1	GULF OF MEXICO FISHERY MANAGEMENT COUNCIL
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3	MACKEREL MANAGEMENT COMMITTEE
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5	Omni Hotel Corpus Christi, Texas
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7	August 20, 2018
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The Mackerel Management Committee of the Gulf of Mexico Fishery Management Council convened at the Omni Hotel, Corpus Christi, Texas, Monday afternoon, August 20, 2018, and was called to order by Chairman Tom Frazer.

ADOPTION OF AGENDA APPROVAL OF MINUTES ACTION GUIDE AND NEXT STEPS

 CHAIRMAN TOM FRAZER: The first agenda item, I guess, is Adoption of the Agenda, and so has everybody had a chance to peek at it? If so, can I get a motion to adopt the agenda? John Sanchez. Can I get a second for that? Second by Martha Guyas. Thank you. All right.

The next agenda item is Approval of the Minutes, and same thing. Any objections to the minutes? Can I get a motion to approve them? Motion by John Sanchez and second by Martha Guyas. All right. The next agenda item is the Action Item and Next Steps, and Mr. Ryan Rindone is going to lead us through that.

MR. RYAN RINDONE: Thank you, sir. We have three items on the agenda for you guys today. We have an update of the coastal migratory pelagic species landings, and then we have an update of the cobia catch per unit effort indices and what the SSC's recommendations were pertaining to those, and then we have CMP Framework Amendment 7, which looks at Gulf migratory group cobia size and possession limits, and we have those size limit and possession limit analyses for you guys to review.

CHAIRMAN FRAZER: All right, and so I guess we'll work through the landings updates, and is that going to be you, Sue? Great.

CMP LANDINGS UPDATE

MS. SUSAN GERHART: Thank you. If we could pull up the landings update. First, we have the king mackerel commercial landings. Now, the king mackerel, for most of the zones, the fishing year is July 1 through June 30, and so, with the exception of the Northern Zone, what you're seeing here for the 2018/2019 is just for the past one-and-a-half months.

We really don't have landings much except for in the Western Zone, where 39 percent has been taken. The Southern Zone has very little landings right now. They generally don't start seeing landings until into the winter, because the fish are north at this time.

If we scroll down to the next table, this is last year, and so this is the year that ended June 30 for most zones, except that the Northern Zone goes until the end of September. However, they did close back in May, because the quota was met, and you can see that we went a bit over. The Southern Zone hook-and-line was quite a bit over. We think that that had to do with late reporting and such, that we didn't get those reports and so we didn't shut them down in time to prevent that overage. The overall ACL is only about 9 percent over, and so that's not bad.

The gillnet season, we did not close. They fished for a while and caught most of the quota, but then the weather was poor and the fish weren't around, and so those fishermen just chose not to fish again, and so we never shut them down.

Scrolling down again, we have the recreational king mackerel, again the July through June season, and we do not have that last wave of data yet. We only have landings through the end of April from MRIP. We don't have any Texas data at all for 2018 or the end of 2017. Actually, I think we have some of Texas data for 2017, but not all of it, and you can see that only 28 percent so far was taken, without May and June and the Texas data in there.

If we go down to the next table, this is for Spanish and cobia. Those both have stock ACLs, and there is no allocation between commercial and recreational, and so it's one ACL, and we do show you the landings separately for commercial and recreational there, so that you can see how they fall out.

We had the end of the fishing year for Spanish mackerel at the end of March, and so you can see that that data -- The commercial is through mid-August, but the recreational, again, is only through the end of April, which should cover most of this fishing season, and we're missing some Texas data here as well. Very little of the quota was taken, 9 percent, and, of course, there wasn't a closure.

For cobia, we also have -- That's on the calendar year. The fishing year is the calendar year, and, again, the same caveats. We have up-to-date on the commercial, but the recreational is only through April, and there has been 21 percent taken so far of the ACL. There is also an ACT on cobia, and that's at around 24 percent.

Then the last table is the 2017 landings for these two species. Both of those are complete now, but we're still missing some of the very late 2017 landings from Texas, the mid-November to

December landings from those, and you can see that the landings that we had were well below the ACL for both of those species for last year as well, and that's my report.

CHAIRMAN FRAZER: Thank you very much. Is there any questions about the report? All right. Seeing none, I guess we'll continue on with the Update of Cobia of the Cobia CPUE, and who is the SSC representative? Luiz. Welcome, my friend.

UPDATE OF COBIA CPUE INDICES AND SSC RECOMMENDATIONS

DR. LUIZ BARBIERI: It's me again, Mr. Chairman. I'm glad to be back. Good afternoon, everybody. I am going to be the SSC representative for this week, and I will be giving you reports in the different committees, and then I think, on Wednesday, there is a comprehensive overview of some of the items that are not being covered during the committee presentations.

Yes, during this last SSC meeting, and this was the August 2 meeting of the Standing, the Mackerel, and the Shrimp and Reef Fish SSCs, and so we had all those groups together. We had a presentation on the cobia indices of abundance from the Science Center, and then we discussed a little bit of the issues that have to do with the Coastal Migratory Pelagic Framework Amendment 7 that you're going to be discussing this morning, and so the SSC looked at some of those options being considered and provided some recommendations to you going forward.

Again, here is the presentation that we received from the Science Center that covers the indices of abundance for the recreational sector. This will be MRFSS and MRIP and the headboat sectors going from 1981 through 2017.

What I'm going to try to do is go over some of those issues, but in a fast and summarized way. If you have more questions, I am glad to see that Dr. Porch is here, back fresh from vacation and ready to address any questions that you might have.

 Those are the time series, the indices of abundance, and then you have the nominal values there, and the indices are the blue dots, and you have a range of uncertainty, and you have the estimated, the standardized, indices for both fleets, the private recreational fleet, and that would be MRFSS and MRIP data, on the left, and then, on the right, you have the headboat fleet over the same time period.

For the MRIP, MRFSS and MRIP, the private recreational sector, you can see that, really, the index shows no real trends. I

know that you have been discussing and, in different states around the Gulf, we have been hearing a lot from stakeholders concerned about the condition of the cobia stock and the lack of large, older fish and concerns over abundance and all of that, but those concerns did not materialize, as far as that recreational time series of abundance is concerned.

Now, for the headboat, which is, of course, the two on the right, you can see that there was a trend indicating somewhat of a dip in abundance lately. It's hard to tell whether those things pan out or not, because you just have one against the other.

The SSC discussed this quite a bit and really didn't feel that the committee had enough information to interpret much out of these indices of abundance other than no major indication of a problem that we could find in these indices. The information was equivocal, at best.

After that overview, then the committee discussed the Coastal Migratory Pelagic Amendment 7, Draft Amendment 7, and some of the measures that are going to be presented to you in a little while and, to give you some advice on how we felt about either one of those types of measures being applied to reduce fishing mortality for cobia, the bottom line is that the indices of abundance are not very informative right now, and the committee felt like, well, we have, next year, a cobia assessment coming up which will integrate different types of data that you generally see, like landings data and the composition, the size and age composition, and a whole number of other factors that are more informative, as far as understanding the status of the stock and understanding how the dynamics of the stock is actually operating there.

The committee felt that, if the council's approach here is to be proactive in applying a management measure to reduce fishing mortality and prevent further issues, problems, from developing until this assessment is done, that, in that case, the committee felt that the minimum size limit will provide you the best, the greatest, benefit when you compare that to the bag limit, and so you're going to see -- I think that will be the next presentation.

Mr. Rindone is going to present you an analysis that looks into reductions in the bag limit and the size limit, and so the committee, SSC, evaluated both of those and felt that those were both, from a technical standpoint, well done. They are informative, scientifically sound methodologies that were

applied, but that, on that bang-for-the-buck type of approach, the minimum size limit reduction would accomplish more in reducing fishing mortality than the bag limit itself.

The committee went on to discuss, really, whether we wanted to make a stronger recommendation to you on each one of those options or which one to adopt, and there was quite a bit of discussion there, and we tried to stay within the role of the SSC and evaluate the technical merit of those analyses and make a recommendation on which analysis will provide you the most, in terms of reducing fishing mortality, but decided not to pick any preferable option there from the suite of options presented, feeling that that would be a role for the council to take. I think that this completes my presentation, Mr. Chairman, and I would be glad to address any questions that the committee might have.

CHAIRMAN FRAZER: Thank you, Luiz. I think we've got a number of questions, and I'll start out with Robin.

MR. ROBIN RIECHERS: Luiz, you kind of touched on it, but, when you were first showing the abundance curves, or the CPUE trends, my question to you then was going to be, but did we look at this based on size of fish and so forth, and it sounds like, based on what you just said then after that, it was that, no, you all just looked at it strictly with these current trends and indices that you had here. You didn't try to break it down by size of fish or anything like that?

DR. BARBIERI: Not in this analysis that was provided by the Science Center. Mr. Rindone, and I don't know if he did this as part of an IPT, in developing those options, but there is an analysis that is a little more detailed that does try and group things by sizes and in terms of the bag limits and size limits, for you to see what's there. This analysis here that we received, in terms of indices of abundance, is all-inclusive of all sizes.

CHAIRMAN FRAZER: Mr. Anson.

MR. KEVIN ANSON: A question, I think first for Ryan. Ryan, was the SSC asked to provide recommendations, I guess, for which path to go? Luiz had summarized and said that they felt like it wasn't part of their purview, and so I'm just curious. We seem to have this show up from time to time on the SSC, and I'm just wondering if it's coming from us through the council staff to them, or is it something that's an issue that they keep rehashing, as far as the management side of the house and the

scientific side of the house.

MR. RINDONE: It's tough to say sometimes, because, when these discussions -- As these discussions evolve organically at the meeting, an awful lot of different questions get asked, as I'm sure you would hope that they do, and staff's direction to the SSC from the council was to evaluate the analyses that were done, and, like Dr. Barbieri said, are they sound, are they appropriate, given what the council's intent is, and sometimes, even with that, there can be some confusion as to exactly what the council is asking.

As far as how to rectify that, perhaps if the council had something very explicit they wanted the SSC to evaluate, but my only caution in that would be this is a scientific, deliberative body, and so sometimes those tendrils that spread out reveal things that we otherwise wouldn't have considered, and so you're right that it does happen from time to time, but, ultimately, they stayed within the science.

I have a couple of questions, Luiz. On this CHAIRMAN FRAZER: figure right here, when I look back, for example, at the 2017 landings data for the recreational stuff, in Florida, which is generally the state that captures most or harvests most of the cobia, right, and they were down significantly, somewhere about 500,000 pounds to two-hundred-and-something, but Alabama was actually up a little bit, and I believe Texas might have been up as well, or Louisiana, but what I'm trying to understand is, on that bottom-left-hand panel of that proportion index, if you're catching half the fish that you historically might have, this suggests that, every time that you go out and you're targeting a cobia, the odds of getting that cobia are about the same as they were forever. I am just trying to reconcile that, in my mind. Either there is fewer fishermen or the fishermen are getting worse, and so did you guys talk about that on the SSC?

DR. BARBIERI: I don't think we talked about that explicitly in that sense. This came up, and it has to do with the issue of targeting, and it has to do with a whole dimension of fishing that involves, of course, human beings, and there are changes in behavior, and you have this -- Of course, this is a coastal migratory pelagic group, and so it's highly dynamic and moving around, according to a whole number of environmental conditions, and so it's not one of those stable type of stock abundance that you see and availability of the stock that you can find them consistently over time.

It's hard to tease out, when you see a combined graph like this

over a long time series for this one survey that is so inclusive of the Gulf of Mexico, the details on a smaller scale, and this is where this analysis sheds some light, but the SSC really felt that, until -- Especially for a species like cobia, but until we can get a stock assessment that can look under the hood at a whole number of these other data sources and can try and parse things between the eastern and western and northern Gulf and evaluate those things, look at the composition, the age and the sizes that are coming out, those things would be more informative.

In a way, I think that the committee agrees with you that, even though the trends don't show up there, they are just not very informative, as presented.

CHAIRMAN FRAZER: Sure, and I guess I would -- I appreciate all of that. I mean, what I am also trying to understand though, if you go to the bottom-right-hand panel, and so, when you're looking at the headboat, they're not typically targeting cobia, and so it's a little more representative sample, I would think, right, and so that indicates, in fact, that it's actually on the downward spin a little bit, suggestive of that.

I am just trying to reconcile that also in my head, but was there any discussion in the SSC about the landings actually in the north? Because they did go up in Alabama, and I think in Louisiana too, but I would have to go back and look at that, but the public testimony that we received kind of indicated more Gulf-wide that there was a problem everywhere, and so maybe I can ask Kevin and the folks from Louisiana to kind of shed some light on the cobia landings and what's going on there. Go ahead, Ryan.

MR. RINDONE: Thank you, Mr. Chair. About the headboat landings, something that was discussed at the meeting was the potential for effort shifting within the headboat fleet, especially in the last five to eight years, with things like pilot programs and Amendment 40. Headboats that may have typically drifted may not be doing as much drift fishing. They may be anchoring up on the reef structure to take advantage of those opportunities.

The extent to which that is or is not happening was purely just postulated, just as I said it, and we can't really say exactly what has or hasn't happened yet, but it was presented as a possible reason for the decrease in effort for the headboat fleet.

The other thing that you kind of touched on was the fact that headboats don't explicitly target cobia, and so they are, in a sense, a little bit independent of your normal fishery-dependent data that come in.

CHAIRMAN FRAZER: We'll go ahead with Chris and then Kevin.

MR. CHRIS SCHIEBLE: Just to touch on the landings that you were talking about a little bit, we ran year-to-date LA Creel landings prior to coming to this meeting for this year, 2018, and compared it to year-to-date landings going back through 2014, inception of LA Creel, and there is actually an upward trend this year over last year, 2017, which was down from 2016, and so this year is higher than 2016 was, and 2016 was higher than last year, and so last year seemed to be the anomaly, the lower year, and a little bump-up this year, but this is year-todate through July, fishing year through the end of July, and anything could change between now and the end of the year, of but it seems that maybe there is some interannual variation that takes place on a certain half of the Gulf, perhaps, where you see some years that are a bimodal distribution and other years you don't.

That's one possibility of what we could be seeing, and it could be just a change in fishing effort with weather, weather-dependent, just like we see with snapper, too. I mean, we may have better years than other years, because of angling pressure. I would tend to say that we agree with the SSC Committee right now that it seems like a stock assessment is probably the most important thing before making a major decision.

CHAIRMAN FRAZER: Thanks, Chris. Kevin.

MR. ANSON: To address your question, just looking really quickly here at the landings for Alabama, amongst for-hire vessels and private vessels, or anglers, the trend, by looking at numbers of fish, is fairly static from 2014 on.

There is a slight increase in the numbers of fish, but perhaps we probably may be focusing or hearing a lot of folks that are in the for-hire fleet, and not necessarily from the private guys, because, when you look at the numbers of fish within the two sectors, the private recs are static, and the for-hire fleet went down from 2016, from over 2,000 fish begin caught to maybe a couple hundred, and so there was a dramatic drop-off.

As Chris had mentioned and other people have mentioned, there may be shifts in fishing behavior or patterns, or maybe there is

less trips being made for the charter boat guys and some of the private guys are picking up the effort, and so they're able to maintain that level of harvest, if you will, for the state, but certainly there is a drop-off, significant drop-off, but 2016 was also a little bit higher year too for for-hire, and so I don't know yet.

CHAIRMAN FRAZER: Thanks. Susan.

MS. SUSAN BOGGS: I would just like to comment to Ryan discussing the headboats. I know, in Alabama, the eight headboats there, it's more of like an incidental catch. It's not something that's being targeted.

CHAIRMAN FRAZER: Thank you. Luiz.

DR. BARBIERI: Mr. Chairman, just a couple of points. One is remember that, even when you have a stock assessment for a species stock like cobia, there will be a fairly high amount of uncertainty.

I just participated in SEDAR 58 with the southern group of cobia, the stock ID process, a series of workshops in preparation for the SEDAR 58 benchmark assessment there, and, I mean, the lack of biological information on this species is tremendous, age composition and size, and even age and size of sexual maturity are very uncertain.

If you go back and look at the benchmark assessment, SEDAR 28, that we had for the Gulf, that was already very uncertain, and so an analysis like this, of course, which is a lower tier, in terms of its capabilities, is unlikely to be able to really capture all of these dynamics that we are talking about, changes in fish behavior, movements of the fish, depending on all sorts of parameters, but one other thing that I wanted to say.

I think this is informative, because, in a couple of days, maybe tomorrow or maybe Wednesday morning, we're going to be talking about the interim analysis. This afternoon, I guess Dr. Porch is going to be presenting something about the revised and expanded SEDAR process and about the interim analysis.

Then, I am going to, when I give the full report, I guess Wednesday morning, talk a little bit about red grouper, and you're going to be able to see how, perhaps, in situations such as this, when the council wants a bit more information, but we are not completely at the stage where we can provide a full stock assessment, I think that the interim analysis is going to

be much more informative.

It's going to be able to pull more information than simply looking at these indices of abundance, and so that's just something to contextualize that discussion as it takes place this afternoon and we talk about red grouper later on.

CHAIRMAN FRAZER: Ms. Bosarge.

I'm glad you brought that up, because I MS. LEANN BOSARGE: mentioned it at the SSC meeting, too. I was trying to be proactive and think about that stock assessment coming up, because one of the issues, it seemed like, with the graph on the bottom left, or both of the left graphs, is, essentially, it's a predominantly recreational fishery, and so that's your two kind of recreational groups there, but the issue with that proportion positive MRFSS thing seemed to be actually trying to figure out what was a cobia trip and what wasn't and trying to parse that out of the data, and I just wondered, because it is so heavily so recreationally influenced, are we going to have issues when we get into the stock assessment side of the house with that, and does that mean that we should almost give a little more credence to the headboat CPUE index? Is there a little less uncertainty surrounding that? Not to mention that, if it is mainly a bycatch fishery, you could almost see that as like a fishery-independent index, to a degree, right, and so --

DR. BARBIERI: Well, this, to me, brings to memory things that we have discussed before, you know greater amberjack and the last assessment and this -- How do we parse out or how do we look at the different fleets to see which one will have the best and the most informational content, and cobia is in that same situation, where, when you are trying to identify that percent positive and identify which trips actually were targeting cobia, to identify which ones turned out positive, you run into a lot of problems.

This is where those data workshops and the assessment workshops can at least try to take measures to ameliorate, because the assessment analysts can go back, when the panel provides some input, and try and parse it differently and look at things from a different perspective, to see if you can gather some more information than this, and so it is an issue. It will be hard for us, I think, to overcome with the amount of data that we have presently.

CHAIRMAN FRAZER: Go ahead, Dr. Mickle.

DR. PAUL MICKLE: Thank you. Just, with migratory fisheries, it gets really complicated, just from my state's perspective. When we have our shootouts, our big cobia seasons, if there's a migration later in the year, then we miss those landings, and so that's kind of a false negative, false positive, right, and so that's Type 2 error, with an inference in a stock assessment, at least from a local level, and so it would be interesting, and I think the data could do this, to bring in that temporal aspect, so that, when these fleets do have seasonality in their efforts, it can be parsed out to determine that, well, maybe the cohorts came through, but they were just missed within the efforts, right, and so, with the headboats, like what Leann was saying, I don't know if there's an effort variable there, but it's difficult to parse out.

Like Luiz said, it just becomes so difficult when even some of the life history aspects are not very well documented on this species and sexual maturity, and it just brings it all -- It's very difficult to make those inferences, but we've heard the fishermen come here, and they have fished for thirty-plus years, and they've never seen anything like this, and so there is some weight in those statements, and so I'm glad to see this discussion. Thank you.

CHAIRMAN FRAZER: I certainly don't want to throw rocks at the SSC. I think you guys did a great job, and it's a really difficult set of data to work with, and I understand the shortcomings, or the limitations. It's not that the data are bad, but they're just difficult, right, but we are in a bit of a predicament, or a pickle, with regard to the council, because we've heard countless public testimony that we've got an issue, and I think we kind of have this obligation to be responsive to the stakeholders, right?

What I would ask from the SSC, really, in my mind, is, is there a negative result or consequence of us moving forward with one of the two action items that we have put in this document?

DR. BARBIERI: Right, and I think there was a misunderstanding along the way, perhaps the way that I presented it. The SSC was not discouraging the council, really, to proceed with any action. Actually, the SSC tried to take that neutral approach of not weighing-in one way or the other. This is your prerogative to move forward whatever regulatory measures that you feel like moving ahead with.

What we wanted to do is two things. One is be transparent about the uncertainty and let you know that this is a highly-equivocal

type of situation and that the analysis that we have in front of us is not very informative, so that you cannot really look at that too much for support, because that analysis is quite equivocal, one side.

The other side is this is really a risk assessment. It's a risk assessment type of thing, and we feel that you can actually exercise that judgment, given this information that we presented, and so we were not discouraging and feeling any disadvantage with you taking action.

It's that, if you decide to take action, be aware that the size limit changes are more likely to reduce fishing mortality to the degree that you want it reduced than the bag limit and that we don't really have -- We see a very fuzzy picture of the status of the stock right now when we look at these graphs, and so we're letting you know how fuzzy we feel it is and that the information content is limited.

CHAIRMAN FRAZER: All right. I appreciate that. Are there any more questions for Luiz at this point? If not, I think that's a good segue into the next agenda item with Ryan. Thanks.

OPTIONS: CMP FRAMEWORK AMENDMENT 7: MODIFICATIONS TO GULF COBIA SIZE AND POSSESSION LIMITS

MR. RINDONE: Okay. Let's pull up Tab C, Number 6. This is our framework action to look at modifying Gulf cobia size and possession limits, in response to the feedback that you guys have received from stakeholders over several of the meetings that we've had.

Just to quickly review our purpose and need, the purpose of this action is to modify the minimum size limit and possession limit of Gulf cobia in order to reduce harvest. The need is to respond to concerns of potential overfishing of Gulf cobia until more information on stock status becomes available. Is there any desire to revisit that in any way?

Seeing no hands shooting up, we'll go right on to Chapter 2. We incorporated the size and possession limit analyses into the discussion on these actions, and so we'll touch those in that order.

 Action 1 looks at modifying the minimum size limit for Gulf cobia, and, again, both of these actions apply only to Gulf cobia within the Gulf Council's jurisdiction, and so, even though Gulf cobia go all the way up to the Georgia/Florida line

as a migratory group, cobia occurring from the Georgia/Florida line down to the council jurisdictional boundary are apportioned to the South Atlantic Council for management, and so this would not apply to that portion of the Gulf cobia stock. The South Atlantic Council, at some future date, could take commensurate action, if they thought it appropriate.

Action 1 modifies the minimum size limit. We have a few alternatives here, in addition to doing nothing. Alternative 2 would increase the minimum size limit for both recreational and commercial fishermen to thirty-six inches fork length. Alternative 3 is thirty-nine inches fork length, and Alternative 4 is forty-two inches fork length.

The size limit analyses that were done were done considering these specific alternatives, and, if we go down to Figure 2.1.1, if we scroll down just a bit, this is the annual average weight of cobia in the Gulf for both sectors. The commercial sector is in purple, and the rec sector is in black, and so the commercial sector, if we're just eyeballing it, looks relatively flat, and the rec sector -- You might say that there's been a slight decrease over time in the average weight of cobia caught.

If we go down to the next figure, Figure 2.1.2, this is the total discards of cobia in the Gulf by year for the recreational sector, and that's because discard estimates were only available for MRIP, and, Dr. Mickle, this, I hope, gets at some of what you had asked at the previous meeting. You were asking about time series of discards and how that has changed with time and with size, et cetera.

I regret to say that, for the commercial sector, the landings are so much lower by comparison. Those data just -- They are not informative, and, because of the incidental nature of how cobia are often caught, we don't have the data for this species like we do many of the other species. There is a lot of fuzzy, gray areas.

CHAIRMAN FRAZER: Hold on real quick, Ryan. I think Dale had a quick question.

MR. DALE DIAZ: I did read the document, but I don't remember if it's in there, Ryan. As far as dead discards, do we know the percent of discards that don't make it?

MR. RINDONE: 5 percent.

MR. DIAZ: 5 percent?

MR. RINDONE: That's per the last stock assessment. That's for both components combined. They fish generally with the same gear, and they handle the fish in a similar way, and so the discard mortality applies to both.

CHAIRMAN FRAZER: Another real quick -- Dale, go ahead.

MR. DIAZ: Just to follow-up, it surprises me that it's that low, because they typically gaff the bigger fish, and so I would have expected that to be higher, but Leann brought up something, and this wasn't my question, but, when me and her was talking earlier, and while we're on the size limits, the females grow faster than the males, and so what is your -- I mean, what's your thoughts on if we were to raise the size limit, if that would be a positive or a negative impact, because we might be fishing the females a shade harder, and maybe we're doing that already, but do you think that impacts it in any way?

MR. RINDONE: The females do grow faster than the males, and they have a larger size at age than the males do, and so, theoretically, based just on that, the more you increase the size limit, and we haven't analyzed this, but, just based on what we have analyzed, the more you increase the size limit, the higher the probability you may have, to some degree, of harvesting females disproportionate to males.

If the thinking is that there could be something wrong with stock productivity in some way, then removing more females may be counterintuitive to that, to trying to fix that particular issue. It's not to say that any increase in the minimum size limit is going to result in that effect, but, the larger you go, based on the size at age, the more females you may be harvesting.

If we go to Figure 2.1.4, and we'll go back to one of those other figures to show that, but, if we can go to Figure 2.1.4, please, there is that growth curve.

CHAIRMAN FRAZER: We have a real quick question.

MS. ANNA BECKWITH: Just to Ryan's point, when we went through this process, the South Atlantic did take that into consideration, Dale. You may have even been at those meetings, but we did note concerns that, as you raise the size limit, and we have an analysis in there somewhere, and I could probably dig it out, where, if memory serves, we assumed about 5 percent greater amount of females per inch, and that might be a range,

but I would have to go back and find that, but certainly you would have more females at the larger size limit, and so we settled on a thirty-six-inch, because we felt that that was still achieving without having that be disproportionately more catch towards the females.

CHAIRMAN FRAZER: I am going to ask a quick question of Anna as well. So, when you went to thirty-six inches -- One of the discussions we had at the council meeting last time was some problems handling those bigger fish. Have you guys talked about that, or have you seen any evidence that moving from a thirty-three to a thirty-six-inch resulted in some type of increased mortality, for example?

MS. BECKWITH: We did make it through our first cobia season at thirty-six, and there were probably some grumblings from the recreational community, but the charter guys were able to adjust pretty easily.

I was telling J.D. that one of the tricks that I heard some of the charter folks talk about was just putting a couple of pieces of tape on the side of the boat, just to have a quick reference, where they didn't have to pull the fish in, but I think we did not hear that much pushback from the thirty-six-inch size as we initially expected to.

CHAIRMAN FRAZER: Thank you. Sorry, Ryan. Go ahead.

MR. RINDONE: I was just trying to bring up the sex-specific length-at-age data that you see on the screen right now, just in reference to this particular discussion, and so you can see how the females, in orange, do get larger more quickly than the males do, and the stock assumed a one-to-one sex ratio, but, to be fair, we don't have an awful lot of information on that in the first place.

CHAIRMAN FRAZER: Ms. Bosarge.

 MS. BOSARGE: I guess the inverse to that argument about if you raise the size limit you may end up harvesting more females is that we were told at the last meeting that, generally speaking, a three-year-old fish is sexually mature.

 A three-year-old female is going to be above forty inches, and I don't know what that is exactly, maybe forty-two, something like that, and so, if you raise that size limit, and I'm not saying to go to forty-two, but the fact that you're going to actually let some of those females reproduce, rather than kill them

before they ever reproduce, you have to offset that against some of that death, that 5 percent death, that we know is skewed toward females, the bigger females, and so, I mean, I guess what I'm saying is there is some tradeoffs.

MR. RINDONE: I didn't put the confidence intervals for these data on this graph, because it would have made it visually confusing, but they're wide, to say the least, and so, generally speaking though, you are correct in that, at three years old, a female cobia can be rather large.

The other thing to consider, directly related to what you had said, was that cobia can spawn multiple times in the same season, and so there could be multiple opportunities for that fish to reproduce at a larger size compared to a smaller size, just by function of time and growth.

MS. BOSARGE: But they've got to live long enough to make it to the big size. We can't kill them first.

CHAIRMAN FRAZER: Okay. We're going to, in the interest of time, keep on plugging.

MR. RINDONE: Sure. Figure 2.1.3, this shows the size distribution of cobia landed in the Gulf from Texas through west Florida just for 2015 through 2017, and that's all of those years combined. The red line there shows the minimum size limit.

From a percent of fish landed perspective, you can see that a fair amount of -- The large proportion of fish that are interacted with by fishermen are of legal size or larger, and, generally speaking, the commercial sector and the for-hire sector interact with larger cobia than the private angling sector or the headboat sector, or headboat component or what have you, headboat fleet.

If we look at the Table 2.1.2, you guys can see the estimated percent reduction in the landings for the actions proposed in Alternative 1, and so remember Alternative 2 raises the minimum size limit to thirty-six inches fork length. Alternative 3 is thirty-nine inches, and Alternative 4 is forty-two inches, and you can see those percent reduction in landings by sector over there to the right, and, again, it's important to remember that this particular species harvest is dominated, better than 90 percent, by the recreational sector.

That is the size limit analysis, and you guys do not currently

have any preferred alternatives or anything for this action. Did you have any questions or anything like that before we move on?

CHAIRMAN FRAZER: I think I would just prefer to move to the next action item, actually. Go ahead, Andy. Sorry.

MR. ANDY STRELCHECK: I heard Anna talk about the South Atlantic size limit of thirty-six inches, and are all the Gulf states currently at a thirty-three-inch size limit?

MR. RINDONE: Or equivalent, yes.

MR. STRELCHECK: Okay, and then I want to put this on the table for consideration. I realize the bag limit doesn't get us much, but, based on past experiences and analysts, typically, when we estimate a size limit reduction, we don't ever realize it, because those fish quickly grow into that new size limit and ultimately get caught up a few years down the road, and so, typically, we realize the size limit reduction in harvest in the first or maybe second year, but as those fish -- If they respond, they will grow into that size limit, and the net effect is going to not be as great as what we estimate here, and so I do want to talk about possibly considering a closed season as part of the alternatives later.

CHAIRMAN FRAZER: Sure. Ms. Bosarge.

 MS. BOSARGE: Luiz stated that the one thing that the SSC did kind of give us some guidance on was that we would probably get the most bang for our buck with a size limit change, and I'm not sure what the rationale for that was. I guess part of it is that we're not catching the quota anyway, and so, if you change the bag limit -- I mean, you're not catching the quota, but, if you change that size limit and maybe let a few of those fish reproduce again before you kill them, you may actually see some sort of conservation benefits there, and so I just hope that we'll continue to -- Not anything extreme with a change in size limit, but, I mean, I really do feel like we might could make some headway there.

CHAIRMAN FRAZER: Sure. I think we're going to revisit this at Full Council, and I think we're going to run into a time constraint, but, Andy, I have a real quick question. With regard to a closed season option, are you trying to target like the spawning season in particular, and they have a protracted spawning season, and so I don't know what you might be thinking.

MR. STRELCHECK: My recollection is they spawn April through September, with a peak in the summer months, and so I guess I would want to look at the data to determine what would be the most valuable from a spawning season benefit but also when they're being landed and when would potentially be the shortest season that we would have to impose to get some net reduction.

CHAIRMAN FRAZER: Okay. Great. Thanks. Go ahead, Ryan.

 MR. RINDONE: All right, and so we'll move on to Action 2 then. Action 2 looks at modifying the possession limit for Gulf cobia, and again, this is just in the Gulf Council's jurisdictional area, and you guys currently have the two preferred alternatives here.

Preferred Alternative 2 would decrease the per-person daily possession limit to one fish per day. Alternative 3 would create a commercial and recreational daily vessel limit, and you guys currently prefer Option 3a, which would set that daily vessel limit at two fish.

If we go down to Figure 2.2.1, you can see that the number of cobia landed per angler per trip is, generally speaking, less than one. This lends itself to the incidental nature of interaction with cobia by commercial and recreational anglers.

If we go down to the next figure, 2.2.2, you see the number of cobia per vessel per trip, and the preponderance for all fleets is one cobia harvested per vessel per trip on trips that listed cobia as the primary or secondary species that was targeted, and, again, both of those figures use data combined for 2015 to 2017.

If we go down to Table 2.2.1, you can see the percent reduction in landings, per the alternatives that are proposed for Action 2, and these percent reductions are estimated to be much smaller than those for the minimum size limit. Hence, what the SSC had discussed with you guys. I am just breezing here, because I know we're on a time constraint, and so you all stop me if you want to.

The next three tables show the estimated percent reduction when combined with an increase in the minimum size limit. Table 2.2.2 there shows thirty-six inches, and 2.2.3 is thirty-nine inches, and 2.3.4 is forty-two inches. Intuitively enough, the larger the minimum size limit, combined with a reduction in the possession limit, the greater the predicted reduction in harvest, and that's what we have for Action 2, Mr. Chair.

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CHAIRMAN FRAZER: Thank you, Ryan. Is there any questions at this point for Ryan? I have a couple. With regard to timing, clearly there is some discussion that is going to need to take place, and, again, at the Full Council, but where are we in this document, exactly?

MR. RINDONE: Well, it's a framework, and we're in what we'll call the draft phase right now. We have preferred alternatives for Alternative 2, which are commensurate with those that are currently in place for the State of Florida on the west coast, and you guys don't have anything for any change in the minimum size limit. If you guys don't want to change the minimum size limit, you guys can always recommend to remove that from the document, and that will certainly streamline it a bit.

If you guys want to consider a change in the season, then a motion that says let's add an alternative to look at that and give us, I guess, some parameters to examine. I know Dr. Strelcheck had mentioned looking at the landings and when the landings come in and looking at that compared to the spawning season to try and get an idea of what might be best and the percent reduction in fishing mortality that we might see for that, and so it's up to you guys.

CHAIRMAN FRAZER: Sure. I think what we'll do is give this a little bit of thought and give you some better direction at Full Council. Go ahead, Dale. Do you have a question?

MR. DIAZ: I am just thinking here as you're talking. You know, at the last meeting, I was the one that threw out the preferred for the possession limit, and there is a lot of information that's been brought here today that we didn't have at the last meeting, and mainly the SSC is saying the biggest bang for the buck is in the size limit, and then Ryan has got the percentages that we can get based on what we're looking at.

We've got good information. The Louisiana landings are slightly up over 2016 for sure, right, in 2017, and I hate for us to wait until Full Council and pick a preferred if somebody feels strongly about something on the size limit, or even changing the possession limit, because we've got public testimony that we're going to have on Wednesday, and so, if we don't throw something out there that we think we might do, then we're liable not to get much comment from the people that's going to show up.

I am just a little hesitant to wait until Full Council to do stuff, for that public testimony component only, and so thank

you, and I'm not sure that I want to throw out a motion just yet. I'm stewing on it.

CHAIRMAN FRAZER: Leann said we could work really late during Full Council if I wanted. Go ahead, Robin.

MR. RIECHERS: Well, I mean, it kind of begs the question of, if we're going to entertain closures, then we're really going to have to go back and work on the document more, and so I think that really is the question, Dale. If you're going to entertain those in any way, then whether we have a preferred at this moment in time really is not going to change the outcome of when this document will come for final, and so I am not saying we are, but certainly Andy suggested that he wanted to at least entertain that.

CHAIRMAN FRAZER: Yes, and I appreciate that, and I would like to talk to Andy a little bit more and have some discussion about what that option might look like, based on the biology of the fish a little bit, and so, at least for me, I am happy to sit a little bit and wait, and I appreciate your comments, Dale, and, again, I would reiterate it. If somebody feels strongly about a size preference, then now would be the time. Go ahead, Martha.

MS. MARTHA GUYAS: I think I said this at the last meeting, but our commission considered this issue, and I think they finalized it in December, and they decided to leave the size limit alone for the time being, wanting to get that assessment and get more information.

They considered raising it, I think to thirty-eight, and then ended up walking away from it, because of testimony from the public about different ways that different people were fishing for cobia in different areas, and so they felt like -- The short story is they felt like they didn't have the information they really needed to make that change, but everybody seemed to be able to be onboard with reducing the size limit, or, excuse me, the bag limit and the vessel limit.

That was how they chose to address it, and so, in terms of what the commission is going to do here, they will keep the size limit they have, I think until we have the assessment, and so this probably would not be a situation where we would change in state waters to go along with whatever the council does if the council makes a change in the size limit, and so I will just put that out there.

CHAIRMAN FRAZER: Thank you. John Sanchez and then Leann.

MR. JOHN SANCHEZ: Thank you. I am thinking, the more I hear the discussion of all, I am leaning toward bag limit is the way to go, only because the size limit -- I kind of heard some rationale that made a lot of sense to me that, one, if we raise the size limit, we're getting into the ones that produce more fecund -- That are breeders. Two, any reduction that we're going to realize there is going to be temporary as they start to take those fish out of the population in subsequent years, and so it seems like bag limit, to me, would be more of a way to do it.

CHAIRMAN FRAZER: Thanks, John. Leann, go ahead.

MS. BOSARGE: I was just going to say, if you all are entertaining the idea of a possible closed season during spawning or peak landings or whatever your preference may be, probably now would be a good time to let's have at least that discussion and put a motion on the board, if you want that action item added in there, and let's vote that part up or down.

Then, if you want to pick preferreds at Full Council, we can, if you want to wait until you get that analysis, and fine, but I think we probably should have that motion and get that discussion out of the way during committee, if you want this document to come back with an action item that looks at seasonal closures.

CHAIRMAN FRAZER: I just want to make sure, if we do that, if we make a motion to put an option in there that would consider a seasonal closure, then there is certainly no need to pick a preferred today, because we're going to see that whole document again, right? Okay. Then I would be happy to entertain that motion, if somebody would like to make it. Robin.

MR. RIECHERS: Well, I think it goes back to the problem you were suggesting that you wanted to talk with Andy some more about, and it's pretty hard for any of us to identify, other than in a generic sense, when those closures might make the most sense, but, really, this is the kind of thing we typically look at a calendar of fecundity and as well as the catches, and we try to make those kind of combinations at that point. Doing it sitting here blindly I think is probably a disservice to the fish as well as the fishery, in some respects.

 CHAIRMAN FRAZER: Sure, and I guess what I was suggesting is that we would just put it as an item in the document. It would have to go back to staff to figure out all the alternatives,

but, Carrie, you had a quick question?

was just going to point out, on page 27 of the document, it talks about the seasonal aspects of reproduction, and this was based on the work that Nancy Brown-Peterson et al. did in 2001, and it talks about they form large aggregations and they spawn during daylight hours in the Gulf from April through September, and then it goes into the peaks, with the increased gonad production in March and the peak in July and decline and level off thereafter, sometime in September, and so, if you are looking at a seasonal closure, at least you know when the peak is.

CHAIRMAN FRAZER: Thank you. John Sanchez.

MR. SANCHEZ: Just a comment. To think that, as we were getting into cobia not too long ago, and it was moving rather quickly, I had hoped that, oh my god, we could actually do something quickly.

CHAIRMAN FRAZER: To that point, I think we're trying to be very responsive to the tremendous amount of public testimony that we heard on this issue, but it's complicated, and I'm going to make sure that we try to get it right. Sue.

MS. GERHART: Adding this new action doesn't necessarily mean that you could not take final action in October. If staff looks and comes up with alternatives and does the analyses and you are okay with those alternatives and want one of those alternatives, then you could go ahead. It's just if you wanted something that wasn't analyzed that there would be an issue with doing that.

CHAIRMAN FRAZER: Okay. We're going to wrap this up pretty soon here, but does somebody at this time want to make a motion to direct staff to develop a second action item that is related to a closure, or a third, excuse me? Andy.

MR. STRELCHECK: Since I raised it, I will make the motion to include a new action in the amendment that evaluates seasonal closures for cobia. I think we can leave it at that.

 CHAIRMAN FRAZER: Okay. We have a motion on the board. Is there a second? Going once, going twice, and no second for the motion. I will second the motion, for discussion. Can somebody enlighten me as to why they may not feel strongly about entertaining this motion? Dale.

MR. DIAZ: I don't really feel strongly about not entertaining the motion, but I'm just trying to think about how this fishery is prosecuted in the area that I'm in, and there are several long-standing cobia tournaments that are in the late April and May timeframe, which tends to be the peak spawning time, and I'm just wondering how unpopular it would be to try to implement this in my area, and so that's what is giving me pause, but I'm trying to also think about what is best for the stock and what we should do, and, right now, I'm just not excited about the seasonal closures.

CHAIRMAN FRAZER: Okay. Thank you. Mr. Anson.

MR. ANSON: I will echo a lot of what Dale just said. I am not too fond of doing some analysis on seasonal closures, although it could provide us some benefits, as much as managing the species, and I'm just uncertain, until we know I guess, I'm uncertain as to what the magic or the best time is for setting a seasonal closure.

It may be outside of those typical cobia tournaments, and so John said earlier that we thought we would kind of push this through pretty quickly and kind of get it set up for next season, because there seemed to be a lot of desire amongst at least the eastern Gulf to do that, and this just kind of would slow that down, and I understand Sue's comments, but I just am a little uneasy going into October with a new action item and making it final.

That's not to say that we would go with a seasonal closure, but it's just going through the effort and everything and then having that discussion and final action in order to meet that timeline to have something in place for 2019.

CHAIRMAN FRAZER: Sure. I appreciate that. Dr. Mickle.

 DR. MICKLE: Thank you. I appreciate you recognizing me. I'm not on the committee, and I don't really like when council members not on committees talk after motions, but I'm doing it, and so I guess I don't like myself, but, with Nancy's paper -- I am going to have to go back and look at Nancy's paper to see how robust the data is.

It may be heavily, I'm assuming, on the eastern side of the Gulf. The samples from her histological statements that were read into this document may not be a representation of Gulf-wide reproductive timing, and so we definitely need to at least check on that and have that on the record.

 Also, we're kind of heading down the road of the amberjacks. With the seasonal closure issues, you start getting into differences temporally between the fleets in east and west, and Dale spoke for our central area as well, and so these things get really complicated when we start talking about closures, and so I won't provide an opinion, as I'm not on the committee. Thank you.

CHAIRMAN FRAZER: I'm going to go with John and then Martha and then Robin.

MR. SANCHEZ: For all the concerns we just discussed, I will say a big no thank-you.

CHAIRMAN FRAZER: Thank you, John.

MS. GUYAS: Ditto all of those things, and I think it's not just the differences in terms of how and when the fleets are operating, but it's really when the fish are there, because this is one of those pulse fisheries where they're moving around and popping up in different places at different times, and so a seasonal closure is likely going to impact some parts of the Gulf more than others, and so we'll just have to be very mindful of that.

CHAIRMAN FRAZER: Thank you. Robin.

MR. RIECHERS: Well, I will even kind of take it a more 10,000 or 30,000-foot level, is that we have started this document because we heard from fishermen, and, now that we've seen the evidence of that, the evidence we're seeing doesn't necessarily corroborate what we've seen on the ground, at least across the entire Gulf.

When you think about it from that perspective, we are going to see some of those regional differences, quite likely, as we've already seen in testimony. In addition to that, we're kind of down to a decision about possibly a bag limit, which frankly doesn't change anything, or at least we've heard some of that discussion, and so, without the size limit or some of these other things, we may be doing something, but just to make ourselves feel good, as opposed to really doing something in the fishery.

With that, like I said, I was hesitant to add anything until we actually know if we're really going to go forward with something or do we -- Now, after seeing the data brought to us, and not

that the data of people's testimony is not important, but, seeing what we actually know about the fishery and the landings and those indexes, are we ready to move now, or are we ready to wait on an assessment?

CHAIRMAN FRAZER: Thanks, Robin. Leann.

MS. BOSARGE: I am not going to speak to the motion, but just to that point, so we saw two different -- An index for MRFSS and an index for headboat. One was flat and one was negative, and so read from that what you will. There was nothing positive out there, right?

Then, if you look at landings, since it's predominantly a recreational fishery, the landings peaked in 1997 at 2.9 million pounds, and so that's almost three-million. Last year, we landed 889,000 in the Gulf area, not including that east Florida, and so, I mean, we're down. There is no doubt we're down, and landings have been down for quite some time.

The max landings we've gotten since 2001, which is eighteen years or so, was 1.2 million, and that's still not even half of your peak landings, and so, I mean, I don't think that there is any doubt, between that and the public testimony that we had, that there may be a need for action here.

I'm just throwing that out there as like that 30,000-foot view of what's happening with cobia, and so I hope that eventually we will look at picking a preferred on that size limit. We may want to hear some public testimony, and maybe it will guide us, but I am like you. If we just do the bag limit, we didn't do too much, and so I think we need to look at at least both of those.

CHAIRMAN FRAZER: I am going to take maybe one or two more questions and then we're going to move on. Andy.

 MR. STRELCHECK: Well, I'm not going to ask a question. I'm going to suggest that, if you agree, I will withdraw the motion from consideration, after thinking about it. Our next assessment will be in 2019, and we'll have the size limit increase for 2019, maybe into 2020 at that point, and we can always come back and reevaluate management measures based on that.

CHAIRMAN FRAZER: Okay. Motion withdrawn. I think what we're going to do is -- Go ahead, Dale.

MR. DIAZ: I am going to put a motion out there and just see where it goes. For Action 1, I would like to make Alternative 2 the preferred alternative, and that would be increase the recreational and commercial minimum size limit of Gulf cobia to thirty-six inches fork length in the Gulf Council's jurisdictional area.

CHAIRMAN FRAZER: We have a motion on the board. Is there a second for that motion? Second by Kevin Anson. Is there any discussion on the motion?

MR. DIAZ: One reason I made the motion is I want us to have the discussion, and I would like to have something to go out for public testimony also, but I really don't think, based on the information that Ryan has provided today, that the bag limit does that much for us. Most folks land one or less anyway, and so it's not going to do that much.

I guess one thing gives me pause. All five states are at thirty-three, and so, if we go forward with this, really, I don't know if the states are going to follow through, and it's a lot of effort for the states, but, out of the information we've looked at today, I feel like this is probably the most logical move.

It's not drastic, but I don't think the information makes us take drastic measures, and I just think it's a reasonable thing for us to at least consider, based on the public testimony that we've had in the past, and so thank you.

CHAIRMAN FRAZER: Ryan, to that point?

MR. RINDONE: Just a reminder that 60 to 70 percent of cobia caught in the Gulf are caught in federal waters.

CHAIRMAN FRAZER: Thank you. Carrie.

EXECUTIVE DIRECTOR SIMMONS: Thank you, Mr. Chair. I just wanted to bring something up about the schedule and this possible change, which we're going to talk about in the next committee, but my understanding, from the cobia update assessment that we're going to talk about here coming up, is the terminal year of data would be 2017, and so any management changes now would not be taken into effect in that stock assessment.

CHAIRMAN FRAZER: Thank you as well for that. Okay. Is there any further discussion about the motion? Seeing none, is there

anybody opposed to this motion? Two opposed. All in favor of the motion, four. The motion carries four to two.

All right, and so I think we're good to go, and we will revisit this in Full Council, unless there is any other business to consider. All right. Seeing none -
(Whereupon, the meeting adjourned on August 20, 2018.)