dolphin, and so, there again, looking at that flexibility in managing the sector ACLs.

Action 5, which would revise accountability measures for dolphin, was aimed at accommodating some of the alternatives of Action 4. Action 6 was revise the ABC control rule for dolphin and wahoo, and this action is being pursued via Dolphin Wahoo Amendment 11, which is part of the Generic ABC Control Rule Amendment, and so work is ongoing on this particular action. Action 7, there again, allowing the possession of vessels with gear onboard that are not authorized for use in the dolphin and wahoo fishery to possess dolphin and wahoo, and the initial request was from the New England lobster fishermen. Then, finally, Action 8 would remove the requirement of vessel operators or crew to hold an operator card in the dolphin wahoo fishery. The dolphin wahoo fishery and the rock shrimp fishery are the only two fisheries managed by the South Atlantic where these operator cards are a requirement.

In addition to those items, when initially developing Amendment 10, the committee identified several other management topics that could be addressed. In the end, the decision was made to pursue items directly related to flexibility in the management of sector ACLs while making a list of other topics, kind of to keep on the -- To address at a future date.

The list of topics that was compiled at the June 2016 meeting includes for-hire bag limit sales of dolphin by dually-permitted vessels, and I will also mention that there has been quite a bit of public

comment submitted for this meeting and through the electronic means on the webpage from individuals as well as municipalities endorsing this to be reevaluated, and, also, there were two motions from the Dolphin Wahoo AP last time they met endorsing that as well.

Other topics that were also covered was the modification of the purpose and need to allow a directed commercial fishery for dolphin, make the commercial dolphin wahoo permit limited entry, make the for-hire dolphin wahoo permit limited entry, and this was considered initially, but, per guidance at the December 2016 meeting, this was not pursued, and that's the amendment that eventually became Snapper Grouper Amendment 47, which, as you recall, work is no longer being done on that amendment.

Institute a circle hook requirement in the dolphin and wahoo fishery, change the fishing year start date to better accommodate the growth of the New England fishery, consider using an ACT to monitor the recreational fishery, as opposed to modifying the ACL or OY, removing the operator card requirement, and, there again, that was eventually added to Dolphin Wahoo Amendment 10, and then, finally, consider complementing HMS requirements in the directed dolphin longline fishery.

Finally, one more issue that has been brought up, and it was a motion passed by the Dolphin Wahoo AP as well as it's been addressed in public comment, but this is potentially reducing the recreational vessel limit to forty fish immediately, and this was suggested through public comment, or when the recreational ACT has been met, and that was the Dolphin Wahoo AP recommendation.

With that, as I mentioned, we're really looking for guidance on how to move forward with this amendment and what you would like to see at future meetings and also the preferred timing and what items should remain in Amendment 10, and so not really an exhaustive list of options here, but the committee could direct staff to begin working on Dolphin Wahoo Amendment 10, with some guidance on which actions to include, all the actions, some actions, or potentially adding new items to the amendment, and also, there again, just some guidance on the preferred timing of seeing an amendment document.

MS. BECKWITH: Thank you, John. For a lot of our newer members, there is probably some question about the idea of revising the definition of optimum yield for dolphin in particular and kind of what the history of that is. We had a fair bit of discussion when the dolphin fishery did close down that, in general, the interest of the recreational fishery and the commercial fisheries are different. Most commercial fisheries are considered a successful fishery if they catch 100 percent of their ACL, and so the definition of optimum yield for the commercial portion of the fishery for dolphin would logically be that the catch equals their ACL.

For the recreational community, there has been an acknowledgment that abundance is important, and so recreational folks go out, and they want to fish, and they want to catch fish. They want there to be a bunch of fish out there, so it's easier for them to catch, but their goal is not to catch every last fish in their ACL, and so, as a way of sort of getting around that, one of the ideas was that, in discussion with National Marine Fisheries Service, was that we could set our optimum yield definition to be as the examples below, and I won't get into all the details, but, basically, the ACT, the annual catch target, could be set differently for the recreational fishery, and say we could set it at 50 or 60 percent of the ACL, recognizing that what we are trying to actually catch in the recreational fishery is 50 or 60 percent of the total amount of fish allowed and allowing the rest of

those fish to be maintained out there in the ecosystem for abundance, for ease of catch, to facilitate recreational fishermen, versus recognizing the need for the commercial industry to be able to catch their entire portion of the quota.

There is more detail within the information, but I saw the eyebrow kind of pop up, and I wanted to give a very quick, and I'm happy to go through some of the additional history with folks afterwards. I have got two quick questions, and then I will open it up. For Action 6, since we are currently taking that -- Since we're sort of dealing with that, then we can sort of assume that we'll be able to move the current Action 6 out of Amendment 10, but what about Action 8? Are we not dealing with Action 8, the removing of the operator card, through the President's Executive Order? Where are we with that?

MS. MCCAWLEY: It's my understanding, and Brian can correct me if I'm wrong, that this was one of the items that we said was already being worked on in another amendment that was underway, and I think that it needs to be worked on here. We weren't starting an amendment with all those items from that Executive Order or whatever it was called.

DR. CHEUVRONT: That's exactly correct. This was on the list of things that you wanted to consider in a future amendment, and, when we last looked at it, there was a whole list of items, and, if you want that, I can pull that up, but they were things that you had said that you wanted to work on in the future, and you would work on them through other -- They weren't necessarily things that you said you definitely wanted to get rid of at this point, but they were the items that went into the response from the council to the Executive Order. Remember that was about things that you wanted to -- That were unnecessary or outdated or unneeded and that sort of thing, but you came up with another list of things you wanted to consider, and that was on the to-be-considered list.

MS. BECKWITH: Got you, but, on the list for the Executive Order to be removed was the operator card requirement for the charter guys, wasn't it? I feel like that was a very impassioned plea from me.

MS. MCCAWLEY: Yes, but, even though it was in there, it didn't have a vehicle to be removed. It needs a vehicle through the council process, in some sort of amendment, to be removed. That was just an identification of the issues that we wanted to work on, but, to me, this is the vehicle to do that.

MS. BECKWITH: Okay. Got it. I thought they were just going to disappear once we identified them. That is what I thought was going to happen. How disappointing. Okay. Now I'm going to open up for questions.

MR. BREWER: I did have a question. I am reading here -- It says one option is to consider complementing HMS requirements in the directed dolphin longline fishery, and I'm not really sure what that is.

MS. BECKWITH: That was something that I'm sure Dewey was going to bring up as well, but that is coming back to the discussion that we have what we have sort of deemed our council longline boats, our commercial industry that has a dolphin commercial permit and is using longlines to catch dolphin, but do not have the other required HMS permits and who are not

required to have circle hooks and use whole baits and some of those other things that we've sort of discussed multiple times.

We did have a presentation on that, I think in June of 2017, when we were in Florida, where the Permits Office -- Not the Permits Office, but they came in and gave us kind of a presentation on identifying who that subset was, and so I actually have that presentation for reference right here, and I know that that's something that Dewey is interested in seeing moved forward, and so that might be something that we push into Amendment 10, this discussion.

MR. BREWER: What you're actually talking about is getting the, quote, council boats to have the same requirements as the blue-water boats? When it's put in that terminology, I understand it.

MR. GRINER: I was just going to kind of follow-up on what you were saying about the commercial ACL, that we want to catch the whole ACL, and so I really don't see why we can't take Action 3 out of this.

MS. BECKWITH: It just ties back to Action 1. It's part of the definition, and so I think, but I'm not sure, but the short of it is I think what we need to move forward here is, one, are we okay with what's currently in Amendment 10, and so, to Tim's point, we can see if Action 3 is necessary, or it would just go in as part of the discussion, and we would pick no action, because I think it's currently set at ACL equals ABC.

DR. CRABTREE: It does seem to me that the immediate need we have with this fishery, and a lot of our fisheries, is we have new recreational catch estimates that are roughly twice as high as they once were in the past, or maybe more than twice as high. The ACL for dolphin is based on landings, and so we have a need to revisit the ACLs and respecify all those things and figure out how to do that, I guess, and then we have allocations that are based on one perception of the historical mix of the fishery, and now that's very different, and that's true for dolphin and wahoo, and so it seems to me that we have a need to revisit the setting of the annual catch limits, which would include targets and OY and all those things, and we're going to have a need to revisit the allocation, as painful as that may be, because that's going to all have changed too, and maybe other things, but I don't know how we get at some of these other issues until we know what we're looking at, in terms of how the perception of the fishery and the landings has changed.

MS. MCCAWLEY: I agree with all of that. I think that we need to -- I would like to see us move forward with Amendment 10, and I would like to keep all of the actions that are in there now, and I do think that we need to look at revising the ACL based on the new MRIP numbers, and I think we need to look at allocations, and I would also like to see for-hire bag limit sales added and the circle hook requirement added and reducing the recreational vessel limit to forty fish, which came out of the AP. I would like to see those things added to this as well.

MS. BECKWITH: This is going to be a very long amendment, because I also feel pretty strongly, and I think Dewey does as well, that we've been working with HMS for a number of years, and the longline industry has come to us numerous times and asked us to bring our folks into compliance with their requirements, and so I think that considering complementing the HMS requirements in the directed dolphin longline fishery is pretty important, and it's certainly one thing that I would like to see accomplished prior to my leaving this council at the end of my third term.

MR. HEMILRIGHT: I think the part about addressing the -- I am going to call them Chester's council boats, I have affectionately learned over the last few years here, is going to take a little bit more than needs to be done right now. The major thing that I was looking at is a mechanism to, when you look at landings, identify the council boats and what that segment landed, and it looks like you've got a few more fish to fry in the meantime and then address that, because I don't understand -- You just can't go give out tri-packs to equal what we have now in the pelagic longline industry, where I say a tri-pack is you have an incidental sword or tuna and a landed tuna longline to go along with my dolphin wahoo, and so I don't know how the council is going to --

These people have been doing this -- Folks have been fishing for a while like that, and you just can't say, hey, you've got to go get a tri-pack or you're out, you're done. I just wanted to look at a way to monitor what the landings are and say, hey, here is a million pounds and 100,000 pounds come from tri-pack boats, I mean came from council boats, and that's my sense of urgency right now, since we were having problems in the future identifying it and stuff like that, and I was hoping that the white paper that was produced had some mechanism to identify.

MS. BECKWITH: Two things, Dewey. We're not intending on requiring our guys to go out and get the tri-pack. What the discussion has been is would it be appropriate for us to require the -- If you're going to use longlines to catch dolphin, under our permit, should they be required to have circle hooks and the maximum amount of hooks and some of those -- The training for turtles and endangered species release and all those things, but not requiring our guys to go get your permits. That was not up for discussion.

In terms of your other point, the Fisheries Statistics Division from the Southeast Fisheries Science Center did identify a way of identifying those landings, and we were told that they could automate the process, if needed, and that was part of their presentation last June, and so I guess we could request that that process become one of the automated processes, so we could monitor, in the meantime, how much is being caught by longlines, but two of their needed data collection improvements that they identified when they gave us this presentation was that ACCSP partners needed to collect finer, greater detail.

The detail needed -- They need greater gear detail than just longlines. They need to know what type of longlines, pelagic, bottom, et cetera, and the second data requirement that they had issues with was that all records should have vessel state registration or U.S. Coast Guard numbers, and they found many records where vessels were unknown and there was no way to match the permit, and so those were the two outcomes to being very efficient to automating that process, and so we could follow-up with the Fisheries Statistics Division and ask for kind of a way forward from here to automate that process and to get that information regularly.

MR. HEMILRIGHT: I am kind of perplexed that it's many. I mean, are we talking, when we say "many", is it ten, twenty, thirty, forty? There is a way to figure this out that it can be accounted for. I mean, I just feel like there should be, and we can talk more offline.

MS. BECKWITH: Okay, and so where are we? Do we have a path forward? Are we going to move Amendment 10 forward with that huge, ginormous list of things shoved in there?

MR. BELL: Speaking of the huge, ginormous list, I think it's no surprise -- I am not a big fan of the concept of sale of recreational fish, but we've had that discussion before, and we don't need to necessarily go into all the details now, but I think, for some of the -- You started out explaining how the recreational fishery is different from the commercial fishery, in terms of what is successful to them, and I think one of the issues that I would have is what you're potentially doing, if you go that route, is you are incentivizing a part of the recreational fishery to really go out and where, all of a sudden, the fish you bring back to the dock is the big deal and setting up, I think, just some unfair competition with what I would call the actual focused commercial fishermen versus somebody that is kind of jumping across one sector to the other.

We have talked about a lot of this, in general, and, also, the council has a history of kind of going back and forth on -- Whether it's snapper grouper or dolphin wahoo, in and out and in and out, and I get it, and particularly where Jessica is coming from, and I know this is a big deal, particularly for some of the guys down in south Florida and all, but even like when Bob Jones was kind of sending us some information and stuff, and one of the areas that he had a PowerPoint presentation on was -- What really hit home to me was the whole concept of, okay, if fish are going to enter the market for human consumption, they have got to meet all of the requirements of HACCP plans and all this stuff. That may be that charter boats can do everything they need to do to accommodate that, but, just for a bunch of reasons, I'm not a fan of that particular aspect, but I certainly understand where Jessica is coming from.

MS. BECKWITH: To some of those concerns, that's why we specified the dually-permitted, because those guys would have all of their appropriate commercial permits, and just because they are commercial on Monday and recreational on Tuesday, but I hear you. I am going to let Tim speak, and then one way I think we could move these additional items forward is to actually take a vote and see which of these additional things we want to put into Amendment 10, because, if Mel is not necessarily interested in the for-hire bag limits, it may be that the majority of the committee does or doesn't want to see that move forward, and so, in the essence of time and staff and effort, let's make sure that there's at least a majority of people that want to see some of these things move forward.

MR. GRINER: I just wanted to go back to the longline landings for a minute and make sure that I understood what you were saying. You were saying that they identified longline landings associated with a permit, but not with a vessel, and how could that be?

MS. BECKWITH: Verbatim, needed data collection improvements are all records should have vessel state registration or U.S. Coast Guard number. Many records where vessel was unknown, and so they just didn't have the vessel registration number, and so they couldn't tie it to a permit, and so, for some reason, the records came into ACCSP without the vessel registration number. Without the vessel registration number, they weren't able to tie it to a permit.

MR. GRINER: But they came in under a permit number, right? I just don't understand how you can have a permit and not the vessel.

MS. BECKWITH: I think the way they did the analysis was by the landings associated the vessels and then backtracked it to the permits, and so I have the presentation here, and we can go back through it to answer that specifically, but I think that's how they had to handle it.

MR. SAPP: I'm a big fan of the for-hire bag limit sales as well, and it's not incentivizing you to go catch more, because they're already incentivized to catch their, right now, sixty-fish limit, and we're talking about now dropping it down to a forty-fish limit, which I'm also a big fan of. It also introduces into the market more high-quality, day-caught fish. If these fish are on the boat for eight hours or less, which is generally a full-day charter, it is so much higher quality than anything else that's brought to market that it almost creates a boutique market, a higher-value market, that then the commercial sector would likely try to chase and get those extra dollars per pound.

It also gets rid of a giant quantity of waste that I see year after year, where a successful charter fisherman reaches his charter's limit. The charter then takes this giant mass of filleted fish home and freezes it, and it immediately then reduces the value of that fish when they thaw it, and then, inevitably, at the end of the year, it's, man, I've got this freezer full of fish, and they end up throwing it away. That waste, I just despise that. If you allow that charter to then take a portion that they're going to eat, and they have the option of saying, no, I want it all, or, no, go ahead and you keep a portion and sell it, because it's legal, I see nothing but a benefit and a positive from that.

MS. BECKWITH: Yes, and these are the types of discussions that we would have in detail if they made it into the amendment.

MR. SAPP: Well, I mean, if we're about to make a vote to make this go away here, I think it needs to be discussed further right now.

MS. BECKWITH: Okay.

MR. HEMILRIGHT: This is one where the AP panel, a few years ago, when I was on, I believe was in favor of. As far as the boutique fishery and eight hours, I know, with my vessel out there, we carry about three tons of ice, and I don't know how much ice these carry, but something that has happened in the HMS thing is the parity at HMS when you go to sell and being a commercial fisherman.

I have to have a life raft, survival suits, EPIRBs, and I have to spend about $4,000, and then, every year, it's about $1,000 to $1,500. Because I have permits that allow me to sell, and I believe that the permits that these charter fishermen would be allowed to sell, it's -- I feel like they should have the same type of safety equipment that I have as a commercial fisherman, and so that's the only parity that I would like to see if this went forward.

I think it's a small amount of fish, and I did see where the AP panel was in favor of it coming off the recreational industry, but the parity that I am looking for, and I said this quite a few times up at the Mid and at HMS, but I want to spread the love around of the requirements as me as a commercial fisherman have to do to anybody else. No more, but, if they want to sell fish also, and I think that's only fair.

MS. BECKWITH: Yes, and they would fall under that, Dewey, because what we would be considering is the bag limit sales of dolphin by dually-permitted vessels, which means they would have to have their commercial permits as well, and so you're talking about the guys on the Morehead City waterfront that have commercial licenses on the boats and are also running day

charters, and so they do both, but they would have their commercial permit, and so they would fall under all of those requirements.

MR. HEMILRIGHT: So that would be a Coast Guard safety inspection and --

MS. BECKWITH: Whatever is appropriate for the size of the boat.

MR. SAPP: Being that we're not longline vessels, we aren't inspected, and we're not high-occupancy vehicles, or vessels, and we're not inspected. However, we are required to have the EPIRBs and everything else, but just not the life raft and the inspection. Like you said, it is such a small percentage of the fishery, and we're not looking to take from commercial, as I do both, but, again, I don't see where it can hurt the commercial industry in any way, shape, or form.

MR. HEMILRIGHT: I don't think it would hurt it. I just know, if you've got a general category permit in New England, or anywhere, you can have a charter boat, and you can have a commercial permit. You can do both, and you've got to have safety equipment to go sell your fish. HMS has just recently implemented something where you've got two permits. You've either got a charter no-sale or a charter for-sale, and you may have to have the Coast Guard -- We're still working our way with that through the council and getting HMS to, if you're able to sell your fish, you've got have the same safety equipment as a commercial fisherman.

It doesn't have nothing to do with inspected vessel or uninspected, but it's the way they issue the permit that allows you to sell, and you are deemed commercial, and, if you're commercial, you have to have this safety equipment, by definition of the Coast Guard, and so that's the only thing that I am advocating for.

MS. BECKWITH: Yes, the safety equipment is based on the size of the boat.

MR. GRINER: I really don't have a problem with the idea of the bag sales, but I just think -- Maybe we'll get into the details if we move forward, but I do see some problems, going forward. These charter guys are coming back to a charter dock with six guys on their boat, and they're at a marina, and where is the dealer? Is he going to drive up in his truck or -- They're not going to the fish house to unload.

These fish are still going to need to go to a dealer, and how are we going to make sure these fish are accounted for properly, and whose quota are they coming off of? How do we make sure that these go through a dealer and that, after that charter leaves and there is -- If they only wanted twenty out of the forty dolphin, that the other twenty just don't go straight to the back of a restaurant somewhere, but they've got to go through a dealer, and they're going to have to still be accounted for, and how do you make sure they're not accounted for under MRIP and through a dealer? I just see some real issues in really trying to get through the details of it all, but, at the end of the day, I'm like Art.

For some guys that came down from Oklahoma, and this is their last day of their one-week vacation, and, all of a sudden, they had a great day, and maybe they forgot to tell the captain that they only wanted ten fish, and they went out and they caught all forty of their fish, and you talk about professionalizing the industry, and a professional captain would have had that discussion before they left the dock, how much fish do you want to take home with you today, and they would

have been releasing fish all day, but, that notwithstanding, you've still got this issue of how do these fish get through the channels of commerce correctly and be accounted for correctly?

MR. BELL: I was just going to point out that it's the details that always hangs us up when we get into this, and, you know, you could have a vessel that's dually-permitted, and so one day I'm running a charter trip and the next day I'm running a commercial trip. You can do that, but that's not what they want to do. They want to run a charter trip and turn it into a commercial, the catch piece anyway, turn it into a commercial endeavor, and so that's where it gets complicated, I think, in terms of into the details.

Part of my concern is, okay, this year it's dolphin wahoo, and, two years from now, we're back to snapper grouper again and then CMP and whatever, but you can certainly -- A dually-permitted vessel -- To Dewey's point, if you're running a commercial trip, you are a commercial boat. You have to have the inspection, and you have to have the life raft, and you have to have the EPIRB, whatever it is, for that size vessel and the distance offshore, and so it's a level playing field, but, if you're running a charter trip, it's a charter trip, one or the other, but the problem is when you blend the two sectors in together, and then it gets confusing, and you have to sort through whose fish is it and who do we credit this for, and then where do the fish come from, in terms of, okay, well, they're going to come -- If it's a recreational trip that's catching them, then it comes out of the recreational sector. Then maybe not everybody in the recreational sector is interested in giving up a larger piece of their ACL, and that's the issue with this. It comes up in the details.

MS. BECKWITH: We are over time, and so I'm going to have Roy and Art, and then we're going to vote this one up or down into Amendment 10, which doesn't make it disappear, but it just is going into this amendment, and then we're going to move on.

DR. CRABTREE: Mel raises a lot of concerns that I have, although I don't -- I have generally not supported bag limit sales. This is an issue though that's gone on for a long time, and I suspect we're going to take a look at it, but I can remember sitting here when we prohibited bag limit sales of snapper grouper and all the outcry about that, and it is tricky to decide why is it okay here, but it's not okay there.

You do have issues with which ACL is it coming out of, and I guess the bag limit sales would come out of the recreational ACL, as I understand it, but then what happens if the commercial ACL is reached and the commercial fishery closes? Does that mean that bag limit sales are the only commercial fishing that can occur, or does that stop too, and is that fair? There is issues there.

Then, to get at some of Art's comment, if the issue here is about waste and about the guy coming home with forty dolphin and then deciding he doesn't want them, that's a bag limit issue, and why are we letting bring in so many fish? If it's just we want them to have enough fish to be able to go home and have dinner, they sure don't need those numbers of fish. We can clearly design this to allow them to pack the ice chest and put a bunch of fish in the freezer, and so there are different ways to get at that, and so I have mixed feelings about this one, but it is a bit of a can of worms.

MS. BECKWITH: Well, and, to one of your points, I would say that, at least in North Carolina, the charter component would say that their sixty fish is what they need to sell a charter to six guys, ten fish per person, and so --

DR. CRABTREE: But they said that when the bag limits for everything were sky high. I have heard that about every fishery that I have ever managed.

MS. BECKWITH: We're going to hear a lot about this one, I'm sure.

MR. SAPP: To that point, the forty fish is not real. It is sixty fish right now, but it is, in no way, shape, or form, a real commercial trip, because, in a real commercial trip, I'm not stopping at sixty, or I'm not stopping at forty. I'm stopping when the sun goes down and I can't see them anymore or they quit biting, especially with a species that there is no trip limit right now, and so this isn't a joint commercial/charter trip. This is a charter trip, where we're stopping at our legal limit, which is much, much lower than -- Well, there is no limit on the commercial and -- There are so many points, and I didn't write it all down, and I apologize, but I'm sure we'll speak about it later, but I just don't want to see it disappear here in some kind of a vote.

MS. BECKWITH: Okay, and so I'm going to -- I heard Jessica make the motion on the board.

MS. MCCAWLEY: **Yes, I did, but, just before we leave a number of these items, I wanted to make sure that the items that aren't listed in the actions, that we get through those other four or five that I mentioned as well, but, yes, I did bring this up as one of those points that I would like to see in the amendment.**

MS. BECKWITH: Okay. Is there a second?

MR. SAPP: There is.

MS. BECKWITH: Second by Art. Okay. **All those in favor of seeing bag limit sales added to Amendment 10, please raise your hand, six; all those opposed to seeing bag limit sales, four; abstentions, two.** Okay, and so we will see this again in Amendment 10. The next one up was the circle hook requirement, and do you want to handle that one next?

MS. MCCAWLEY: Correct me if I'm wrong, but I thought this was somewhat related to the HMS requirements, and was it not?

MS. BECKWITH: Yes, the circle hooks would be one of, and so it sort of -- I didn't quite know if you were interested in seeing those.

MS. MCCAWLEY: Yes, and let me say that on the record. Yes, both of those, to me, kind of go together. I see that they're separate on the list, but, in my mind, they went together.

MS. BECKWITH: Okay, and so then what we would be adding would be consideration of appropriate HMS requirements in the directed dolphin longline fishery, and then we can get sort of more information on then when this comes back of what that would actually mean, the circle hooks, the fishing with whole baits, that sort of stuff. Okay. Can I get someone to make that motion?

MS. MCCAWLEY: **So moved.**

MS. BECKWITH: Moved by Jessica. Can I have someone second that motion? Second by Chris. Okay.

DR. CRABTREE: To be clear, we're not talking about HMS permitting requirements. We're talking about gear requirements.

MS. BECKWITH: Gear requirements, yes, gear and training requirements, if there is any. Gear and training requirements, as appropriate.

MR. GRINER: Gear as in --

MS. BECKWITH: Circle hooks.

MR. GRINER: VMS?

MS. BECKWITH: I think we're going to need a list of what the requirements are, and then we can sort of go through and pick out what's appropriate for us to include to our fishermen, because you're right that they do have VMS, but we wouldn't be requiring them to have necessarily VMS, but we would likely require them to have circle hooks and to potentially use whole bait, to go through some of the training, and so I think it's not all-encompassing, and that's why I wanted to put the "as appropriate", consider HMS gear and training requirements, as appropriate, for the fishery.

MR. GRINER: Thank you.

MS. BECKWITH: Okay. Any other clarifications on that? We will get into all the painful details once we get the whole list of what the requirements are, and then we'll start picking and choosing what we want to move forward into our little section of love. Okay. All those in favor of seeing this move forward -- Go ahead, Chester.

MR. BREWER: When you say pelagic longline fishery, are you talking about blue-water boats, or are you talking about council boats?

MS. BECKWITH: This is for us to tell our guys, our council guys, that they might need to use the gear requirements for the blue-water --

MR. BREWER: It wasn't a joke question, because the blue-water guys refer to themselves as the pelagic longline, and I realize it's just different wording, but I just wanted to know what the intent was. What you're talking about right here are the, quote, state boats or council boats. Thank you.

MS. BECKWITH: **All those in favor of seeing this in Amendment 10, please raise your hand. The motion passes.** All right. What was the other one? You wanted the bag limit one?

MS. MCCAWLEY: The vessel limit, the one the AP talked about, which is the forty fish.

MS. BECKWITH: Okay, and so, if you guys want to see this, go ahead and make a -- I guess Jessica would be making a motion to add the reducing the recreational vessel limit to forty.

MS. MCCAWLEY: **So moved.**

MS. BECKWITH: I want to personally say, on the record, to my North Carolina guys, that I do not want to see this happen. It's seconded by Chester.

MR. BREWER: No, I would like to make a motion.

MS. BECKWITH: We have a motion. Do we have a second? Okay. Did you want to make a point though against this motion?

MR. BREWER: No, I got confused. I thought we had already gone forward.

MS. BECKWITH: Okay. All right. **All those in favor of seeing an action to re-assess the bag limit for dolphin, potentially down to forty, please raise your hand, six hands; all those opposed, three opposed. The motion passes, and we will see this again.**

MR. BREWER: I would also like to include consider using an ACT to monitor the recreational fishery, as opposed to modifying the ACL or OY.

MS. BECKWITH: Yes, that's basically in there.

MR. BREWER: Is it?

MS. BECKWITH: Yes, because we can talk about -- We will talk about the ACTs, and, the definition of OY, you can either go forth and change it, or keep it as-is, and then you can still talk about the ACT, and so, the way the actions are set up, you can basically have that conversation.

MR. BREWER: Okay. Thank you.

MS. MCCAWLEY: Do we need to add the revise the ACL to this, because that's technically not on the list.

MS. BECKWITH: Yes, I kind of figured that one was a given, but we certainly can make a motion. Jessica, would you make that motion?

MS. MCCAWLEY: **So moved.**

MS. BECKWITH: Is there a second? Chester. Okay. **We are moving to add an action to revise the ACL to accommodate the new MRIP data. Is there anyone opposed to this motion? Seeing none, this motion passes.**

Okay. My master goal for this amendment is to see this one off before I leave this council, and so we have ten meetings to get this one done. Then allocations. For sure, of course, we want to look at allocations. Jack, are we missing anything else?

DR. MCGOVERN: No, it was just allocations that I was going to bring up.

MS. BECKWITH: Okay.

MR. BREWER: I want to go back to Dewey's point, because I think that what he said was very, very important. That is we -- Most of us remember that, when the dolphin commercial fishery closed some years ago, there was an attempt made to find out who had whacked those fish, so that we could try to identify where the problem was coming from. Brian worked long and hard trying to identify which vessels, be they -- I mean, the HMS guys were saying, no, it's the state boats, and they did it, and the state boats didn't say anything, and so we were trying to find out who -- Essentially what those catches were. Brian worked very hard to try to get that information, and he was not able to get it, and so I'm still very interested in seeing that information and the monitoring of that situation, but I don't know that, without a hammer, we're going to get that information.

MS. BECKWITH: Okay, and so we do have a way forward to get that information. We chatted that the Fisheries Statistics Division did figure out a way of identifying that, albeit they had some data issues, and so we are a step closer to being able to figure that out, and they will -- I will follow-up with Dr. Clay, to see where we can get with that.

MR. BREWER: Dr. Clay, did you hear my plea?

DR. PORCH: Dr. Clay. I like that. It's kind of like Dr. Ruth. No, I was talking to General Counsel here. Dr. Phil.

MR. BREWER: You don't want to be that guy. I know a lot about him.

MS. BECKWITH: We're good. We'll touch base after. You're okay. Okay. We have a motion to add an action to revise the sector allocations. Do I have anyone willing to make that motion?

MS. MCCAWLEY: **So moved.**

MS. BECKWITH: Motion by Jessica. Is there a second? I need a second. Okay. **Is there anyone opposed to this motion? I see three people opposed. The motion passes.** I think that brings us to what, because we are way over time.

MR. HADLEY: That is it for Dolphin Wahoo, and just Other Business. I will just clarify that we are going to take action -- My understanding is the direction to staff is to remove Action 6 from the amendment, since it's being pursued in a different FMP document.

MS. BECKWITH: Yes.

MR. HADLEY: Great. Thank you.

MS. BECKWITH: Okay. Is there any other business to come before Dolphin Wahoo? Seeing none, we are adjourned.

(Whereupon, the meeting adjourned on December 4, 2018.)

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