GULF OF MEXICO FISHERY MANAGEMENT COUNCIL
AD HOC RED SNAPPER PRIVATE ANGLER ADVISORY PANEL

Gulf Council Office Tampa, Florida

JANUARY 18, 2018

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PAGE 98: Motion to support state management of all recreational red snapper. The motion carried on page 104.

PAGE 133: Motion that the committee fully supports and endorses the Modern Fish Act as incorporated into H.R. 200”. The motion carried on page 134.

PAGE 135: Motion that that council investigate the impact of the illegal red snapper fishery occurring in U.S. waters operating out of Mexico. The motion carried on page 135.

PAGE 137: Motion to explore the requirement of descending devices and/or venting tools to reduce discard mortality in all sectors: commercial, headboat, and recreational. The motion carried on page 144.

PAGE 147: Motion to recommend the council reconsider red snapper allocations considering all relevant factors, including, but not limited to the following: social, economic, historical catch, and increased participation of the recreational sector. The motion carried on page 150.

PAGE 154: Motion to recommend that the council explore voluntary angler electronic reporting of harvest and discards and how that information can be incorporated into management decisions and stock assessments. The motion carried on page 154.

PAGE 154: Motion to consider increasing the creel limit on red snapper to three fish with one fish over twenty inches, and the other two fish have got to be under twenty inches. The motion failed on page 161.

PAGE 163: Motion to reconvene the panel again. The motion carried on page 163.
The Meeting of the Ad Hoc Red Snapper Private Angler Advisory Panel of the Gulf of Mexico Fishery Management Council convened at the Gulf Council Office, Tampa, Florida, Thursday morning, January 18, 2018, and was called to order at 8:30 a.m. by Chairman Charlie Caplinger.

AGENDA AND INTRODUCTIONS

CHAIRMAN CHARLIE CAPLINGER: With all the flight cancellations and the closed interstates, we certainly appreciate you being here. I have to read a Chair statement, and so bear with me here.

Good morning. My name is Charlie Caplinger, and I welcome all of you, as the Chair, to the Ad Hoc Red Snapper Private Angler Advisory Panel for the Gulf of Mexico Fishery Management Council. We appreciate your participation in this meeting. Representing the Gulf Council is Doug Boyd, and council staff for this meeting are John Froeschke, Karen Hoak, and Camilla Shireman.

Notice of this meeting was posted in the Federal Register and provided to the media and subscribers of the council’s email list. Meeting information was also posted on the council’s website. The purpose of today’s meeting is to provide recommendations to the council on private recreational red snapper management measures which would provide more quality access to the resource in federal waters, reduce discards, and improve fisheries data collection.

This meeting is open to the public, and members of the public are welcome to speak at times that will allow the orderly conduct of business. Please advise me or the council staff if you desire to address the committee. If you have not already done so, please register in the sign-in book at the entrance. Agendas are also over there for anyone needing a copy.

This meeting is being recorded, and so, when you speak, please identify yourself and speak into the microphone, and, anyone that does not have a microphone, please find one and identify yourself. Please deactivate microphones when finished. A summary of the meeting will be produced and will be available to the public along with the digital recordings. Interested parties may contact the council office if they desire copies of either. For the purpose of voice identification, we ask that each member identify him or herself, starting on my left.

MR. DOUG BOYD: Doug Boyd, council.
MR. JOHN T. MARQUEZ, JR: Johnny Marquez.

MR. WILLIAM M. BLANKENSHIP: Butch Blankenship.

MR. ED LANDGRAF: Ed Landgraf, Louisiana.

MR. RODOLFO C. VALENCIANO: Rudy Valenciano, Louisiana.

DR. JOHN FROESCHKE: John Froeschke, council staff.

DR. AVA LASSETER: Ava Lasseter, council staff.

DR. ASSANE DIAGNE: Assane Diagne, council staff.

MR. RAY BOX: Ray Box, Texas.

MR. MICHAEL B. MCDERMOTT: Michael McDermott, Mississippi.

MR. MARCUS R. KENNEDY: Marcus Kennedy, Alabama.

MR. HUGHES ANDRY: Hughes Andry, Sportco Marketing, out of Texas.

MR. JAMES “JIM” ALLEN BROWN: Jim Brown, Florida.

MS KELLIE REBELLO RALSTON: Kellie Ralston, Florida.

DR. ROY CRABTREE: Roy Crabtree, NOAA Fisheries.

DR. SHANNON CALAY: Shannon Calay, NOAA Fisheries.

MR. NATHANIEL DUVALL: Nate Duvall, Mississippi.

MR. MARK TURNER: Mark Turner, Alabama.

APPROVAL OF THE MINUTES FROM THE MAY 8-9, 2017 MEETING

CHAIRMAN CAPLINGER: Thank you, all. I have to hit this to start this meeting. Just so you know, we have to approve the minutes from last year’s meeting on May 8 and 9, and so, if you can, please review these, and we need a motion to approve them, after you have reviewed them, and so take a second to review these minutes. Can I get a motion? I have a motion to approve the motion and a second. All in favor; any opposition. The minutes are approved.

I just want to let you know, as a housekeeping note, that I
think Dr. Shipp is under the weather today, and so he will not be here, and I think Dr. Porch is not here as well, but I think we have a substitute presenter there. With that, I will introduce Dr. Froeschke to tell us why we are here.

PRESENTATION: SUMMARY OVERVIEW OF REQUESTED ITEMS FROM LAST MEETING

DR. FROESCHKE: Thanks, and good morning. On behalf of the council, again, thanks, everybody, for taking the time to come. I know it’s not easy to get out of your personal lives, and travel is not easy.

Before we get started, if you need to use the restroom, women are out this door and straight down the hall on your left, and the men are down past the elevators and then take a right. You will see the sign. Coffee and bagels and that sort of thing are back there, and there are drinks, sodas and water, in the refrigerator. Please help yourself.

If you need something else and you don’t have it and you can’t find it, let me or one of the other council staff know, and we’ll do our very best to get whatever it is you need. As the day goes on, if you have some snafu with your travel or something like that, please let us know, and we will try and help you, if you’re going to need transportation to the airport and things like that. Any questions on that stuff before we get started?

CHAIRMAN CAPLINGER: How about lunch?

DR. FROESCHKE: Lunch, I think there was an email sent out. Karen, stop me if I get off track, but lunch is going to be provided, and so probably it should be brought into the room. Then, I think, on your per diem, I think you just take off like thirteen-dollars for lunch. Is there anything that I missed on that?

MS. KAREN HOAK: To make sure that the AP -- You won’t be able to go out, and so it’s a working lunch.

DR. FROESCHKE: Any questions on that? Okay. The plan is -- As Charlie indicated, Dr. Shipp is sick. He just let me know, and so, that part, we’re just going to have to reschedule. He has a unique perspective, and so it’s difficult to find someone that can provide that in the absence of him, and Dr. Porch is not here.
Dr. Calay is here, and she’s a very capable stock assessment scientist from the Southeast Fisheries Science Center. She is well-versed in all things stock assessment. She has done many herself, and she works at a high level there, and so I think she will be a great resource for the group, both specifically on things relevant to red snapper and more generally on how the assessment process works and how that folds into the management and things like that. At the end of her presentation, please use her as a resource. She is very knowledgeable.

I have prepared a short presentation, if you want to bring that up, Karen. If you recall, at the last meeting, there were a number of information requests, I will call them, that you felt like more background information was necessary. What I tried to do was provide some of that here or give you a response to each of those items, and so I was going to start with that.

This is not intended to be an in-depth thing, and part of it, for example the stock assessment information, Dr. Calay is going to provide, and so I won’t try to replicate that, but I did want to let you know that we did respond to your requests, to at least let you know.

I think it’s always good to start a meeting with why we’re here. If you recall back to the first one, we obviously have a problem, in terms of stakeholder satisfaction, with the red snapper recreational fishery, in terms of access and things, and we hope to be able to improve that, and so you all, as the knowledgeable stakeholders, have probably been underrepresented in the council process, at least from a private recreational perspective, and so we’re trying to reach out to you all and get your advice.

We have tried to get a broad swath of regional perspectives and different participants in the fishery. Weather aside, I think we’ve been able to do that, but please keep that in mind. That’s why you’re here, and we’re hoping that you can provide guidance to the council, both in terms of we would like to see more of this or we would like to see less of something else, but both of those are useful, and, the more prescriptive you can be, the better, but I understand that it doesn’t have to be -- Concepts are helpful as well.

In terms of the charge, you have seen this before as well. The council has convened this group to think of ways we can increase access in federal waters, and we can discuss both the state and federal waters and how they interplay and methods to potentially reduce discards. As you know, discarded fish are wasted, and
so, if we can reduce those, that leaves more open to fishing and more access.

Then, third, if you have ideas on how data collection can be improved, and there is obviously is a connection. If we have better data, then we may be able to improve our estimates of harvest and things and improve access.

This little flow chart on the bottom here, just to kind of remind everybody of the way this works, the council gave a charge, and we formed an AP, and the AP provides recommendations to the council. The council will consider these, but they’re under no obligation to act on these. At any rate, that little black arrow, whatever the council does or doesn’t do with your recommendations, I will let you know. I will write back, in an email or something, and just say these are the recommendations and the council did X, Y, and Z, or didn’t do, and so I do try to do that.

In the past, sometimes APs have provided recommendations and then APs have -- We haven’t always been great about following up, and so just to let you know that we will -- You will hear from us again.

The action items, this is from the May 2017 meeting, and there were some requests for a description of the inputs, if you will, to how harvest recommendations are arrived at, and so I’ll give you a little bit of background on both the fishery-dependent and the independent data, what they are and how they’re used. Shannon also has some more detailed methods on that.

There was some discussion about the use of economic data in fisheries management, and I think most of you are aware that economics is part of the Magnuson Act. Dr. Diagne here is the staff economist here, and he’s worked here for a long time, and he’s very knowledgeable about that, and so we have some slides in here, and he’s going to kind of walk you through how these data are used and their role in fishery management.

Last time, there was questions about allocation, both how these numbers were derived, both between the commercial and recreational sector and within the for-hire and private rec components on the recreational side, and so we have a little bit of information about that.

This one about legislative issues, I will start by saying that that’s sort of above our paygrade, and, as a council, we’re not involved in particular bills from Congress, and that’s by
In the past, Doug Gregory, our Executive Director, has prepared an outline of one bill in there, and it’s in the background materials. It sort of looks at the council response to the intended request. I am aware that there are several other bills in various states of progress, if you will, but I haven’t prepared that. That’s just not what we do. I’m sorry.

The last part, again, Dr. Calay is on the stock assessments and harvest, and she has prepared a fairly detailed presentation, and I do think that it provides a lot of useful information on how this process works, and, again, I think your ability to ask questions, if you have specific questions to her, will be very useful.

That’s sort of what we have prepared on this. At the end of the day, what we hope to do is provide time for some lengthy discussions, to give you time to deliberate and make the recommendations that you feel are appropriate.

At this time, I will just give you a little bit more information, and I’m approaching this from inputs to how a fishing level recommendation, specific to red snapper, works in the Gulf. This will generally be representative of what we would call a data-rich species, meaning a species that has a fully age-structured stock assessment model that’s data-rich and we have a lot of information. We don’t have everything that we would like to have, but we do have more than many species.

In terms of the kinds of data, we broadly think of it as fishery-dependent or fishery-independent. Fishery-dependent means these data are derived from fisheries, both recreational and commercial fisheries. We use these to derive a few different things. One is the total harvest, which is that second bullet there, which is fairly to simple to think of. It’s just how many individuals, either in pounds or numbers, were removed from the fishery. In this case, it’s by the commercial. We also do that, obviously, for recreational.

Other things are the catch rate, meaning how fast they are removed from the fishery with a given amount of effort, and so we use these to understand the catch per unit effort, which can be associated with an overall abundance of a stock.

As you know, the commercial fishery is tightly controlled, in terms of the reporting requirements. Their effort is well estimated, and the total number of participants is controlled.
and much smaller than the recreational fishery, and so those data certainly are included in the assessment, both from an index of abundance and total removals on the harvest side.

The recreational is a little bit different. There are really kind of three parts of the recreational that we monitor. There is the private recreational, which is many of you, and that’s individuals going out on their own boats or fishing from the shore. Obviously, you’re not shore fishing for red snapper, but, in general, this is a broad group of participants fishing in a lot of different ways from a lot of different access points, and, historically, these participants have always been surveyed by surveys.

It used to be MRFSS in the Gulf states, minus Texas, and that’s been transitioned to MRIP, which attempted to improve and address many of the shortcomings in the MRFSS system that was a result of a 2006 National Academy of Sciences review.

The MRIP survey operates in Florida, Alabama, and Mississippi, and there are two parts. The effort is estimated by a mail survey now, where they have a registry of anglers, and they contact them in a sampling program to estimate how many people are fishing in a given area in a given block of time.

They also conduct dock-side intercepts. They actually meet people at the dock when they return from trips, and they see what they caught, how many, how big, and so they use that to obtain both the biological information as well as estimates of what and how many, and that can be combined with the effort to get estimates of how many fish were harvested and discarded.

In Louisiana, in 2014, they began developing their own program called LA Creel. It was meant to address what they felt were some of their more regional needs that MRIP wasn’t addressing, and they have used this in lieu of MRIP, and they have calibrated it, and so it has recently become a certified replacement, but, essentially, it serves the same purpose, although it does survey both the for-hire sector, at least charter boats, as well as the private anglers, and I will come back to the headboats in a minute.

The Texas Parks and Wildlife, Texas has always done their own survey. They started theirs in the 1970s, long before the MRFSS or MRIP surveys existed, and they have always felt that it meant their needs. The good news about it is that it’s been around for a long time and it’s fairly consistent. These other ones have changed more, and there may be challenges in estimating red
snapper and things, some species, based on their sampling program, but I won’t get into those specifics.

What we did do, and I don’t work for any of these states, and so I don’t want to represent their programs, but we did provide some background information on the website, in the background materials, about the specific websites.

Lastly, just the logbooks, as you know, what we call the headboats are the big for-hire vessels, where people pay per-person and they go out on the trips, and there might be sixty or a hundred people out, and we have a special program called the Southeast Region Headboat Survey, and they have an electronic reporting program.

Once a week, the vessel operators are required to send a report of what they caught, and it’s all electronic, and so it’s a little bit different system, but it does give high-quality data pretty quick.

MS. RALSTON: John, before you leave that slide, could you give kind of a brief overview of kind of where the states, Florida, Alabama, and Mississippi, are in developing their own programs to potentially replace MRIP, as Louisiana has done, and maybe how those are comparing with MRIP, if we have any sort of--

DR. FROESCHKE: I have a little bit more information in a coming slide on some of that, and Shannon has some of that as well. Then this next slide sort of just illustrates the problem. As I indicated, these are broad, multispecies generalized surveys. The red snapper season has gotten progressively shorter, and these types of surveys don’t always work well in short seasons for single species.

The other thing that has changed is, as the federal season has gotten shorter, the state seasons have expanded, and I think you’ve seen this figure before. On the panel on my left, it shows the number of days in the state seasons for each of the five Gulf states, and this top one up here looks a little bit funny, but that’s Texas, and they’ve always had a year-round state season, but the remaining Gulf states, as you can see, in recent years, have dramatically increased their state seasons.

The result of that is that the proportion of the quota, or allowable harvest, that comes from state waters is now quite substantial, and so that, essentially, comes off the top. The more fish you harvest in state waters, the fewer that can be harvested in federal waters, and the result has been a shortened
These shortened federal seasons in response, the Gulf states have each developed a specific survey program to improve their estimates of red snapper harvest in their states, and so what I’ve done is just, kind of across the top here, is each state -- Kind of a brief description of their programs.

Florida has the Gulf Reef Fish Survey, and it’s a registry system that tries to reduce the pool of anglers, and there’s a lot of people -- When you go out, you’ll see a lot of boats, but the vast majority do not. They’re inshore fishermen, and so, to the extent you can remove those from your survey pool, it helps improve the estimates of reef-fish-associated species.

Alabama has what they call Snapper Check, and this is a reporting system and where anglers are required to report their landings. It’s an electronic system, and it produces estimates based on a capture-recapture method, and many of these -- They have worked with statisticians and things, and they’re under review to try to make these systems as robust as they can, and it’s an ongoing process, but it is fairly sophisticated, and the idea that these programs are in various levels of certification, but, ultimately, the idea is that they will replace the MRIP estimates for at least these species.

Mississippi has a Tails and Scales Program. It’s also a mandatory red snapper reporting program that you have to have a trip authorization and report your harvest, and, before I go on, each of these have more detail, again, in the background presentation for each of the states that they provided to the council at the June 2017 meeting, and so, rather than hashing through all of those, I just put them up there, if you want to look through them. If you have a specific question about them from a state, we can certainly get you in contact.

Louisiana has their own LA Creel survey, and, again, this includes both private and for-hire sampling, but it’s an effort-intensive survey, and it generates a fairly specific time and precise estimates of harvest, and so it has recently been certified to replace MRIP.

Then, again, with Texas, as I’ve said, they’ve had a long -- They have a long-going survey. They have a Gulf-only survey to improve their estimates of offshore species, and they have also worked with the iSnapper program that, as you probably know, was developed by Greg Stunz at Texas A&M Corpus Christi, which is an electronic reporting program.
It relied on a dockside validation, which was done by the Parks and Wildlife, and they have worked with them for a long time, and there may be some closer integration in the future between those programs.

On the fishery-independent side, the value of these data are they are useful in producing estimates of abundance of the stock that doesn’t require as much adjustment for changes in regulatory things. The fishery-dependent, for example, the harvest is affected by the seasons and the rules and all these things.

The fishery-independent, the idea is that the gears are used in a specific way in a sampling design, and so the estimates, through time, should be representative, and so increases in abundance over time should be proportional to an increase in abundance of the stock in that same time period.

As you know, there are lots of different habitats in the Gulf, and red snapper use different habitats throughout their life and their sizes, and so different gear types are necessary to try to characterize the abundance of the various life stages and across habitats.

Traditionally, in the Gulf, the longest-standing survey has been a trawl survey used for multispecies, and it does not capture adult red snapper, because they don’t survey on reefs, typically, and they’re too big. It does provide a good index of juvenile abundance.

The reef fish trap video surveys is a more specialized survey aimed at red snapper. It’s a more recent survey. We also have the vertical line and the longline. The longlines catch the larger animals. They set these near the reefs, but not on the reefs, and so each of these individually produces indices of abundance, and they target specific sizes and ages of red snapper.

All of this information is combined, as you will see from Shannon’s presentation, into the stock assessment, and so there are a number of different inputs. If you’re interested, I also did put a link down here with a full description. It’s a pamphlet, and it’s readable, but it’s longer than I wanted to go through here, and it has more detail about the sampling effort and the intensity in each of the programs, and so I encourage you to have a look at that.
Then, on these charts on the right, you kind of just see, down here, and you can’t read that, but I think that’s the SEAMAP, but you can see that each dot represents a sampling location, and the different colors represent the various state entities, and so this is a federal program, but it’s done by the states, through SEAMAP, and so, as you can see, there’s a lot of effort. I mean, it’s a big Gulf, but it is Gulf-wide, at least in fishable waters, in terms of depth, and so it’s an intensive survey that is very useful.

At this point, you did ask for some information about economics, and I am not an economist, and I pretend to be sometimes to tease Assane, but I’m going to turn it over to him and kind of have him walk you through how this information is incorporated into the FMP process.

DR. ASSANE DIAGNE: Thank you, John, and good morning, again. I will try to provide a very brief overview of some of the uses of economics within our management process. During this short overview, some of the key points we’ll try to touch on would include a purpose for these analysis, some of the mandates that we have, as indicated in the Magnuson Act, for example, and some Executive Orders, and, finally, briefly discuss the distinction, or the difference, if you will, between economic impact and economic effects, or economic value, because it seems to me, and in talking to John, that it has been a recurring theme of discussion.

I will just go ahead and look at some of the mandates, and emphasis on the word “some”. We have additional mandates and additional Executive Orders. Essentially, the National Standards in the MSA, the Magnuson-Stevens Act, would require us to do certain types of analysis.

In terms of the fisheries description, we typically include also the economic impacts and look at business activities within the Gulf of Mexico, and the key issue here is to make sure that the rebuilding restrictions, as well as the benefits that may occur, are allocated equitably.

In terms of mentioning a few Executive Orders, and, actually, I will mention just one, 12866, which really gives us guidance on how to conduct regulatory impact reviews, and, here, really, the focus, the emphasis, is on maximizing net benefits to the nation. I will repeat this. It’s to make the distinction between the nation, which is, I guess, broader in scope, and the Gulf of Mexico, which is, essentially, under the council’s purview, but our directive is to look at net benefits at the
national level.

We have also some analysis to conduct under NEPA, including, for example, the cumulative effects, and that is always included in all of our amendments, and a final mandate that we will mention here as an example would be, for example, coming from the Endangered Species Act and when it comes, for example, to designation of critical habitat.

Now on to the purpose of these analyses that we typically include in the regulatory actions. We have to evaluate the expected economic consequences of the management alternatives and the consideration in a particular, let’s say, amendment or framework action. In doing so, some of the questions and some of the issues that we look at would include who is expected to be affected by the proposed regulation, how, and by how much. That would be one aspect.

What are the economic effects and impacts on fishing businesses, individual fishermen, and other entities that may be affected, suppliers, dealers, processors, communities? I will come back in a second and talk about economic effects versus economic impacts, and, finally, we address the distributional effects, in terms of who wins and who loses and essentially was the split equitable amongst the parties.

Let’s look a little bit at the difference or the distinction between economic effects or economic values and economic impacts. When we look at economic effects, we, in general, discuss changes in participation and activities and efforts, and we look at the change in harvest by sector. We look at the changes in ex-vessel and trip prices, changes in revenue and harvesting cost, and changes in economic value.

In economic value, we have two components. One is known as consumer surplus, and, essentially, if we wanted to define “consumer surplus”, it is the difference between the maximum an angler is willing to pay for a trip, or let’s say for a fish, and minus the cost of harvesting the fish, and so, obviously, the wider that gap, the better off the angler is.

On the side of the producer, we have a measure known as producer surplus, and this is the difference between what it is that the producer receives for a trip, let’s say a charter/for-hire operation, minus the cost of providing that trip, and, here again, the wider that gap, the better off, let’s say, the charter captain or owner would be, because then you would have additional resources that you can turn around and apply to some
other productive uses.

Again, when we look at economic value, is it towards computing the net economic benefits to the nation, or the broad perspective. Now, when we are looking at the economic impacts, those would include changes in employment and jobs, income, and added value, but these are really geared towards a specific region. You will look, for example, at an economic impact in a well-defined community, state, or region, or let’s say, for example, towards the Gulf of Mexico. Here, your interest is in looking at the linkages within the economy of the region that you have previously determined.

One last observation is let’s say, for example, we have a very long spell of extremely bad weather and recreational anglers do not have the opportunity to go out and fish. The expectation is that some of those recreational dollars, and I put that in quotes, would be directed towards other activities within this country. People would find other ways to entertain themselves and participate in leisure activities, and so it is not all lost.

Essentially, when looking at the management measure, economic impacts are important, in terms of looking at the linkages. Where is money spent and how does it flow, but the central measure for us would be the economic value, because that is the measure that directs us towards the net national benefits, net benefits to the nation, which is our primary mandate, per the Magnuson Act.

CHAIRMAN CAPLINGER: Excuse me for a second. In your opinion, what does the data show about economic value to the nation for red snapper, as you compare it from a commercial target to a recreational target?

DR. DIAGNE: I would preface my answer by saying that I don’t have an opinion. What I can share with you is what the data showed us.

CHAIRMAN CAPLINGER: Yes.

DR. DIAGNE: Essentially, when we compare numbers, one of the challenges is always to compare apples to apples, if you would, likes with likes. It does not tell us a whole lot when we take let’s say economic impacts of X and Y billion from one sector and compare it with economic impacts of other type of billions in another sector. That does not tell us anything. It just simply tells you how the resources, if you would, flow within
the linkages in a particular region.

What is of benefit, and of value, when we have a regulation to evaluate before us, is to evaluate those changes that we talked about and to look at how the proposed management alternative, if you would, impacts the net benefits to the nation. In computing the net benefit to the nation, both sectors, if we are talking about fishing here, meaning the recreational sector as well as the commercial sector, are contributors to this, because we look at consumer surplus and producer surplus, and so both sides contribute to enhancing the net benefit to the nation.

**CHAIRMAN CAPLINGER:** What you’re telling me is the data does not say that the commercial value is more than the recreational value or vice versa, and is that right?

**DR. DIAGNE:** Yes, what I’m telling you is, in computing the net benefit to the nation, you take the contribution of both and you look at enhancing that, and, in general, in comparing different management alternatives, but, at this point, I would not be able to say that this sector has contributed more than this one, based on let’s say numbers that we see in terms of economic impact, however large those numbers may be.

**MR. BROWN:** I am trying to wrap my head around what you said, and so I have to kind of simplify it down, to make sure I’ve got it straight. In my area, in Apalachicola, during red snapper season, we probably see 75 percent of the vehicles in the parking lot at the boat ramp are from Georgia, and so, if you shorten the red snapper season, then those folks from Georgia won’t come down, and they will stay in Georgia, but they might go to a movie instead and still spend money.

You’re saying that that impact could be a positive to the nation as a whole, because they’re staying home and spending money, but it could be a negative for Apalachicola, because they’re not coming there, but you’re not necessarily counting the negative for Apalachicola, because there is still a benefit in Georgia, and is that correct?

**DR. DIAGNE:** It is close, absolutely, and the fundamental idea that you have right is the fact that, if you are looking at changes in efficiency, which is what economic value allows us to measure, then the fact that one spends, let’s say, a dollar in Apalachicola, or that same dollar is spent in Tampa or in Boston, should not make a difference.

It would, of course, be of great importance to the community in
Apalachicola, or let’s say in Tampa Bay or in Destin and so forth, and that is the key distinction, but there is a matter of scope.

Per the MSA, our scope and primary, I guess, responsibility is to maximize net benefits to the nation, but, of course, if you took the mayor of a small town somewhere in the Gulf, then their responsibility is to make sure that revenues flow within that community and create jobs and so on and so forth, and so therein lies, if you would, a difference in scope that would then be translated into a difference in objectives.

MR. KENNEDY: I think one of the things we have to deal with, and maybe there is a misconception, but, basically, what a lot of us want to know is this economic impact and assigning value to a red snapper is what we’ve got in our mind, and so we’re trying to basically figure out what the value of that red snapper is to the nation.

So, when we wind up with one extra red snapper and we put it out there on the floor, what is the value of that red snapper as a recreationally-caught red snapper versus what is the value of that same ten-pound red snapper if it’s caught as a commercially-caught red snapper, and one stakeholder that a lot of us don’t give credit to, but some people want that red snapper to still swim in the ocean, and what is the value of that?

We’ve got two consumptive users, a recreational and a commercial, and then a non-consumptive user that just wants the thing left staying around there, and so, when you decide where that extra red snapper gets to go, just commonsense says, okay, from an economic standpoint, we want to know, dollar-wise, is that red snapper more valuable?

Is that ten-pound red snapper worth a hundred-dollars if a recreational angler catches it? Is it worth fifty-dollars if it’s caught and sold commercially? Then, if it’s just left swimming around in the Gulf, what is it worth, and so, in my mind, I’m thinking that’s the way you determine what is the net economic benefit of that red snapper, and so is there anything in place that allows you to assign what amounts to a simplistic value to that red snapper, so that when, say the Scientific and Statistical Committee comes up with this extra red snapper, who gets dibs on it, from an economic standpoint?

DR. DIAGNE: This is a great question, because it really gets at the heart of what it is that we are trying to discuss, and,
essentially, if you allow me to segue, this goes at the core of how allocation decisions are made, essentially. I would just cover the next slide, and, in the process, come back and answer your question.

One of the examples that we thought to include, after talking to John, is to look at this, I guess, thorny issue of allocation between sectors. Allocations should be based, essentially, on economic efficiency, and economic efficiency has to do with economic value, which you just mentioned.

The other side of it, the impacts, the bigger the expenditure, the bigger the impact. I would say just one more thing about impacts and then move on and address the points that he just made. If, for example, tomorrow we have a catastrophe in some area, and I don’t want to say the Bay Area, but let’s say in the Gulf, an oil spill or something of that nature, that would damage the natural resource, obviously, that we have, and that will damage a whole lot of things, but, on the flip side of that, because you are going to bring a lot of money to clean it up and hire people, that would increase economic impact, and so economic impacts, large numbers, are not necessarily good for us.

Now to come back to this. In terms of allocation, the right metric is economic value, and so, in this particular case, you would pick up a fish and look at let’s say both sectors, the commercial sector and the recreational sector, and compare the marginal willingness to pay, essentially, and say in which part would this fish generate more value?

Now comparing the two values, and the recent studies that we have would suggest that, at the margin, a recreationally-caught fish has more value than the commercially-caught fish, and I stress what I just said. I say at the margin. At the margin would allow you to make small changes around that margin, and so, if you want to use those numbers to make large, or wholesale, changes in allocation, you have a problem.

The problem that you have is nobody knows whether that marginal value would still hold, but what I can say for certain is that, at the margin, based on all of the studies that I have seen, a recreationally-caught fish is worth more than a commercially-caught fish. That is one thing.

The second thing, perhaps, that we can offer to answer his question further is that, when those numbers are derived, there is a fundamental assumption that is made in the methods of
calculation, and what is assumed is that you have a proper sorting method, and, by sorting method, we mean that, for example, if you had let’s say ten fish to sell, you would be able, presumably, to auction them off and to make certain that each fish would go to the person that is willing to pay the most for it.

Let’s say if I wanted to sell a home or an asset, I would make sure that the asset goes to the person that is willing to pay me the most for that asset, for me to recoup as much as I can.

The problem that we have in the recreational sector, or the challenge, I should say, is that we do not have a sorting mechanism. By that, I mean that we are managed under open access, and it means that the red snapper may be caught by someone like me, who perhaps places a very low value on the fish, or the fish, the same fish, could have been caught, perhaps, by someone like a fisherman here in this room who would place a higher value on the fish.

If we were able to make sure that the highest willingness to pay catches the fish first and then you go down from there, then that would be very helpful, but, again, on the studies that I have seen so far, a recreationally-caught fish is worth more than a commercially-caught fish at the margin. I hope this answers your question.

MR. BROWN: Basically, what you just said there, and from our knowledge of the Deepwater Horizon, it would probably be better off just to unplug all the oil wells and let the Gulf be polluted, because that would probably be the highest value.

DR. DIAGNE: No, I didn’t say that. I said that, after the oil spill, because somebody brought in a lot of crews and a lot of resources were spent to clean it up, that, in turn, generated tremendous economic impact, but the net result is we damaged the ecosystem, and we did certainly damage certain stocks and so forth. That was just to say that, looking at the big number, when it comes to economic impact, does not necessarily mean that it is good for us.

MR. LANDGRAF: Is it fair to say that, as the snapper creel limit has went down over the years for recreational from whatever it was, six, five, four, three, two, that the two fish is worth a lot more than the six fish was, correct?

DR. DIAGNE: That’s an excellent point too, and yes. What I want to offer is that there is an assumption in economics, but
we just have to look at kids, I guess, and maybe ourselves, to
realize that it is true. The more you get of something, the
less you value it, and so, if you give me let’s say six fish,
the first fish would have a very high value, but then the
marginal value would decrease.

The second fish would be worth less than the first, and the
third fish would be less, and so on and so forth. To the extent
that now you get only let’s say two fish, let’s say the first
fish, presumably, will have the same value, but the second fish
will be highly valued also, but a little less than the first
fish, and I did mention kids in the sense that, if you were to
give them a treat, or let’s say a snack, they may take the first
one, the second one, the third one, and, at some point, they
will throw it back at you, essentially saying that I don’t want
this anymore, and so, yes, willingness to pay, marginal
willingness to pay, are on a declining schedule.

MR. LANDGRAF: I would also add that being able to catch less
fish, to me, in this scenario, value and cost are proportional.
What I would have paid to catch six fish has now quadrupled,
because now my cost to catch two fish is three times higher than
catching six fish, right? The cost being higher, to me, as a
recreational angler, I would argue that that has decreased the
amount of anglers that are able to go out and fish.

DR. DIAGNE: What it has decreased is the consumer surplus.
Remember that when we talked about this that we looked at the
maximum that you were willing and able to pay for the fish minus
the cost that it took for you to catch the fish.

If the maximum goes up a bit, but your cost, as you indicate,
triples or quadruples, obviously that margin between the two, or
that gap between the two, begins to shrink, and so your
enjoyment, if you would, or the economic value that you derive
from the fish, begins to shrink. Then, if you push that
further, the net benefits to the nation are then lessened as an
effect.

I would perhaps offer another example. It may be intuitive, or
maybe not, but let’s say I go out to buy a home or a car, for
that matter. A car, I guess, would be simpler. I purchase the
vehicle, and I go back home. I don’t think that I would go home
and be happy and brag about the fact that I paid too much for
the car.

What would make sense is for me to say, well, I really got a
good deal, and I paid as little as I could, because then,
presumably, I have money left over to turn around and do other things. I don’t know anybody who is happy to have overpaid for something that they bought, because then that, essentially, really puts a hole in your budget.

Let’s apply that same reasoning to catching a fish. I should not be really extremely, I guess, happy of overpaying to catch a fish. What makes sense is for me to value the fish at this level, but pay as little as I can, so that the gap between the two, or consumer surplus, is as wide as it can be.

MR. LANDGRAF: I can tell you, from my own standpoint, when my wife asks me how much it cost to catch two snapper, she is not very happy.

DR. DIAGNE: No, I would lowball the number.

CHAIRMAN CAPLINGER: In the event that there is no season, are you suggesting that the fish decreases in value, maybe to almost worthless?

DR. DIAGNE: No, I am not suggesting that at all. The value of the fish, really, is something that you look at in terms of the maximum that you would be willing and able to pay to catch it minus what it would cost you to catch the fish. Even if there is no season, that value is still there, and, by asking your question, I am reminded of the last part of his question, because he did mention non-consumptive values.

I have to say that, typically, the analyses that we conduct do not do a whole lot of service to non-consumptive values. We just mentioned it in passing, and, in those, one could think about, essentially, those folks that would be happy to just see the fish swim in the Gulf of Mexico. That has value to them.

There is another value, and this is the value of, essentially, leaving the fish to future generations. There are some people who are perfectly happy not harvesting the fish, because they know that this will contribute to a healthier stock for their children and grandchildren. All of those things are values, but very difficult, of course, to quantify, and so, typically, what we do is we base our analysis on consumptive values and then just mention, I guess, that there are other values out there, meaning non-consumptive values, which would include bequest values and the like.

MR. KENNEDY: Could you possibly expand on -- Like deer hunting, you can’t hunt wild deer commercially. If the fisheries was
like that, like instead of commercially catching red snapper in the wild, versus deer hunting, and so the value would significantly drop of the red snapper, correct, because you don’t have the ability, and then recreational folks could actually go out and catch more fish, probably underneath the tonnage quotas for the year, and it would cost them a lot less money, if it was like on-land species that are consumed in the wild.

DR. DIAGNE: I am not sure that we can make those inferences, and I believe that, in hunting and so forth, you have rationing systems, meaning you have lotteries and people draw numbers and this and that in various settings, and I don’t know exactly what are the procedures for deer hunting, versus let’s say duck and other things, but one of the issues, again, in recreational fishing is that, if someone is thinking about perhaps expanding access and so forth, it has to be what type of quality of access is one trying to offer and what is, I guess, a feasible expectation when it comes to the population in the Gulf of Mexico, the very popular touristic attractions and so forth, meaning the sheer number of people who want to have access to that resource, and that is, I guess, something for us to think about.

One last thing that we would say is most of what we do is really concentrated and focuses on the federal aspect of things, but, needless to say, I guess the fish really do not recognize, I guess, state versus federal boundaries and so forth, and John, in his introduction, did talk about the harvest in state waters, which I think now accounts for up to 80 percent or so, maybe 70 or 80 percent, of the recreational catches.

I mean, those are some of the parameters, I guess, that one needs to think about in terms of really thinking about improving access and improving the quality of that access.

CHAIRMAN CAPLINGER: Will you go back to your example and talk about the second bullet point of economic efficiency, because it suggests here that the policy should seek to minimize the cost of providing goods and services to consumers, and, if that is indeed the case, then I’m not sure we’re doing that right now, because, if you go to your seafood market or your grocery store, red snapper is the most expensive fish in the box, and so, if we’re trying to provide the cheapest -- Minimize the cost, and, if that is our goal here, then we’re not achieving that as well.

DR. DIAGNE: I don’t know why you would conclude that we’re not achieving that. I mean, essentially, really, in looking at net
national benefits, again, you have a difference between the maximum that you are willing and able to pay and the costs that you have to bear to participate in that activity, whatever the activity may be.

Now, I mean, what you are mentioning is that fact that, when one goes to the seafood market or Publix, et cetera, and you look at a red snapper fillet, or another fish fillet for that matter, it is extremely expensive, but, here, we can begin to discuss other things, really. I mean, what type of demand is there for the product itself and what kind of a supply do we have?

We have a fairly limited supply, if you look at it, and, in the big picture, the red snapper in the Gulf is a very small portion, if you would, when it comes to the seafood that we consume in this country. Most of it, I think in excess of 80 percent or so, would come from imports, but the fact that on the shelf at Publix or the seafood market it is ten-dollars a pound, and, actually, I have seen, quite frankly, in terms of the fillet, more expensive than that, and I’m sure you have, and that does not really tell us a whole lot about the fishing part of this business. It tells us more about the demand for the product in the seafood market as well as the availability of the supply of the product.

CHAIRMAN CAPLINGER: I get that completely, and I understand that that is an indication of the demand, but I guess my point is that, if this is what we’re basing allocation on, maybe we should have less consideration for this. This should be a smaller part of the consideration, and we should look at, again, the overall benefit to the nation, which would be who is spending the most, what does the nation get, what is the best or highest value that the nation gets, for that ten-pound fish that’s sitting in the middle of the room.

DR. DIAGNE: Okay. I think now I follow you, and perhaps there is a misunderstanding in terms of the costs that we are referring to. When we are talking about allocation, the costs that we mentioned, when it comes to computing the surplus values, those are, let’s say, for example, for the commercial fishermen, producer surplus, how much he or she will get paid for the fish minus the cost of the trip and catching the fish. It is the cost of harvesting that fish that we are referring to here.

On the recreational side of things, it is the maximum that let’s say a recreational angler is willing and able to pay for the fish minus the cost that he or she had to bear to harvest the
fish. That is the cost that we are talking about, and we were
not talking about the cost to let’s say anyone here going to
Publix and buying the fish, although that is something to be
considered, because, in terms of the chain of value, or the
value chain, after the harvest, we need to look at the
additional value created.

For example, the wholesaler that buys the fish and then turns
around and sells it to a retailer gets some more value, and,
typically, we overlook that, because the data available to us
may be lacking, but that would have added to the commercial
value, if you would, and, on top of that, the value that let’s
say a consumer like myself gets from purchasing the fish in
Publix and offering, let’s say, a meal to my family, there is a
difference there in value that I get, and, on top of that, the
value that one of us gets when we travel, let’s say, to a city
on the Gulf, and let’s take New Orleans, which is known for its
cuisine and seafood and so forth, the value to restaurant
owners, because you added value to the fish and so on and so
forth.

I have to say that we are challenged in finding the data along
the value chain from harvest to plate, if you would. On the
recreational side, we are challenged in defining the value of
the fish let’s say to the recreational angler, because there is
no market transaction, and so, essentially, we have to resort to
other techniques, and those are non-valuation techniques, and
you use proxies for it, such as how much one paid for the travel
to the site and so on and so forth, or your design experiment.
I guess there was a little misunderstanding, and maybe I didn’t
make it clear, in terms of which costs would apply where.

CHAIRMAN CAPLINGER: Thank you, and I guess the last question I
had was it says economic impacts should not be the primary basis
for allocation decisions and that will likely reward inefficient
producers. Well, the recreational angler is the inefficient
producer. We are not good, as good, as efficient, as a
commercial fisherman, and so, clearly, we are going to spend a
lot more per pound of fish that we catch.

DR. DIAGNE: On the flip side of that, I did say that, at the
margin, the value of a recreationally-caught fish is higher than
the value of a commercially-caught fish, but, in general, the
point that you made, yes. If we look at economic impacts alone,
then you would reward inefficiency, because, the more money you
spend, the more impacts you generate, but, as a nation, our net
benefit is to be as efficient as we can, so that you can take
leftover resources and go do something else, and that is the
main reason why, for allocations and other policy choices, you look at net national benefits.

CHAIRMAN CAPLINGER: Thank you.

MR. MARQUEZ: I would like to say one thing. It seems to me that we started this discussion in talking about how we can kind of compare apples, and, when you start talking about the economic benefit of the fish and efficiencies, we’re not comparing the same things in a recreational fishery and a commercial fishery.

That seems, to me, to assume it’s all about what is the value of how quickly we can put that fillet in the market, or on the table, at the least cost, and what it doesn’t take into account, from the recreational standpoint, is it’s the experience. It’s the value of fishing. It’s the ability to go out and fish. That value is greatly diminished if there is no opportunity to go and catch fish. It’s not necessarily about a pound-for-pound value, and so you’re really not comparing the same things.

The other is that, and this is just, I guess, my ignorance until this morning, this standard of a national -- What’s the benefit to the nation, and it seems that any economic analysis, if that’s the standard, you just wipe out any benefit of a recreational fishery, because you have this standard that money is fungible, and, if they don’t spend it on recreational fishing, they will just go spend it on something else, and so it just totally discounts the value of the recreational fishery unless you bring that analysis down to some lower level, as in a state.

I know, in my state in Mississippi, they would look at the value of tourism and bringing all those people to the coast, and that benefits the entire state. It certainly benefits those local communities. To somehow look at recreational fishing and say, well, if we didn’t have it, it wouldn’t really matter, because they could go back to Arkansas or Missouri, all these people that were fishing, and they would just do something else, they would go river-rafting, and I don’t quite understand that. It seems to just remove any value of economic analysis in this fishery.

DR. DIAGNE: All right, and very good points, but those are not really the implications. Let us start with the benefit to the nation, the fact that the experience of fishing has value on its own, going out on the water, open water, with family and friends and so forth. Absolutely, but that in itself is captured in the
maximum that one is willing and able to pay for the fish.

It is in it, and the experience itself is part and parcel to determining that value. It is embedded in it, and, if that value, I guess, were really the most of the value of the fishing experience, then presumably we could just move to a catch-and-release fishery, because the experience is what it is that we value the most, and obviously that is not the point.

When we look at allocation, we absolutely compare apples to apples, even though the data that we have may be lacking on both sides of this, because what we are comparing is, again, economic values.

On the recreational side, where does value come from? It comes from two places, from the consumer side, and I say consumer because we use it in a general, and I say from the angler side as a consumer surplus, and, again, that difference between that maximum willingness to pay minus the cost of harvesting the fish. That’s consumer surplus, and, to that, you add the value that for-hire operations enjoy, meaning producer surplus, which is the difference between how much they get paid minus the cost of providing the trip, and so these are economic values.

You take economic values on the commercial side, and, normally, you should follow the fish until its final consumption point, which is presumably when you go to a restaurant and buy it at the table, but we don’t have the data to see really the added value that the restaurant owner puts on that fish, meaning buying the fish and preparing it, et cetera, and putting it on the plate.

We don’t have good data on the lower step, if you would, from that wholesaler who bought the fish and brought it to the restaurant owner. What we have is we have the data at the harvesting level, essentially, how much did it cost the commercial fisherman to harvest the fish and what is it that he or she gets for it, and one more thing that we have to say -- I mean, the Magnuson Act is careful in saying that all the economics is a part of the discussion when it comes to allocation and it should not be the sole justification, and so we have to look at the other things than how it would impact different communities and related businesses and so forth.

It is a piece of it, but it is not the only thing when it comes to making allocation decisions, and none of this discussion really implies that recreational fishing has no value. To the contrary, there is a lot of economic value generated by the
recreational sector, and I would repeat that again. There is a lot of economic value, and that is the proper metric to looking at allocation.

Economic impacts, unfortunately, are not. They are big numbers, but they are not, because allocation is about efficiency, and so you need economic value. Economic impact is about how much money has been spent and where do those dollars flow in the economy. You buy let’s say bait and fuel and ice, and then the person turns around and pays his workers, and those workers go to the supermarket and buy things and so on, and the dollar circulates, essentially, and that will give you a measure of economic impact.

DR. ROY CRABTREE: You get some sense, from this discussion, as to how complicated this whole issue gets, and trying to get at benefits and surpluses and all the things that Assane is talking about -- It’s not that hard to understand how you get there on the commercial side, and even the charter side, but, with recreational fishermen, it’s a lot more complicated, because there is value in just the pleasure and the fun that people get out of fishing. The problem is how do you put a number on that, and so how do you monetize the pleasure that people get from fishing?

Well, they come up with surveys that ask all kinds of questions about how much would you be willing to pay for this and that, and so the willingness to pay number that you come up with is effectively trying to get at that, but, complicating all of this -- Like you said, there are all kinds of tensions and competing things going on. Like, if the bag limit is too low, you get into this issue of how much did you spend to get to get to catch one fish, but, if you raise the bag limit, you catch up to the annual catch limits faster, and you get fewer days, and that cuts back on the amount of opportunity you get to go fishing, and so that starts getting into all the complications of it.

We could get you more days by lowering the bag limit, but then you’re going to pay more per fish on it, and so the whole thing is a really -- In my opinion, understanding the nuances of what net benefits really mean and how it applies to recreational fisheries is one of the most difficult concepts to wrap your head around in fisheries, and that’s partly why we argue a lot about allocations, but we haven’t made a great deal of progress on it, and it’s also, in my personal opinion, one of the problems we have when the litigation comes, because then you go in front of a federal judge, who doesn’t really know anything about this stuff, and you try to explain it to them very quickly
and in a very short brief, and they may or may not understand it
and they may or may not come to a decision that makes sense to
you.

It is a complicated concept, but, with red snapper at least, in
general, the willingness to pay numbers are higher on the
recreational side than they are on the commercial side, which
might indicate that you could increase net benefits by some
level of reallocation towards the recreational fishery.

The problem we get into is no one can really tell us what the
magic allocation that maximizes all of that is, and no one can
really tell us how much should you reallocate, and that’s part
of the dilemma. There’s just not a clear-cut way that is easy
to wrap your head around to figure out what would be the magic
allocation that would maximize all of this stuff, and so I think
it’s a good discussion, but it is a very tricky concept to
really get your head around.

**MR. MARQUEZ:** Could I ask one other question? We talked about
just this straight sort of a dollar value here, and the idea
that the economics shouldn’t play the lead role. I don’t think
that it says that it shouldn’t play any role, but, within that,
you indicated that they’re supposed to consider the impacts on
local communities as one of the items of consideration, and can
you give us any insight on sort of how that folds together when
you get into the decision-making process, because I think this
goes exactly to the point that Jim Brown was making earlier.

Although the national net benefit may be sort of a wash if all
these folks from Georgia just stay in Georgia and spend their
money there, but the impact to that community is severe if they
don’t have that quota and they don’t have those fishermen there.

**DR. DIAGNE:** In making a decision comparing management
alternatives, a variety of factors, of course, would be
considered, one of which being the economics, and I believe that
Dr. Lasseter, when she discusses a few issues with you, will
talk about some of the social implications as well of the
management alternatives.

If you have let’s say two alternatives of equal contribution
when it comes to net benefits, you would look at the one that
would do the least -- That would be the most beneficial to small
communities, I guess, particular communities, in making the
decision, but how do you balance all of these competing aspects?
That is more, really, the purview of the council, if you would.
We provide the information and say that, in terms of economic
benefits and business activity, which are the impacts, these are the numbers that we have. Then, in terms of, I guess, the biological effects, these are the implications, in terms of social effects, these are the implications, and then you can have the cumulative effects, et cetera, and so forth, but, at the end of the day really, the difficult and challenging decisions, those are the purview of the council. They are the ones that take in the information and balance all of those different aspects and come up with their final decision as to how they want to manage.

DR. FROESCHKE: Are you going to finish your allocation slides?

DR. DIAGNE: I think that was it, or is this one mine? I thought that this was --

DR. FROESCHKE: I can do it, or you can do it, whatever you want to do.

DR. DIAGNE: It’s the same, and I think I may have a nicer voice, and so I will just give this to you.

DR. FROESCHKE: If you recall, at the last meeting, you did ask for some additional information about how the allocations that we do have were arrived at, and so I just put together a few quick slides.

The first bullet, how the commercial and the recreational allocation was determined, that was one question, and then, within the recreational sector, how the apportionment between the for-hire and the private rec for sector separation, how that was done, and so we have a couple of diagrams.

Then the most recent allocation adjustment, which was overturned by the courts, and we can touch on that a little bit, but I will probably have to defer back to Assane, but, originally -- Well, I will start by the commercial to recreational allocation is 51 percent commercial and 49 percent recreational.

This has been for a very long time. It was established in 1990 in Reef Fish Amendment 1. We’re in the 50’s now on these amendments, and so if you’re keeping score, but this was based on landings, and that’s typically how, fisheries that are allocated, that’s how they’re done. What was done was a calculation, essentially, of the landings between 1979 and 1987, and, essentially, they were tallied up for each sector and taken an average, and it was 51/49, essentially.
That’s where we were. In 2015, there was a Reef Fish Amendment that did modify the allocation to 48.5 commercial and 51.5 recreational. However, that was overturned by a judge, and so it reverted back to the commercial and recreational. As sort of the nuts-and-bolts of how those numbers were arrived, it sort of encapsulated all the information that Assane discussed.

There really isn’t information to get too far away from what we have, based on what we have, because it’s really at the margin, and so, in terms of the -- If you think back to just the quota, we have the recreational allocation is 49 percent, and then, of that, in the sector separation amendment, it was further subdivided into 42.3 percent for the for-hire and 57.7 for the private, and, again, that was a -- There was a landings series that was used, and I think it was 1986 forward, through 2009, and I can check that number.

Essentially, the way it’s done is you take -- There is two parts to it. You take the whole time series, and then the most recent years are doubly-weighted, if you will, and an average was computed, and that’s how it was done, and that’s fairly typical of how we’ve done it in the past for other species.

In terms of just to kind of circle back, this was a little bit intended to build off of Dr. Shipp and what he was likely to say, but, just to kind of re-orient everyone, in the flow chart, Congress develops the rules that govern federal fisheries management.

What we operate under is the Magnuson, and this is sort of where we can play. Rules and bills and things that operate above that level are not in our purview, and so we typically don’t go there. That’s not to say that you can’t, but we don’t, because we’re not allowed to, and so we are constrained to what’s allowed under the Magnuson Act.

From that, sort of NOAA and the council work together, with public input, to establish fishing regulations, which are implemented by the Department of Commerce. Just to kind of re-orient yourself to how this process works, occasionally we might remind you of this is not something -- That’s a great idea, but it’s not in our purview, and that might happen, and that’s just the way it is, and I apologize.

At this time -- I think questions have sort of come up as they have been mentioned, but, if you have any other ones, we can take them now. Otherwise, we have some other stuff for you.
**MR. ANDRY:** John, you had talked a little while ago about the different states’ methods of surveys, and it comes up with this, with the allocation process. I am guessing all those allocations were based upon the MRIP surveys?

**DR. FROESCHKE:** No, not necessarily, because, for example, there is no MRIP survey in Texas.

**MR. ANDRY:** Right.

**DR. FROESCHKE:** There are different options, but what is done for the various states is their numbers are estimated with the various programs, and there is sort of a calibration to make sure that everybody is operating on the same currency, and so there is some calibration that’s done.

Then, for example, the headboat is a Southeast Region, but primarily it’s the same program throughout Texas to Florida, and so, in terms of estimating the total recreational landings, those individual components are summed.

**MR. ANDRY:** When we get into some of the state-based survey programs, how are they aligning with what MRIP has put out there in the past? Are there some states that are doing a better job than others with their individual survey programs?

**DR. FROESCHKE:** Well, I will caveat this with essentially you’re calibrating two unknowns. I mean, there is a total estimate of fish, dead fish, that were removed, and we will never know precisely that number.

The MRIP is currently the standard, and these other programs are referenced in lieu of that, and so the way that we try to understand this is what’s called a PSE, or percent standard error, and the idea is that, the more precise your estimate, the less uncertainty is associated around that, and we think that’s likely to be a better estimate.

Each of the states are in various processes of getting their various programs certified through MRIP, which essentially says that MRIP has reviewed the methodology and they have agreed that this is a reasonable and appropriate method to estimate landings from the fishery and that these numbers can be used in the management process.

As you can see, if you look in the various state presentations, the methodologies are different, and that is by design. Different regions have different needs and different amounts of
resources and things to direct at the fleet, and so it is very complicated.

**DR. CRABTREE:** Hughes, are you trying to get -- Are you asking how do the magnitudes of the federal survey compare to the state survey and individual states?

**MR. ANDRY:** Yes, I am.

**DR. CRABTREE:** In Louisiana, we ran LA Creel and the MRIP survey side-by-side in 2015, and the LA Creel red snapper catch estimate was 2 percent higher than the MRIP catch estimate for red snapper, and so they’re very close.

Mississippi has done Tails and Scales estimates for two years. One was lower than the MRIP estimate and one was higher than the MRIP estimate, but the MRIP estimate for the State of Mississippi is extremely uncertain, because they catch very, very few snapper.

The biggest disparity we’ve seen consistently has been with Snapper Check in Alabama. The for-hire estimate that Alabama produces is fairly close to the MRIP for-hire estimate, but the private catch estimate from Snapper Check has been about half, about a million pounds less, than the MRIP estimate.

Now, the issue with Snapper Check is there is a fair amount of non-compliance with Snapper Check and people who are supposed to report and they just don’t, and so there’s an expansion factor that’s applied to the estimate to account for that, and, depending on what expansion factor you use and how you do it, you can get very different catch estimates, and so that’s the biggest thing that’s being looked at with Snapper Check by these external statisticians as part of the review methodology.

Now, Florida is working on a reef fish endorsement that they would use to modify the effort survey, and the last report I heard from them was that the estimates were comparable to the MRIP numbers, but I don’t think their survey is very stable yet, and they’re not really releasing the estimates with any confidence.

Then, overlaid on all of this, is they have changed the way the effort survey is done. In the past, it was a telephone survey that asked how many times did you go fishing in the last sixty days, and they’re switched, as of this year, to a mail survey, and the reason for that is because of cellphones and caller ID and nobody answers the phone anymore, and so the statisticians
say a mail survey is the way to go.

The pilot studies on that have consistently produced much higher estimates of effort than the telephone survey, and so that would indicate that MRIP is underestimating catches across the board. The bottom line of all that is there is no clear pattern in looking at the state surveys. Some are producing higher estimates and some lower and some pretty close, and the biggest disparity is in the private sector Snapper Check estimate with Alabama. That is still being looked at to try and understand what it means.

MR. BROWN: Going back to the allocation, and I’m sure this has probably been asked plenty of times, but, by using thirty or forty-year-old data for landings, for commercial and recreational, the commercial fleet has probably, I would guess, halved from what it was thirty or forty years ago, the number of commercial boats involved in the commercial fishery, and the number of recreational boats has probably doubled during that time.

You have taken this 51/49 split and you’ve given 51 percent to fewer people and 49 percent to more people, and that seems to be out of whack, and I’m sure that that’s been the discussion of a lot of folks, and I was wondering if there was any weight given to the changes in numbers.

I mean, you can look at historical boat registration data, and you can look at state-by-state license issues and federal license issues and see that there has been a drastic change in those numbers, which seems like that needs to be updated, and I don’t know if you have discussed that recently or not.

DR. DIAGNE: I just would want to, I guess, maybe add one point, and that was a very good question. We have to look at, really, the final use of the products that we are talking about. As a recreational angler, when I harvest a red snapper, then I will presumably take it home and prepare it and have a meal and so forth, if I am so lucky to catch it.

As a commercial fisherman, once the fish is harvested, it goes through the channels, and so, if we are comparing really numbers of consumers, and I put that in quotes, the right metric is not the fleet that’s harvesting the fish, but the final customers that are going to eat those fish harvested on the recreational side.

Although the number of anglers has certainly increased, and I
think you said double, and it’s probably more than that, but, if we look at consumption of let’s say seafood products, we could also as well argue that the final customers, the consumers of those products, have definitely increased, and so, looking at the size of the fleet, I think that misses a part of the picture, in the sense that those fish are destined to go to market and be used by a much larger population, if you would.

MR. BROWN: But that also gets back to looking at the economic piece that -- Other than the price has probably increased for red snapper, it’s that the commercial side stays stagnant, because, even though the fleet size doesn’t change, the number of fish, I guess, or the price is somewhat similar, but, when you’re adding more users on the recreational side, that increases the value of what was talked about earlier of that individual fish, and the value increases dramatically, because now you have more people spending more money to catch that fish.

That would seem, to me, that you would want -- It would be a greater benefit to the nation by having more folks participate in spending more money catching the fish than what is basically stagnant on the commercial side.

DR. DIAGNE: There is some validity to one side of what you just said. Absolutely there is more recreational anglers, a higher demand for harvesting these fish, and so presumably that should be translated into a higher willingness to pay on the recreational side, and, as I said before, based on all of the studies that I have seen, at the margin, the value of a recreationally-caught fish is higher than that of a commercially-harvested fish. There is no question there.

The problem is that, once you stray from that margin, you don’t know what happens, and so, if it were, let’s say, to tweak allocation around the margin, which I guess we are now at 51/49, 51 commercial, and slightly tweak around that, you would have ample justifications, based on the consumer surplus and producer surplus numbers, economic value numbers, that we have, but, if you want to make wholesale changes, a large swing in allocation, no one knows how those values are going to change, and that is one of the challenges, and, again, let’s say on the commercial side, we should really look at the fish and follow it to its final destination, which is not, of course, the commercial vessel, but is on a plate in someone’s home or in a restaurant.

MR. BROWN: On the recreational side, do you follow that, because, when I look at like say Florida’s numbers, they have like recreational saltwater fisheries at a $7.6 billion economic
impact. When they talk about commercial fisheries, it’s in the millions of dollars.

**DR. DIAGNE:** I think that, not to go back to the discussion that we had, and I think we settled the discussion that economic impacts are not the right place to look when we are talking about allocation, and the recreationally-harvested fish absolutely is followed.

I mean, unless there is something that we missed, but, once a recreational angler harvests a red snapper, that is the end of the activity. She would take it home, and, as far as I know, sales are not allowed for recreationally-caught fish. She would take it home and enjoy it and prepare it and share it with family and friends and so forth, and that’s that, and so we do follow that, absolutely.

Where we fall short is in following the commercially-harvested fish because of a lack of data. Once the fish are harvested, they are then sold, presumably, to a dealer, who turns around and sometimes even resells it to a wholesaler, who then supplies the restaurants and grocery stores and seafood markets that they have.

Once the fish reaches a restaurant, the restaurant prepares it and adds value and puts it on a plate in front of a customer, and so that is where we are lacking when it comes to following really, if you would, the value chain, but, in the recreational sector, I believe we do that, and, as Dr. Crabtree mentioned, our challenge really is in determining the right willingness to pay, because there are not market transactions, and so we have experiments and surveys asking people questions and looking at the money they spent in travel. There is a section of models that are known as travel costs, essentially, that reveal the preference.

I don’t know how much you are willing to pay, but I am going to base my estimate on something that you have revealed to us by looking at how much you spent to travel there and catch the fish and so on and so forth.

**CHAIRMAN CAPLINGER:** Roy.

**DR. CRABTREE:** But I think part of what you were touching on, Jim, is the world has changed a lot in the last forty or fifty years and why is the mix of the fishery back in the 1970s and 1980s relevant to what the allocation ought to be today, and, to make that even more complicated, all of the catch estimates have
been revised multiple times over the years, and so, if you look at the current catch estimates from that time period, they don’t add up to 51/49 anymore. That was the catch estimates the council had in front of them when they did this in 1990.

To make it even more complicated, the survey doesn’t even support 1979 or 1980 anymore, and so there’s not a good way to even adjust those estimates anymore, and so there is no question there is a need to review the red snapper allocation and see what it ought to be today and make it more relevant to the way the world is today. The difficulty is there is no clean way to know what it should be, and that makes it very contentious and very difficult.

**MS. RALSTON:** I appreciate those comments, Roy, and I think that is exactly what Jim was getting at, that forty-year-old information needs to be updated. If you all can help me out, but I’m thinking back to the allocation amendment, Amendment 28, that was challenged in court, those allocations were -- The shifts in allocations were being suggested because of original discrepancies or --

**DR. CRABTREE:** That was because of a shift that was made in the way the dockside intercepts are done and changes in the way the people who do the dockside intercepts are told when to go do it and where to go do it, and, when they changed it, it resulted in higher estimates of the recreational catch, and, since the belief was that the allocation is based on what the historical mix in the fishery is, if the recreational catches have been higher historically, that increase ought to go to the recreational fishery.

It's like if you had a fishery that everything indicated it was healthy and you catch a hundred pounds a year and it’s allocated 50/50 and everybody gets fifty pounds, what if you found out one day that one sector was actually catching a hundred pounds, and always had been catching a hundred pounds, and so the catches have actually been 150? Well, all your data says the fishery is healthy, and so you say, okay, the total allowable catch will be 150 pounds.

If you allocate it out 50/50, that means that everybody gets seventy-five, and so the guys who have been catching a hundred all along are going to get cut, and the guys who were catching fifty are going to get an increase, and so that’s what we tried to correct.

The judge said that, well, the trouble with this is it can only
go one way, and there is no way that it would ever result in the commercial fishery getting more fish, and so it’s not fair and you can’t do it, and that’s wrong, because it could have come out, when we changed the survey, that the recreational guys were actually catching fewer fish than we thought, which would have indicated that we should allocate more to the commercial guys, but that nuance escaped the court and they made their decision.

MS. RALSTON: Along those lines, I think it would be a very worthwhile exercise for the council to revisit reallocation of red snapper between the commercial and the recreational sector, and I think that’s something that this AP could consider as a recommendation and perhaps to more fully explore it, because my understanding too of that court decision was that they felt that the council also needed to provide some additional rationale, and I think there’s a way that you could structure that reallocation discussion, or allocation discussion, that would include all of those components.

CHAIRMAN CAPLINGER: If I want to stir the pot even further with allocation, which we clearly have an issue with, I think we’ve hit the limit on what people are willing to pay to catch a red snapper when we divided recreational anglers from private boats into two groups, recreational anglers on charter boats, those the same as the recreational anglers catching those fish, but now the amount that those anglers are spending for a charter to catch two fish may have pushed us to that limit where people say enough and I can’t spend it anymore.

Maybe that’s why the charter catch has been lower than, I guess, the quota, or under the quota, and so I don’t -- Other than fixing a problem with the poor charter captains who bought permits and then were not able to fish for that period of time when the season shrunk so low, I don’t really see a reason, and I have a big problem with dividing the recreational anglers into those two groups.

I know it probably helps you, because you get a better idea of what recreational anglers are catching, because they have a tighter reporting method, and is that right, Dr. Crabtree?

DR. CRABTREE: Well, the effort estimates for the for-hire survey I think are more precise, and probably less biased, than the effort estimates for the general recreational survey, because it’s a smaller universe of captains, and we know who they all are, because they have permits.

CHAIRMAN CAPLINGER: I guess my point is that I think this whole
program was set to fix that problem with these guys who spent a
ton of money buying permits and were not able to use them.

**DR. CRABTREE:** Well, where this came from was a result of the
extended state-water seasons, and we had a rule that’s been in
place for many years, and it’s in place for most of our
fisheries, that says, if you have a federal permit, you have to
abide by the federal rules, regardless of where you’re fishing.

When the states started opening up state waters, the charter
boats could only fish when federal waters were open, and that
meant that, as more and more of the quota got caught up in state
waters, the charter boats were getting squeezed out of the
fishery, and so we went from a fishery that historically had
been roughly 50 percent caught on charter boats and 50 percent
caught by private anglers to a situation, I think in 2013, when
around 80 percent of it was caught by private anglers, and the
charter boats were below 20.

People whose only access to the fishery is to go out on charter
boats, people who don’t have boats or whatever, were getting
squeezed out of the fishery, and so the council -- One of the
jobs the council has is to make sure that everyone has fair and
equitable access, and so the council came in and set an
allocation in order to resolve that problem and shift the mix of
the fishery back to something that was close to what it
historically had been with fish caught on charter boats versus
fish caught by private anglers, and that’s where it came from.
Had we not had differences in the state-water seasons and the
federal-water seasons, I don’t think that it would have ever
happened.

**CHAIRMAN CAPLINGER:** I agree, and I would suggest that the
states didn’t create this problem. I would suggest that the
state seasons increased as a result of the federal seasons that
have been dramatically decreased, and I appreciate the problem
you were in. You’re having to follow the constraints of the
law, but the states did not cause this. This was a federal
issue, and we can debate forever, but --

**DR. CRABTREE:** It’s a chicken-or-the-egg.

**CHAIRMAN CAPLINGER:** What I’m saying is that, if we continue
along this path that we have been on, and I think we’re here to
fix that, the problems with the federal system have caused the
rest of the Gulf, the states, to try and address it. That’s
all.
DR. CRABTREE: The only thing I would point out to you is the reasons for the federal season getting short are multiple and complicated, and one of the problems we have is we’re doing things that make the season even shorter, even though what we say is we want to make the season longer, and so it’s a complicated thing.

There is no getting around that, if states open up more state waters, that causes the federal season to get short. If we engage in activities that increase catch rates, such as putting out artificial reefs, that results in the season being shorter, and so it’s an odd situation, where we’re doing things that work counter to what I hear all the time, which is we want a longer federal season.

Somehow, we’ve got to bring all of these things into alignment and decide what do we really want, and there’s a bunch of ways that you can get to a longer federal season, but we’re all over the map on it. I think it’s broader problem than people generally think about it.

CHAIRMAN CAPLINGER: Well, it comes back to the system is broken, and, if we keep saying, well, we have to work within the constraints of the system, then we’re not going to get anywhere. The system -- We have heard repeatedly, and this is going into another subject, but we’ve heard repeatedly that the Gulf of Mexico, or at least the western Gulf of Mexico, is probably as healthy as it has ever been, and we can’t probably get to a much higher population, and so those are the things that frustrates anglers, when clearly the federal season dropped, continued to be reduced, over time, and that’s created the frustration.

DR. CRABTREE: That’s a great point, but I don’t think that has anything to do with the system being broke. I suspect that the western Gulf is rebuilt and it’s healthy. There is nothing preventing the council to managing red snapper as two stocks, western Gulf and eastern Gulf. If they did that, I suspect you would have robust fisheries off of Louisiana and Texas, with a lot of days.

What is happening right now is the western Gulf is paying a price for the high catch rates in the eastern Gulf. Most of the fish caught recreationally in this fishery are caught off of Alabama and the Panhandle of Florida. I bet you 80 percent of the catch occurs in that small stretch of coast, and so you’re losing days in the west because they’re catching so many fish in the east, but there is nothing in this system that prevents the council from addressing that, but it’s just getting the votes
and the politics of doing it.

MR. BOYD: That’s the key, is the politics. When you go to Florida and you talk to Florida about separating it into two stocks, they glaze over and won’t talk to you anymore. I mean, that’s what we see at the council level, is that it boils down to the politics of the fishery, and, to what you were talking about a minute ago, I will give you my own analogy on the chicken-and-the-egg problem with the fishery.

We say today, and I experienced this coming over here, that there is too many carry-on bags on the airplane, and so people get on the airplane and the last ones on have to go back down the aisle, and you can’t go back down the aisle, and so you’re thirty minutes late leaving because there is too many bags. Whose problem is that? I contend it’s the airlines’ problem, because they started charging for bags and everybody reacted to it.

I think that’s what has happened. In my analogy, I think that’s what has happened in the fishery, is, because of the management, whether you blame it on Magnuson or you blame it on NMFS or you blame it on Roy, which Facebook would do, I’m sure, but the problem is the result is that the states are protecting themselves.

They have to protect their economy and their fishermen, and so they are reacting to what has happened to them, just like the airline traveler has reacted and is now carrying on an extra big bag, and it’s a problem.

MR. BROWN: For Florida, I guess I have to talk, after hearing this. I think part of the problem, at least from Florida’s perspective, would be that what we would be looking at is exactly what we were just talking about between commercial and recreational.

It’s that, if you looked at historic data, then the western Gulf is going to get a larger percentage of the allocation, but, on the other hand, yes, there is more users, probably, in the eastern Gulf that are going out there to participate, but red snapper are in places that we haven’t seen red snapper in the eastern Gulf in fifty years.

I am catching red snapper a mile off the shore, off the beach, off my flats boat, and that hasn’t happened, and so that’s the frustration, I think, from a Florida perspective. It’s that, yes, we’re seeing more fish and --
MS. RALSTON: That’s why we’re catching them.

MR. BROWN: That’s right.

DR. CRABTREE: I get that, and I think you can make an argument that we ought to allocate the fish to where the fishermen are and not necessarily where the fish are, which is kind of how it’s shaking out now, but my only point with all of this is that it’s not a problem structurally in the system and the Magnuson Act. This is just a problem with disagreements and regional differences and getting at kind of a polarized -- I mean, look at Congress today. It’s polarized. They can’t pass -- We may shut down tomorrow afternoon because they can’t come to an agreement.

It’s not like this is unique to the Gulf Council. It’s throughout the whole society, but there is nothing structurally in the Magnuson Act that prevents the council from doing this, which means there is not a change to the Magnuson Act that needs to be made to allow this to happen. The council just needs to come to some agreement and work it out, and that’s difficult.

CHAIRMAN CAPLINGER: Roy, do you and your staff make these recommendations to the Gulf Council that these things should be fixed, or do you throw the ball in their court and say, knock yourselves out and let’s see what you come up with?

Somebody has got to lead these people. I mean, just like we’re being led, and, I mean, somebody has got to drive the train here, and, if you know something is broken or something needs to be fixed, then maybe the staff, the economists and the biologists and the scientists, should be pushing for real changes.

DR. CRABTREE: Well, I have been a big proponent for regional management and delegating more responsibility to manage the fishery to the states. I don’t believe we need the Graves Amendment or legislation to do that. The council can do it. We had an amendment already to roll to do that, and I supported it.

The problem was the states were having disagreements about who should get how many fish, and it’s essentially this very problem, and the states, Texas and Florida, killed the amendment. I voted not to kill it, and now we’re going to talk about exempted fishing permits, and we’ve got a new series of amendments to do state management again, and I will support that. I think we do have a problem here.
I think, when you get another stock assessment, you’re going to again hear about differences in the western and eastern Gulf and that you could manage this as two stocks. Now, as Jim pointed out, there is different ways to look at that, and I think the states just have to decide.

You know, trying to exert leadership on the council is a tricky thing, because, sometimes, if I come in and try to push them one way, they’re going to go the exact opposite way from me, and so that -- If the council is overfishing and the law says you’ve got to do this, it’s easy for me to go in and say you’ve got to end overfishing and here’s the science and that’s what the law requires.

When it’s something like what should the recreational/commercial allocation be, I am happy to tell the council that you need to review the allocation and re-look at this, and I have told the council that you need to look at it, and I voted for Amendment 28, which shifted the allocation, because I thought it was the right thing to do. If this comes up again at the council, I will support taking another look at the allocation, but then, if you ask me what should it be, well, I don’t have the answer to that.

CHAIRMAN CAPLINGER: I think we’re long overdue for a break. Is that right, Dr. Froeschke?

DR. FROESCHKE: Yes, and I was going to suggest that some of this information about the stocks and the distribution is probably better discussed in Shannon’s presentation, because she has a lot of that information, as well as some of the state landings and things like that is also in Ava’s presentation, and so we have some information that could inform those discussions, and so we might move to those and then revisit this as we get there.

MR. LANDGRAF: Charlie, I’ve got one quick thing before we break. I agree with Kelly on the recommendation, and that’s our charge, right, is to make recommendations, and so the challenge for this group, as we go through the day, is understanding recommendations and making sure they’re clear, so we can record them to the council.

CHAIRMAN CAPLINGER: That’s correct.

MR. LANDGRAF: Just to Dr. Crabtree’s point, when it was said that the baseline data that we’re doing our studies against is
old, as we know, shouldn’t that support why one of our recommendations might be to support the Modern Fish Act?

CHAIRMAN CAPLINGER: That’s what we will have to determine at the end of the day. We’re going to take a five or ten-minute break, and then we’ll come back. Thank you all.

(Whereupon, a brief recess was taken.)

PRESENTATION: RED SNAPPER STOCK ASSESSMENT PROCESS

DR. CALAY: My name is Shannon Calay, and I am from the Southeast Fisheries Science Center in Miami, and I actually work directly under Clay Porch, who is the Division Chief at our laboratory. I am the Chief of the Gulf and Caribbean Species Group, and so I supervise the stock assessment staff as well as some ecosystem experts, and I actually did conduct the update assessment in 2014, and so hopefully I know about as much as needed, although certainly I don’t know as much as Clay Porch would have, had he been here. I will try to fill his very capable shoes.

This is a talk about the stock assessment process, some of the data inputs and stock assessment results. If you have any questions at any point, do feel free to interrupt me, or if I’m speaking too fast or using terminology. There is a lot of acronyms in this presentation, and I’m going to try to avoid using them and actually say what the words are, but, if I fall into the trap of acronyms, please feel free to ask any questions that occur to you as I speak.

First of all, what is a stock assessment model? A stock assessment model is simply a set of equations that represent a simplified version of the population dynamics of a fish, or a species, and its fisheries that operate on that stock. We tune stock assessment models to actual observations, from data, of both the biology of the fish, the catches of the species, as well as how those fisheries operate, the effort, the distribution, perhaps, of their landings.

When we say tune, what we really are talking about is something very similar to the way you might do a regression, say of length at age, only we have many things that we’re trying to simultaneously solve, and so, essentially, we’re trying to find the solutions that are most likely, given the data inputs that we have available to us.

Stock assessments provide advice on where the fish population is
today relative to established management benchmarks, and, also, stock assessments predict how the stock will respond to future management actions, and so I’m going to go out on a limb and show just a few slides with some mathematics, at the risk of boring you all to tears, but, in a highly oversimplified stock assessment model, say you have a pond.

The number of fish in that pond is only reduced by fishing. These fish don’t breed, and they don’t leave, and they don’t enter the pond. In this situation, the number of fish you have next year is simply going to be the number of fish you have this year minus the catch.

In this situation also, U is the catch rate, the catches per hour. The catches you have this year, which is U2, are simply going to be proportional to the number of fish that are there in that year, and so Q is a proportionality constant, which you can now conveniently ignore, and the catch rates that you had last year are also proportional to the number of fish that you had last year.

What I am really getting at here is, in this system of equations, which is very oversimplified, you have things that you know, which are identified here in red, and these are things that you know from data observations, and you have other things that you will need to estimate, and those are shown in blue. The proportionality constants, you can ignore.

Now, let’s say, in this example, that the catch in year-one is 1,000 fish, that the catch rates in that year were one fish per hour. In the next year, your catch rates were only half-a-fish per hour. You can rearrange these equations and put in the data that you know and solve for how many fish actually were in this pond. In the first year, you had 2,000 fish in this example, and, in the second year, you had 1,000 fish. This is an extremely oversimplified example, which just gets at the point that we have certain things that we know from data observations and other things that we have to estimate, and we estimate it from the data available to us.

Of course, in a real stock assessment, we use far more data than that to estimate more things, and we use a much more complex set of equations, which is why you need to have a comprehensive review of these assessments, which here occur through a SEDAR process and also through the SSC, which is another, obviously, group of this council, the Scientific and Statistical Committee.

What goes into a real stock assessment? We have information
about the biology and ecology of fish, and we have information
about the age and composition of the catch from analysis of
otoliths, or ear bones, and we have information about the size
of the catch. We monitor recreational fisheries and commercial
fisheries, and we have scientific, or fishery-independent,
surveys. We also monitor other extractions, such as shrimp
bycatch and discards.

What actually went into the 2014 assessment of red snapper and
what are we using also in the update, which is occurring right
now? We are currently underway with an assessment to be
completed in 2018. A reminder that some of this is a little bit
redundant with John’s presentation, but we are using an age-
structured model. We used Stock Synthesis, which is basically
pretty standard across the -- Well, it’s standard use in the
United States. It’s also used in many other countries, and it
has been simulation tested, which is an advantage.

The stock assessment covers a period from 1872 to 2014 in this
case, and we assess the stock as two stocks, one east and one
west of the Mississippi River, and so all of the data inputs are
actually broken out by east and west, but we only estimate one
spawner-recruit relationship at this point, and we allocate the
recruits to either the western Gulf or the eastern Gulf, using
information obtained from data, but the council has chosen to
manage the stock as a Gulf-wide stock.

Although the assessment is already essentially constructed to
support the eastern and western analyses, the management advice,
by the choice of the council, is provided Gulf-wide.

We have a variety of sources of fishery-dependent data, meaning
that they are literally derived from the operations of the
fisheries themselves. For example, we have catch information,
information on the discards, the effort, the catch per unit
effort, and age and length composition data.

The fleets that we actually model in the stock assessment are
the commercial handline, or vertical line, fleet, the longline,
and the recreational private boat and charter boat are combined
in the stock assessment model, and we have the headboat. We
also model closed season commercial discards, closed season
recreational discards, and the shrimp bycatch. Those are all
separated east and west, as I mentioned.

We have a variety of fishery-independent information, which is
also used in the stock assessment model, and, as John mentioned,
the advantage of the fishery-independent data is that we don’t
need to model our way out of changes that have occurred due to management. All of the fishery-dependent sources, they are all influenced by management decisions, and so there are attempts to correct for those changes. That is not needed in the case of the fishery-independent data.

Here we have mostly information on catch rates or indices of abundance from the SEAMAP video survey, the ichthyoplankton, or larval survey, summer trawl and fall trawl survey, NMFS bottom longline survey, and we have information from the artificial reefs. I will talk a little bit about that. It’s from remote-operated vehicles, and it’s primarily a source of fishery-independent length composition information. It’s not an index of abundance at this time.

One thing to mention, and also touched on by John, is that these fishery-independent surveys actually monitor different age classes of red snapper, and so the summer and fall trawl surveys look at age-zero and one, primarily. Well, entirely. The plankton survey, although it actually is a larval fish survey, we’re using it to index the spawning stock biomass, the abundance of the adult spawners, and the NMFS longline survey also is an indicator of the adult biomass of spawners. The video survey is a broader composition of both younger fish and older fish as well.

MR. BROWN: Before you move to the next slide, is the age-structured model -- You haven’t really explained that, and is that in reference to the age of the fish?

DR. CALAY: Yes, exactly, and so we essentially are modeling the fish from age-zero to I think the maximum age in this case is twenty. I think the plus-group is twenty, but I could be mistaken. The fish are actually as old as fifty-seven years, but we have such spotty measurements of the much older fish that we create a plus-group that encompasses fish that are adults, that essentially have that maximum reproductive potential, or close to it, but we compress it into a single age group and track it in the model that way.

MR. BROWN: In that, if it’s a model that is used across all species, and, again, forgive me, especially to all the scientists in the room, for trying to simplify this. If you’re looking at most fish, and say their maximum yield might be between the ages of three and five, and the maximum yield for red snapper might be between ten and twenty, and I’m just making numbers up here, but, in the meantime -- So, in that three to five-year-old fish, there is very little production, probably,
before three years and very little production after five years, but, with red snapper, there may be considerable production before they meet their maximum at ten years and probably not a whole lot after their maximum, but, that period of time between the five and ten-year range, you’ve got a lot of production going on there. Is the model kind of set up to consider that data?

**DR. CALAY:** The model has age-specific estimates of fecundity, or reproduction, and mortality, and it actually has the age composition of the fisheries, and so we know the age that, for example, the recreational headboat fishery in the east -- We know the age classes that that fishery acts upon, and so, as I show these inputs, if it’s still not clear to you what I’m trying to get at, let me try again, but I will show you what the inputs look like, and maybe it will become clearer.

Stock Synthesis is actually a very flexible model framework that can be set up -- It’s essentially set up based on the information you have, and so, in this case, we have information about the age composition of fish from zero to fifty-seven and the years 1872 to 2014, and we have this complete structure, and so that’s how this model is set up, but, in a number of situations, you would have much less data, and the model would be structured more simply. This just happens to be a fairly data-rich stock assessment.

**MR. BROWN:** I guess my question goes to -- It sounds like you are considering that production time prior to them having their prime production.

**DR. CALAY:** Absolutely.

**MR. BROWN:** You’re not just waiting for all the fish to get to that older producing age, but you’re counting in that, yes, those younger fish are still producing, and they’re producing for a longer period of time than what most species produce.

**DR. CALAY:** That’s correct.

**MR. BROWN:** So there’s an adjustment for red snapper, basically.

**DR. CALAY:** Yes, and I will show you what we actually include. All right, and so now I’m just going to go over the data inputs to this particular stock assessment, at least generally. We actually begin this stock assessment model in 1872, and we have estimates of the historical landings of this fishery from, in this case, on this slide, 1872 to 1960, which is prior to where
we start having our NOAA Fisheries data about the commercial and
recreational fisheries.

This information, basically the fishery started in 1872, when
ice became available, and it became economically viable to
capture these fish and sell them, and so the fishery very
quickly ramped up, and, even in the 1880s, and you see the hook
there, there was already some reports of local depletions of
certain stocks, and so there was an investigation to try to
figure out where they would have higher catch rates in other
places.

There was a peak in the probably early 1900s that you see there,
followed by a rapid decline, as the fishery actually moved
toward Campeche Bank, and so, although those landings continue
to occur, they are not in U.S. waters, and so they’re not
included here, but this is a plot of U.S. landings.

The flat portion you see is essentially World War I, and then
there is a slight ramp-up and a big decline, where the dollar
sign is. That’s the Great Depression. The fisheries didn’t
ramp up again until World War II, and then, due to a lot of
enlistment, and so some of the fishermen became soldiers, as
well as the threat of submarines, the fishery did decline again
during World War II.

It has essentially increased from World War II to 1960, with
fluctuations, obviously, as technology increased, as boat
engines became available, as there was boat building occurring.
Even in the 1960s now, there was concern that the stock had
become overfished, particularly in the eastern Gulf of Mexico,
where the fishery was predominantly occurring.

Now this is more -- These landings are from our federal
databases, and so now we have the full history, and so from 1872
to 2014, but I am going to talk about the part that starts with
the green shading, which is where we start to have information
about the recreational fisheries, which apparently there was a
rapid increase in the recreational fisheries that occurred about
that time, and this decrease that you see right here around 1990
is actually caused by the imposition of management regulations,
including the thirteen-inch size limit, and especially pretty
strict catch quotas of five and six-million pounds that occurred
at that time, which limited the landings that were extracted for
red snapper. Since that time, the catch limits have increased
somewhat, and the landings have as well.

We also have discards in the model, and what you’re seeing in
orange are the shrimp discards, and this plot happens to be in millions of pounds, and so the shrimp discards look relatively small when they’re expressed as millions of pounds. If this plot had instead been in numbers, they appear very large, because they’re on the order of twenty-five-million red snapper extracted by the shrimp bycatch in certain years, but they’re very small. They’re essentially mostly age-zeroes and ones, and so they’re small fish, and so their weight is actually relatively low.

You see all these other discards from the recreational and commercial fleets rapidly increase about 1990, and that, again, is due to the management regulations, and so, as you see the size limits occurring, fish are discarded, and some subsequently die of barotrauma, and so that produces dead discards, and you also have closed seasons and bag limits, et cetera, et cetera, that all lead to discards of fish that may subsequently die of barotrauma.

This is an age-structured model, as I have mentioned, and so this is an age-structured input, which does the natural mortality at age, and so why age-zero has a lower natural mortality than age-one is actually because of the way the model is structured. Age-zero is only half-a-year long in Stock Synthesis, and the other ages are all one year long, and so, actually, age-zeroes die at a higher rate than age-one, due to -- Well, they just do, but we apply a lower natural mortality of zero, because, in the model, it’s a half-a-year long, and so it looks a little strange.

These estimates, I believe, came from Benny Gallaway and others, and they were reviewed by the data and assessment workshops during SEDAR 7 and 31, and so we tried to incorporate a variety of information from the academic studies.

Growth, the length at age, obviously, is also an age-specific component to this model, and this functional relationship comes from roughly 100,000 otolith observations, and you can actually age the fish using this otolith bone, and that’s where this measurement comes from.

Reproduction is what you were getting at, and you can see that fish as young as age-two have some maturity, although a very low fecundity, but fish three, four, five, and six all do produce eggs, and there are at least a fraction of them that are mature and producing eggs in the population. There are also a lot more of these small fish, and so, even though their relative fecundity is lower than the oldest fish, there are more of them,
and so they do have an important effect on the reproduction of red snapper.

Obviously, the older the fish get, the more fecund they are. They produce more eggs per year at larger sizes, and so those fish, per individual, are more important to the stock, but there are more younger fish, and so, even though their relative fecundity is lower, there are a lot of them. Is that basically clear? Am I basically addressing the question you asked?

MR. BROWN: Yes.

MS. RALSTON: What does it look like when --

DR. CALAY: I would have to pull a different slide for that, and I don’t know the number offhand.

MS. RALSTON: I would just be curious.

DR. CALAY: In general, the reproduction increases at about the Q above the length of the fish, and so the fish have a maximum size, and, once they essentially achieve their maximum size, their relative fecundity doesn’t change as quickly anymore.

There is some evidence that the older fish have higher fecundity because their eggs survive longer and they provide a higher quality reproductive product, but it doesn’t increase as quickly anymore once they achieve essentially their maximum size, which I think is achieved -- They are achieving their maximum size around age-twenty here, and so you would expect their relative fecundity doesn’t increase as quickly anymore after they achieve their maximum size.

MR. BROWN: So the length of a one-year-old fish, on average, is about what?

DR. CALAY: A one-year-old fish, according to this plot, you’re looking at a length of -- This is probably -- It’s a good question whether this plot is in -- This must be in centimeters. This plot is in centimeters, and so twenty centimeters.

MR. BROWN: Then you would estimate a five-year-old fish being around the forty centimeters or something like that?

DR. CALAY: Yes, and obviously there’s a lot of variability here.

MR. BROWN: Yes, right.
DR. CALAY: One thing that would help us to improve the stock assessment is to have a better idea of the size of fish -- This is fishery-dependent data, again, and so one thing that we lack is a lot of observations of fish below the size limit, and so the smallest fish don’t actually show up on this figure, because they are below the size limit, and so they’re not landed by the fishery-dependent operations.

MR. BROWN: Do you have an opinion or data on -- Because you said the mortality of a one-year-old fish is very high, and how much mortality is caused by -- What am I trying to say, but bait and the other fish, bigger fish, eating smaller fish?

DR. CALAY: I don’t. I’m sorry. I don’t have any.

MR. BROWN: I don’t know that it mattered, but I was just curious.

DR. CALAY: I mean, obviously, there is predation and there is disease. I imagine the largest source is predation, but I’m just not sure.

CHAIRMAN CAPLINGER: Shannon, the number we have to pay attention to is sixteen inches, and so how many times has that fish spawned by the time it reaches sixteen inches? My question is because I don’t want to catch the fish too soon, and, if we’re damaging the fish for some reason for a limit, then I want to be thoughtful about that, but is the -- I am ignorant on this, but what is the commercial length limit? Is it sixteen as well, or is -- It’s smaller, isn’t it? Is it twelve?

DR. CALAY: It’s thirteen.

CHAIRMAN CAPLINGER: So, can you kind of help us with when and how much and how often these fish spawn by the time they reach thirteen and then sixteen?

DR. CALAY: It’s a complicated question, because fish may spawn multiple times in a year, and the spawning frequency also changes with age, and so, typically, I would think, in the relationships that I’ve seen, as the fish get older, they also spawn more frequently.

It’s a question that I can certain address to our Panama City Laboratory, and they could probably respond today, but my impression is that they’re really not -- They’re not producing much, in terms of reproductive products, until they’re age-
three, at least, and it looks like, on this plot, that age-three -- Really, what we’re talking about in some of these fisheries is predominantly we’re catching ages-three to eight in the directed fisheries, and so, at age-three, you’re talking about a very low relative fecundity, and so these fish may have only spawned say once or twice, or one or two years, with a low frequency during that year of spawning. By the time they get up to age-eight, they are spawning more often, and they have had more opportunities to spawn.

DR. CRABTREE: Where the commercial size limit came from -- It used to be fifteen inches, and we lowered it, and that was based on observer data on commercial vessels that indicated that 85 percent of the fish they release were dead anyway, and so every analysis we had indicated that you’re better off to land them and count them against the quota than to throw them over the side dead.

The sixteen inches in the recreational fishery was more based on trying to squeeze a longer season out of it than anything else, but the belief has always been the discard rate in the recreational fishery is much lower.

Remember that the commercial guys fish those Christmas tree rigs that have loads of hooks on them, and they pull them up and stream the rig down the side of the boat, and then there’s quite a period of time before the fish get released, and so it didn’t make any sense to throw that fish away.

CHAIRMAN CAPLINGER: I’ve got you, and I thought it was because that size fish fit on a plate. That’s not right?

DR. CRABTREE: That was part of it. I actually felt like we should have gotten rid of the size limit and required them to land every fish they caught, but they didn’t want to bring in the fish below thirteen, and so there was this compromise, and that’s where it wound up.

CHAIRMAN CAPLINGER: Shannon, is the catch -- Is the amount of red snapper caught insignificant compared to natural predation or whatever else when you look at the spawning rate? Are we really, we being commercial and recreational fishermen, are we hurting the spawning rate at all, or is it such a miniscule amount compared to how many fish are caught in shrimp trawls and die because they’ve been eaten and all that kind of stuff?

DR. CALAY: The stock assessment model does include components of the natural mortality, the directed mortality, fishing
mortality, and discard mortality. If you look at the relative magnitude of those sources of mortality, certainly your recreational fishery in the east and your commercial fisheries in the west have important impacts.

If you look at fishing versus natural mortality, like all fishing sources of mortality and natural mortality, if the sources of directed fishing essentially equal the natural mortality, that’s a situation where we think overfishing could be occurring. I mean, that’s a very general benchmark that we think about.

In this situation, the directed sources of mortality are certainly comparable to the natural mortality that’s occurring, and, specifically, those sources of directed fishing mortality that are notable in the stock assessment model are the recreational removals in the east, in particular, and the commercial removals in the west.

Now, the shrimp bycatch used to be, prior to 2007, a very much more important source of removals. The shrimp effort has declined markedly since that time, and it doesn’t seem to be a very important source of removals anymore, especially given the very high natural mortality of age-zero and one, because the shrimp bycatch is largely age-zero and one, but, if we were to allow the shrimp bycatch to increase again, if we were to allow the shrimp effort to increase, then that would become, again, an important source of mortality in the model. Right now, it seems to be relatively small.

CHAIRMAN CAPLINGER: Thank you.

DR. CALAY: You’re welcome.

MR. MARQUEZ: Shannon, can I ask why is the commercial component just identified for the west, rather than the east?

DR. CALAY: Well, again, this gets at the way the fishing fleets in this model are structured. We’re essentially doing -- Really, we’re doing two stock assessments that are joined through the allocation or the assignment of recruits east and west, and so what I was really get at is that, if you look at the east in isolation, if you look at just the eastern population, the primary source of directed fishing on the eastern population is from the recreational sector, where, if you look at the predominant source of mortality from the western Gulf of Mexico on that western stock in isolation, it tends to come more from the commercial than the recreational sector in
DR. CRABTREE: But there is commercial fishing on both sides.

DR. CALAY: There is commercial fishing on both sides.

DR. CRABTREE: It’s just most of the commercial fishery is in the west and most of the recreational fishery is in the east.

DR. CALAY: Correct. It’s an uneven distribution of those two fishing sectors. Do you see what I’m getting at? Most of the recreational fishing is actually occurring on the eastern stock.

MR. BROWN: All right, and so it’s just the recreational pressure in the east is outstripping the commercial effort there, but would you say the commercial effort in the east and the west is about the same, but it’s just that the recreational effort in the east is higher and it’s outstripping the commercial effort?

DR. CALAY: Let me see if I can say this accurately, and Roy can assist, if needed. I think that -- I don’t want to get at effort, because they are measured differently between commercial and the recreational, but the extractions, the actual commercial and recreational extractions, are fairly similar east and west, but the recreational fishery predominantly occurs in the east.

DR. CRABTREE: I think more than half of the commercial landings are in the west.

DR. CALAY: Yes, right.

MR. KENNEDY: Could you explain the vertical axis to me?

DR. CALAY: It’s relativized, and so, basically, at some age, I think twenty in this plot, which isn’t on the plot, you have the highest fecundity, and so this is just -- Say wherever 0.5 occurs, and it looks like about age-seven, and so a red snapper about age-seven has about 50 percent of the fecundity of an animal that is age-twenty.

MR. KENNEDY: The ability to produce eggs?

DR. CALAY: Right.

MR. KENNEDY: So when we have a management plan to -- According to this, it’s, I guess, pretty much common knowledge, if we have a management plan that incentivizes killing say a ten-year-old
fish, because it’s bigger, instead of killing a three-year-old fish, that’s counterintuitive to the thing you’re trying to help us with with reproduction increases.

We’re a lot better off with one ten-year-old fish in the pond than we are with several three and four-year-old fish in the pond, so that, if you’ve got the biomass of a ten-year-old fish, and say it’s twenty pounds of your stock, whereas that same twenty pounds equals several of these younger fish. According to the reproduction, we’re a lot better off with that single ten-pound fish out there, if he’s twenty pounds, then twenty pounds worth of smaller fish.

**DR. CALAY:** There are always many ways to skin a cat, and you can actually successfully manage a fishery that predominantly catches young fish. You can also successfully manage a fishery by delaying those catches until they’re older.

You could catch large numbers of the older fish, because they’ve had a number of opportunities to reproduce, and so there’s always ways that the fishery can be managed on whatever selectivity pattern you want to see, but that will have an implication for how much you can catch, and so it’s a management decision.

**MR. KENNEDY:** One of the things that we’re considering -- I say considering, but one of the options that there are to consider is to catch the stock down so that the average size of the fish that most people keep would be smaller, so that we reach our quota less quickly, because it’s been an unintended consequence of the management procedures over the years, even though the quotas are going up and the stock is getting healthier, and we get less days, and that’s because the single fish we catch weighs significantly more, and so it seems like another benefit to that would be, if we’re taking out smaller fish, then we are taking out inefficient spawners compared to larger fish.

**DR. CRABTREE:** It’s complicated, because that smaller fish you take out -- If you didn’t take it out, it would continue to grow and get bigger and become a bigger fish, and so --

**MR. KENNEDY:** The same big fish would get caught.

**DR. CRABTREE:** It might, if you could figure out how to catch the small ones without catching the big ones and discarding them and having them die anyway, and that’s always been the main problem here, is it’s very difficult to shift the size fish that the fishery is catching without having big impacts on the
discard patterns.

MR. KENNEDY: I see, in all the management plans, it seems like, every time you want to help the situation, you increase the size of the fish that we’re allowed to keep, thinking that that’s going to extend the season, and I’ve seen that comment in all of the alternatives.

DR. CRABTREE: We used to have analyses that showed that, and that was at the time when the stock was much more depleted than it is now, and so it was hard to catch bigger fish, and so I remember fishing back in the 1990s, and the size limit was fifteen or sixteen inches, and you would go through a lot of fish before you finally caught one that was sixteen inches, and so, if you put the size limit in, it took people longer to catch a fish, and that had the effect of extending the season.

What has happened now though is it doesn’t take any time to catch a sixteen-inch fish, and, because people know they’re going to catch lots of big fish, a lot of people won’t even keep a sixteen-inch fish, because they want a bigger one, and so it probably doesn’t have any effect of extending the season anymore, and we just haven’t changed the size limit, I don’t think, since 2005 or 2006.

It’s been where it is now for a long time, because we have really never seen a powerful reason to change it. I think, if you lowered the recreational size limit, people still aren’t going to bring in those small fish.

MR. KENNEDY: No, and you have to increase the number you can keep to get them to keep the smaller fish.

MR. BROWN: Right, or you could have a slot limit, because that would prevent the discards, because, right now, what you said is exactly the case. I don’t know of anybody that’s keeping anything under a fifteen-pound fish, and so they’re fishing until they can catch those bigger fish, and they’ve got plenty of discards.

DR. CRABTREE: You could put in a slot limit and say that no one could keep a fish above twenty-four inches or something like that. The trouble then is you’ve got to deal with the mortality rate of those big fish that people catch and throw over the side, and it’s probably going to be substantial. I mean, my guess is 30 percent or so of those are going to die. Now, maybe with descending devices and all kinds of things, you can improve on that.
The other part of that is nothing really ticks people off much worse than making them throw a big fish back and watching it float off, and so we’ve talked about slot limits a lot, but the council has just never been willing to go there, because of the concerns about mortality and discards.

MR. BROWN: I don’t know if anybody else has experience with this, but it seems like the younger fish are more aggressive, and so you’re more likely to catch those first at a spot.

DR. CRABTREE: Now, one thing that you probably could do is regulate hook sizes, and, if you use bigger hooks, you’re going to catch fewer small fish, and then you avoid the discards altogether, but, boy, that’s getting into pretty much micromanaging the fishery, and probably there is no real way to enforce that, but, if you made people use a really big hook, you could probably get rid of most of those small fish.

CHAIRMAN CAPLINGER: Roy, it seems like, the bigger the fish, the lesser quality of the meat, and, really, you’re catching a trophy fish. For redfish, for example, in Louisiana, we have, anything over twenty-seven inches, you can only keep one. That has worked well, and people have been fine with taking a picture and releasing those fish, because the picture is what they want.

The quality of the meat is not there, and it’s really not a good fish to eat, and so I’m thinking, with the improvements in descending devices, and I use one right now, and we rarely lose a fish, or we see one, but you would think that you could use that as a carrot and say, if you voluntarily -- If the recreational sector would consider this seriously, then perhaps we could increase the number of days or do something that would benefit their experience on the water.

DR. CRABTREE: You might could. I mean, the thing about redfish is I think the release mortality rate for redfish is 2 or 3 or 4 percent. It’s really low. It’s higher with red snapper, and so, if we knew what effect descending devices would have, and we knew what the compliance would be and how many people would actually do it, we could probably do some sort of analysis to look at what the impact on the season would be.

CHAIRMAN CAPLINGER: Maybe they need to use descending devices across the fishery, into commercial fishing as well, because I’m sure there’s a significant amount of discards on those boats, and, because they are so efficient, and they want to be so efficient, I don’t know how careful they are.
I mean, I have left a rig and chased a fish to grab it and put it back on the descending device and send it back down, and I brought my kids up that way, and I don’t know that that mindset is prevalent across the whole fishery.

**DR. CRABTREE:** The commercial fishery is more complicated. I don’t think they have all that many discards because of the size limit. Most of the discards in the commercial fishery have to do with people not having IFQ quota and those kinds of things, and so you may have grouper guys who don’t own very many IFQ shares, and they may catch snapper sometimes, and they can’t bring them in, and so they’re discarding them, and it doesn’t matter what the sizes are.

Now, that’s getting better over time, because people are trying to acquire quota, and people lease quota to try and cover their discards, but I don’t think all that much of it is because of the size limit, and I wouldn’t expect that these guys fishing thirty-hook rigs are going to be able to effectively use descending devices, but it may have a lot of potential on the recreational fishery if you could really get good compliance and get people to do it, particularly in the western Gulf, because, generally speaking, the fishery is in deeper water in the western Gulf, and so the release mortality rates are probably higher.

**MS. RALSTON:** I really like the idea of perhaps another recommendation of this panel being a more robust exploration of descending devices. I know the council has looked at doing a voluntary type of promotional approach at this point, but I think perhaps a recommendation from this panel to maybe look at what the impacts would be on actual regulatory discards and how that could help with availability of quota might be something for us to think about.

**CHAIRMAN CAPLINGER:** I will mark it down. Thank you.

**MR. BROWN:** And it has incentivized -- It increases the use of it, and so, if you have one onboard and you can keep one more fish, you’re going to have people that are going to go out and buy that and use it.

**CHAIRMAN CAPLINGER:** Doug has a question.

**MR. BOYD:** Well, I’ve got a question for Roy. I think it was at the last meeting, or maybe the meeting before, but Andy Strelcheck sat in for you, and there was a lot of discussion and
a presentation by Greg Stunz out of Texas, the senior biologist, about descending devices, and Andy virtually killed that discussion at that time, and can you comment on that?

DR. CRABTREE: This gets complicated, because there is RESTORE Act money that people want to use to buy descending devices and make them available to folks. One of the things with RESTORE Act money is you can’t use it to do something that is already required in the regulations, and so there is a worry that, if we require descending devices now, that we wouldn’t be able to use RESTORE Act money to buy descending devices and distribute them.

The feeling was let that happen and try to do the outreach and get these out in people’s hands and let them get comfortable with them. Then come back, down the road, and revisit whether we want to require them or not. You know, all we can really require is people to have one onboard the vessel. We don’t have any ability to enforce that people use them or not, and the trouble with that too is that, a lot of these fish you release, you don’t need to use a descending device.

If you’re in shallow water, you’re better off to just let the fish go and let it down, and so, at some point, the fisherman has got to make a judgment call about whether to vent the fish or whether to use the descending devices, and so the best we could do is require people to have them, but I think the consensus right now is we’re better off to let some of this funding get them out into the fishery and let people get used to them and learn to use them and do the outreach part of it and hold off on the regulatory side of it, and so I think that’s where that discussion was.

MR. BOYD: Is there an active program to distribute those to fishermen?

DR. CRABTREE: There are grants and things happening. I think hasn’t ASA distributed descending devices?

MS. RALSTON: Yes, we did some to charter captains, to kind of evaluate how they were using them and what their impressions were and that sort of thing, and so we’ve done some of that.

MR. BOYD: Do you think they’re using them, the charter guys, the for-hire?

MS. RALSTON: We have a summary of the study, and I would have to pull it up, but it seemed like it was a positive result, for sure.
MR. BOYD: Okay, and I have a question for Shannon, if that’s all right.

CHAIRMAN CAPLINGER: Sure.

MR. BOYD: Does the model, your models, take into consideration the poaching that’s happening out of Mexico, because it’s significant, and, if so, how do we manage that, because it feels like, and I think common knowledge is that a majority of those fish, because of the price of the fish, are coming back into the United States from Mexico and being sold to fish houses here.

DR. CALAY: When this stock assessment model which I’m describing was conducted, that information was fairly new, and we had not, at that time, incorporated that information. The estimates are not insignificant of the poaching that’s occurring, and, if we were to put those landings in the model, it would have some impact.

Compared to the total removals in the stock assessment model, they are still relatively small, and so it’s unlikely that you’re going to see a massive effect of the inclusion of the poaching from Mexico, but, nevertheless, if we had an accurate time series of that information, we would be very happy to include that in the stock assessment model, as a sensitivity run at least, for consideration of the group. We are conducting that stock assessment right now, and so maybe I can follow-up with that, to make sure that we’re still considering that source of information.

MR. BOYD: There are wide estimates, like you said, from maybe a million pounds a year to three-million pounds a year, that are being taken out, based on the interceptions, and so the next question I would have is, if it is significant, if it’s poaching at the level of the recreational fishing quota, shouldn’t we do something about that, and how can we manage those fish coming back into the United States, and, if they’re coming back into the United States and they’re coming out of our waters, how do we charge those to a particular sector and account for them in that way?

DR. CRABTREE: That’s complicated, and I would think you wouldn’t charge it to a particular sector, because it’s poaching, and we have poaching from various sources that oftentimes may not get counted, but the trouble with -- I mean, everybody agrees that we don’t want the poaching happening, but it gets into international treaties and the State Department and
our ability to do those kinds of things.

I think it’s high on the Coast Guard’s radar screen. The trouble is these guys come over in boats that are essentially worthless, and the boat gets confiscated, and, ultimately, the poachers get sent home, and I think, ultimately, the boats may get trashed, but apparently they just write it off as a cost of doing business.

The other thing is it’s more than just poaching that these guys, a lot of them, are doing. There is drug running and all sorts of things that I’ve been told are associated with it, and so we would like to change it, and maybe if -- You’re in Texas. When the wall was built, my idea was to extend it out 200 miles.

MR. BOYD: We just need to give them the ability to put a fifty-caliber round through the motor.

DR. CRABTREE: Well, I mean, there’s lots of things you can think of where we should have tougher penalties and all, but that’s all getting well beyond what we --

MR. BOYD: Our Coast Guard representative at the council has said that there is one particular fisherman that’s been caught over twenty times and released back to Mexico, and then, a week later, he’s right back again.

DR. CRABTREE: I guess we could ask the attorneys to advise us on who the authorities are on these sorts of things, and we could make a request that someone in the administration look at tougher penalties for it, but my guess is that it gets tied into NAFTA and all that stuff.

MR. BOYD: The problem is, and you said it, but the problem is that we’ve got a State Department issue, and we’ve got international treaties, and we don’t want our fishermen who go across the border to get their boats confiscated and everything else, and so it’s a very hard issue.

DR. CRABTREE: If you think about a million pounds or two-million pounds of fish, we have a roughly fourteen-million-pound quota, and you’ve got all these dead discard fleets, and so there is probably twenty-million pounds in removals, easy, and so you’re really talking 10 percent or less, probably, and I think that’s why Shannon says that it’s not likely to make a substantive --

MR. BOYD: But when you look at it from the amount of quota that
the recreational fishermen have, which we’re talking about here, it’s significant.

DR. CRABTREE: Well, if they weren’t removing those fish, in theory, we could raise the quotas and catch them ourselves.

CHAIRMAN CAPLINGER: We have two questions. Rudy, I think, had one.

MR. VALENCIANO: Have we made some adjustments to the mortality rate for the fish on discards due to the fact that the rule-of-thumb, back when I was fishing in the 1980s and 1990s, or even late 1970s, the rule-of-thumb was you have to catch redfish in a hundred feet of water or more, and now we’re catching fish, like you said, in forty feet of water, where you don’t need a descending device, and the mortality rate has been decreased substantially, because now we’re catching the red snapper in the upper portion of the water column.

In a lot of cases, like fishing for mangrove snapper without a weight, you’re catching red snapper all the time, and you can release those, and they go right back down. There is no mortality in those, and so, even if you’re releasing the sixteen-inch fish and trying to catch a fifteen-pounder, you’re not doing any damage to the stock, because you’re really not damaging the species, and has any adjustment been made for that?

DR. CALAY: The only adjustments that are being made to the release mortality in the stock assessment model are changes that occurred with the imposition of circle hooks and venting requirements. We have some scientific information from academic studies that have allowed us to make a change in the discard mortality rates due to those events.

We have not considered whether the depth of fishing changed from the time period you were discussing. We do have some information about the depth of fishing that we use, and we have some supplemental surveys that are also providing additional information, like iSnapper, about depth of fishing.

Depth of fishing is a field in the commercial data that we receive, and it’s not a field that we often have a lot of faith in, because we do find that fishermen tend to report one depth of fishing frequently, and it’s not certain whether they’re fishing at the same depth of fishing or that’s just what they always write down.

We don’t have depth of fishing on our recreational datasets at
all, and so we have to infer it from what information we have about their fishing location, which sometimes is just Florida, and so it’s very difficult for us to use that sort of detailed information in the stock assessment context, because the data that we actually have available to us is often quite limited in what sort of information is collected.

MR. VALENCIANO: I would suggest that, since the onset of fishing in state waters being increased, that those state waters are hardly ever -- I know on the coast of Texas, unless you’re on the far south end of Texas, those waters -- Of course, they do go farther out, but like in Louisiana, if you have the three miles, as opposed to the nine miles that we had last year or the year before, most of that water is less than a hundred feet, and so the increased catch of red snapper in state waters in Louisiana, even though the numbers are going up, the discard rate mortality has to have gone down drastically, because you’re not catching those fish where you’ve got the barometric problems with the fish.

DR. CALAY: It’s certainly something that can be examined.

CHAIRMAN CAPLINGER: We have a question in the back, the gentleman in the back.

MR. PETER HOOD: Just back when you were talking about descender devices, I am on a group that is working with some of the money from the oil spill, and, basically, we’re working to develop a program that will look at fish descender devices, and it will look at getting fish descenders out into people’s hands and covering the outreach efforts, as well as supporting a scientific study on both how well the descending devices work Gulf-wide as well as looking at fishermen’s attitudes about descender devices and how they may change with some of these outreach activities. It’s certainly, within the open ocean, something that people are thinking about, and this is one of the projects that I think will be going forward.

CHAIRMAN CAPLINGER: That’s great, because they do work.

MS. RALSTON: Is there a way -- You touched on iSnapper, I think, and is there a way or is it -- It seems to me that you can get some additional data beyond your standard survey through using something like iAngler or iSnapper. Is the Science Center or the council contemplating any actions to expand kind of the use of those programs that could then be incorporated into stock assessments and kind of expanding our data knowledge?
DR. CRABTREE: The biggest change right now is the biggest thing that the council has done is they have approved an amendment to require electronic reporting on the charter boat fleet, and part of the requirement is the electronic logbook has to have a position recording device, and so that’s 42 percent of the recreational catch right there.

When that is implemented and we have it, at least for that part of the fleet, we would have information about what depth you’re fishing in, and so that would be an improvement, and there are lots of things underway now to look at how to use self-reported data through iSnapper and iPhones and that kind of thing from private recreational fisheries, and I think a lot of attention is going to continue with that, but there are all kinds of questions about what would be the inherent biases of that kind of data, but, if we could get some of that information, you could potentially get some depth information out of people.

MR. VALENCIANO: On the egg production, I know from there we can see what the -- Depending on the size of the fish, what the egg production is, and do we have any data that can quantify the amount of eggs being produced as a biomass or any kind of data that would see those numbers increasing or decreasing? Really, by looking at how much they produce, that’s fine, but we don’t know how many fish we have in each, or do we, that we can calculate whether the egg production in the Gulf is going up, whether west or east or both?

DR. CALAY: That’s exactly what a stock assessment can produce, and I’ve got some slides that will show you exactly that. Moving on, remember that we’re just talking about data inputs at the moment, and so I’m continuing with what sorts of data inputs are contained in the stock assessment.

We use several fishery-dependent sources of information to construct indices of abundance, and we also call these catch rates or CPUE series, catch per unit effort. In this case, I am showing you commercial handline, and it’s also broken out east to west, and this is an example where, due to management regulations, in particular the imposition of IFQ, this series has been truncated now, because fishing behavior has changed in such a way that we don’t believe that this series tracks abundance anymore.

Until such a time as we can determine and quantify how these changes in fishing behavior have changed the catch rates of the commercial handline fishery, we no longer utilize that information after the imposition of IFQ as an index of abundance.
of the stock, and so this is a case where we need some assistance from socioeconomists to try to recover this information for use in the stock assessment after 2007.

We also have a commercial longline index, which is not shown, and we have fishery-dependent indices from the recreational sector, and this happens to be MRFSS, or MRIP, and it’s the private and charter boat modes combined. The blue is just the information from the 2014 stock assessment, and the red is the newest series that we have just produced for the assessment to be conducted in 2018.

In the east, the series is generally increasing for recreational, private and charter boat, fishing, suggesting that the population is increasing in the east and also in the west, although, in the most recent years, you do see somewhat of a downturn. It’s unclear whether that is -- Well, we haven’t run the stock assessment model yet, and so it’s unclear yet whether that will be interpreted as a signal in abundance or a signal in, for example, a regulatory effect.

We have several fishery-independent indicators of abundance, and this is the NMFS bottom longline survey in the east and west. This is an indicator of the adult spawning stock biomass, and the important thing to see here is that, in both the east and the west, this information indicates an increase in the spawning stock biomass, a rapid increase, in the recent years.

This particular index begins in 1996, and so, since 2007, roughly, the stock in the east and the west is thought to have increased dramatically, and the same trend is seen in the SEAMAP larval survey, which is also an indicator of spawning stock biomass, egg production of adult spawners. This series is spotty, because, in some years, they either have not sampled or don’t support the estimation. You can see still that, since the time series began, in this case 1986, these series both indicate an increase in abundance of the spawners.

We use age composition data, and this is from fishery-dependent data sources, and this is from readings of the otoliths, which is shown here. It’s a bone that the fish lay down in annual increments, and you can actually read them, like tree rings, to see about how old the fish is, and we have that information beginning, roughly, in the early 1990s through the present day. It’s over 100,000 otolith observations, which is a very large amount.

In this case, this is just showing you the age composition of
the commercial handline fleet in the east, and all this is really telling you is that most of the fish that are actually captured by that fishery are from ages about two to ten. That age composition is relatively static through time, which would suggest that the stock is not increasing rapidly, which is a tension in the stock assessment model.

One of the reasons that we think that this occurs is because of the highly-concentrated nature of the way these fisheries operate, and so, essentially, you’re operating in an area of high fishing mortality, but, outside of these areas of very high fishing mortality, we believe that the stock may be increasing faster in those places.

There is also an element of selectivity here, and so, if this fleet cannot physically capture animals of larger size, they won’t be represented in the age composition. The stock assessment model does account for selectivity.

We also have information about discards from headboat observer programs and commercial observer programs operating in the Gulf of Mexico, and it basically shows, as you would expect, that these fish are young, roughly ages-zero to five for the recreational, and about the same for the commercial handline, although there are some older fish also discarded in the commercial fisheries.

An important source of information is the shrimp bycatch. The way the stock assessment is actually modeled, we fit to shrimp effort, because it’s a more reliable source of information, and then we scale that bycatch estimate using some of the information that comes out of our bycatch estimation procedure, but the important aspect here is that shrimp effort has declined dramatically after about 2007, and so that has meant the shrimp bycatch is much smaller now than it was say in the 1990s. It’s a less important source of removals in the east and west.

**DR. CRABTREE:** One thing that is in the fishery management plan is there is a cap on shrimp effort. If we go over it, the shrimp fishery is shut down in the western Gulf, predominantly, between a depth of I think ten and thirty meters, which is where most of the bycatch occurs, and so we have effectively allocated a fraction of the fishery to the shrimp fleet. If they catch more than we think they are, they would be shut down, and they have never exceeded the cap in the time we’ve been monitoring, but that is in the fishery management plan.

**MS. RALSTON:** Roy, if we’re allocating a portion -- Basically,
we have almost a third sector, it seems like then, the shrimp, and is that kind of an accurate way to look at it?

**DR. CRABTREE:** You could think of it that way. I mean, it’s an effort cap, and so that’s essentially saying, all right, they’re going to catch this many, and so it effectively is like an allocation.

**MS. RALSTON:** How does that cap relate to the graph? Was the cap set back more like at 1995 levels or are we more at 2009 levels or where --

**DR. CRABTREE:** It’s set much closer to recent levels than it is to the historical.

**MS. RALSTON:** I was just wondering if there was a little bit of wiggle room, because it has decreased over time, that it would be --

**DR. CRABTREE:** We set it after that decreased curve. We set the cap, I think, in 2007, and so we knew that decrease had happened.

**MS. RALSTON:** Okay.

**DR. CRABTREE:** Then we at one time, since the stock started recovering, actually adjusted the cap upward a little bit, I think.

**MR. BOYD:** Roy, so we have two caps. We have one on the number of fishermen that are allowed because of the limited entry, and then we have another on the actual catch production, right?

**DR. CRABTREE:** You’re talking about in the shrimp fishery?

**MR. BOYD:** In the shrimp fishery.

**DR. CRABTREE:** Yes, and so shrimp permits are under limited entry, and so there’s a limit on how many federally-permitted shrimp boats there can be. Then there is, separate to all of that, the cap on effort, and the council gets -- I think we get like quarterly reports, but we get an annual report every year that shows where the effort is relative to the cap.

**DR. CALAY:** We also have -- This is fishery-independent information, again. We have this ROV camera survey of artificial reefs, and the locations are shown here, although the plot is difficult to read, but, essentially, we have Western
Florida, Dauphin Island Sea Lab participating, and Panama City. They are mostly northeastern Gulf of Mexico observations from 2005 to 2012.

We are using this information right now as a fishery-independent source of length composition or age composition information in the stock assessment model, and so I’m going to go over just a few aspects of the stock assessment results. There is also a SEDAR stock assessment report that I can refer you to that contains a great deal more information than I want to try to present here.

The most recent SEDAR stock assessment of red snapper actually agrees with the community’s perception of red snapper, that they are in fact more abundant than most fishermen have ever seen in their time on the water, and that’s represented by this plot, which shows the number of fish, in millions, of age-two red snapper in the eastern Gulf on the top and the western Gulf on the bottom.

In 1980, there were roughly four-million fish, according to the stock assessment model, age-two or above, which is about what the directed fisheries observe. In the eastern Gulf and by 2014, there were as many as twelve million, and so you’re seeing a roughly threefold increase over the 1980 abundance estimates.

In the western Gulf, you’re seeing an even larger increase, from roughly five million fish in 1980, ages two and above, to twenty-five million fish, a fivefold increase, in 2014. The stock assessment model does agree that there are more fish than most people have ever observed, in both the eastern and the western Gulf.

CHAIRMAN CAPLINGER: So what is your target?

DR. CALAY: Well, I will show you the target. It’s coming up.

What led to this increase in red snapper? From our perspective, at least, and this just shows you the catch levels, in millions of pounds, and so, basically, in 2007, we had a rebuilding plan, which was revised, and it resulted in a lower fishing mortality, lower catch limits, and we ended overfishing at that time.

Since then, the stock has actually rebuilt, or started to rebuild, I should say, and so, as the stock has increased, so have our estimates of the annual catch limit. They have continued to increase throughout time, until the 2014 stock assessment, where we actually recommended over fourteen million pounds for an ACL.
There has also been a very marked decline in shrimp effort, and this is an important occurrence. As this market declines, and I think it’s a roughly 80 percent decline in shrimp effort has occurred, that has greatly reduced the mortality on the age-zeroes and ones.

We have also seen a strong recruitment that occurred in 2004 through 2006, and remember this is a long-lived species, and so animals that were born in 2004 through 2006 entered our fisheries in the late 2000s, and, to some extent, are still promoting this rapid rebuilding today, as they become increasingly important reproductively.

This is a figure that essentially shows you a measure of fishing mortality, and so this happens to be the fraction of red snapper stock that are removed by fishing, ages-three and above in this case, which is a measure of fish removed either by landings or by dead discards from the directed fisheries in the Gulf.

Again, I am stealing figures from other presentations, and so the red here now is the 2014 assessment, and the blue is the previous assessment to that, which was SEDAR 31, and so you can ignore the two colors. It was just a demonstration that the model results are similar between those two assessments, but the important message here is that, in roughly 2006, before the rebuilding plan was revised, we were catching about 30 percent of the numbers of fish in the Gulf each year. 30 percent of the fish we were removing by fishing pressure each and every year, and that is a large number.

After the rebuilding plan was revised and overfishing ended, by 2010 through 2014, now we’re only removing about 10 to 14 percent of the stock every year, which is a number that basically overfishing has ended and the stock is beginning to rebuild.

You also see that the number of adult fish, and I apologize that we keep changing the age reference on you, but this is just now a measure of the fish ages-four and above, and so these have some reproductive potential. During the period of 2000 through 2006, we had a six-month fishing season, and the stock was considered both overfished and undergoing overfishing.

In 2007, we put in place the new rebuilding plan. Since that time, your age structure has started to recover, and so you have more fish that are now ages-five, six, seven, eight, nine, and ten, and this change is roughly a threefold increase in animals.
age-four since 2007, and that means that your spawning stock 
biomass is increasing Gulf-wide.

This gets partially -- I will continue with this train of 
thought, but, partially, your question is why are they still 
considered overfished and what is our target for recovery? They 
are still considered overfished for essentially this reason.
This animal lives to be up to fifty years old, and so, in 2000, 
this was a period of time where overfishing was occurring, and 
the stock was considered fairly depleted.

There were very few animals older than five years of age, and so 
we were allowing very few of the animals to reproduce at all, in 
fact. In 2016, the stock was roughly about half of the 
rebuilding target, and so it was about 15 percent of the 
unfished reproductive potential, if you had no fishing at all, 
and, at this time, you see we’re rebuilding now. Ages-six 
through eleven are becoming more abundant. See how we’re 
rebuilding the age structure? You’re seeing it now in ages-six 
through eleven.

Now, our target at this time is to rebuild the stock, by 2032, 
to 26 percent of its unfished reproductive potential, and what 
that would look like, in age composition, is this bottom panel, 
and so, if you were to actually achieve that rebuilding target, 
this is what your age composition would look like. You would 
have animals filling the age composition all the way out. You 
see that ages-eleven through nineteen are now filled, and you 
have far more animals in this plus-group of age twenty-plus.

In this case, you have bigger, older animals with a higher 
reproductive potential, and that’s what the current rebuilding 
target would look like, in terms of age composition.

This is just a simplified graphic, and so spawning potential -- 
Here, what I’m talking about is relative to what the stock would 
be at unfished condition, and so how many eggs would the stock 
produce at unfished condition would be 100 percent of your 
spawning potential.

In 1950, the model estimates we were at roughly 45 percent of 
that unfished spawning potential. We had depleted that, by 
1990, to about 2 percent, and so we would call that, in 1990 -- 
In our vernacular, that would be called SPR 2, which is a very 
severe depletion of the stock.

By 2006, it had started to recover somewhat, up to about a 4.9 
percent spawning potential, or roughly 5 percent of its unfished
reproductive potential. Once we did put in place measures that ended overfishing, we started this rapid recovery of the stock. Currently, well as of 2017, our model estimates that we’re at about 17 percent of the unfished reproductive potential, which happens to be about the same level we were at in 1967, and so we have recovered to essentially where we were in the late 1960s, and we’re rebuilding towards this 26 percent target.

If we achieve this by 2032, the model -- What we’re trying to achieve is essentially 26 percent of that unfished reproductive potential, which we think corresponds roughly to the maximum sustainable yield.

MR. BROWN: Where are we going to put all these fish?

DR. CALAY: Where are we going to put all of these fish? In the Gulf.

DR. CRABTREE: I don’t know if you have one that shows this separately for the west and the east.

DR. CALAY: Yes, I do. It’s coming. I do have that shows this separately east and west, and I can jump to it right now. This, I just added, and so it’s fuzzy and not particularly attractive to look at, but I added it because of the discussions that were occurring when we talked about socioeconomics.

The panel on your left is the western Gulf. In the red here, on the right, is the eastern Gulf, and this is actually just a demonstration of the effect of allocations in the east and west, but I can also tell you that your current allocation of 49 percent recreational and 51 percent commercial is actually -- Well, in the west, it’s this dark blue color, and so you see that -- I will read this to you, because it is very difficult to see.

In about 2000, in the west, we were at about 5 percent of your unfished spawning potential, but, in 2000, say right about now, we’re above 20 percent of the spawning potential and rapidly rebuilding towards our target, and so the west is nearing or at even its rebuilding target now, and it’s continuing to increase at your current allocation. In this particular projection, in 2032, you’re at 35 percent of your unfished condition, which is above the rebuilding threshold in the west, according to our current projections.

Now, the effect in the east is opposite. In this case, your current allocation is the most optimistic one, and it’s actually
showing, and you can see this effect, unfortunately, and this might change as we update this stock assessment. This is from the 2014 stock assessment, and some of our results today indicate that the trends in the east aren’t as pessimistic as the 2014 assessment was seeing, and so we may see some changes occurring, but the important thing to note is that the eastern stock actually achieves about 12 percent of the unfished condition in 2015, roughly, and then it starts to decline at the current fishing allocations between the commercial and recreational sector. The western stock continues to increase, and, because you’re managing this Gulf-wide, you achieve the rebuilding threshold.

DR. CRABTREE: So the western Gulf rebuilds above the target to compensate for the eastern Gulf never reaching the target. The more you shift the allocation from the commercial to the recreational, the bigger that disparity becomes, because most of the recreational fishing is in the eastern Gulf, and so, the more you reallocate to the eastern Gulf, the lower the rate where you recover to in the east becomes, and the higher the recovery becomes in the western Gulf.

DR. CALAY: You’re going to build a big population in the west that is going to essentially subsidize a lower population in the east.

CHAIRMAN CAPLINGER: You’re suggesting this clearly pushes the need for separating the Gulf and managing two different sectors, and is that what you’re saying?

DR. CRABTREE: If you live in Texas or Louisiana, that would certainly be a sensible -- If you live in Florida or Alabama, you might --

CHAIRMAN CAPLINGER: No, it’s not even that, but what you’re saying is that we’re going to continue on a downward trend in the eastern Gulf, and they may have less opportunities to fish.

DR. CRABTREE: I’m skeptical of the rate of decline like that, and I suspect, when the new assessment comes out, it won’t be nearly as bad as that, because this is all dependent on assumptions about recruitment, which we don’t really know.

Now, the positive side of that is, if that stock in the eastern Gulf actually declines like that, that would mean lower catch rates in the eastern Gulf and smaller fish overall, which would have the net effect of increasing the season length.
I take your point, and the western Gulf is giving up days to compensate for the eastern Gulf, and so, from that sense, yes, there is a certain level of a fairness issue that you could argue regionally.

MR. MARQUEZ: When you’re looking at managing the stock for the whole Gulf, just from the spawn itself, when they spawn, do the eggs and larvae setting in locally, closer to where the spawn is, if you have this decreased pressure in the west, and they’re continuing to grow at a rapid rate over there, or the stock is continuing to grow at a rapid rate, or is it circulating all through the Gulf?

DR. CALAY: It certainly does circulate through the Gulf, to some extent, although we do find that there is more -- The west subsidizes the east more than the east subsidizes the west. Fish that are spawned in the east are more likely to stay in the east, because of the way the currents flow, essentially.

DR. CRABTREE: There is a lot of information that has developed over the last five or six years that looks at the look current that comes up in the Gulf of Mexico and goes through the Florida Straits, and there is evidence that, depending on how the loop current is configured, more of the larvae may be retained, and so you get good recruitment. In other configurations, more of them get washed out of the Gulf entirely and you have poorer recruitment, and so there is that.

Then the other part of all of this is we don’t really see much of a relationship between the size of the spawning stock and recruitment, and so, even when the stock was fished way down, we had some really big recruitments come out of it, and that gets into the whole level of what are the yields going to be.

The way the model is configured now, we’re harvesting MSY already, and so, even though we rebuild, the quotas don’t go up. Now, that could turn out not to be the case, if in fact we do see more recruitment as the spawning stock grows, but, at least at this point, we haven’t seen much of a relationship there, and so it’s not really clear whether the quotas will go up above where they are now or whether this is about all that we’re going to get out of the stock.

CHAIRMAN CAPLINGER: We have a question in the back.

MR. JASON DELACRUZ: Is this a good time for you to talk about the change that -- The minimum stock size threshold rule that’s already been agreed upon, but hasn’t been enacted yet and how
that would affect that previous slide, on that, and if it would.
I don’t know, but I’ve already been curious about that, and,
having everybody in this room, this might be a good thing for
this group to understand.

**DR. CRABTREE:** The council approved a change to the minimum
stock size threshold, which is the threshold that defines
overfished versus no longer overfished, and it used to be set
based on a formula that was based off of the natural mortality
rate, and so it used to be at about 92 percent of the biomass
when it’s rebuilt.

The council changed that to 50 percent of the biomass at which
the stock is rebuilt, and, based on that, the stock is no longer
overfished, and so we have already put in a change to the annual
report on stock status to Congress to change red snapper from
overfished to not overfished.

Now, that doesn’t mean that the stock is rebuilt, because it
won’t rebuild until we Gulf-wide hit that 26 percent spawning
potential threshold, and we’re not there yet, but it does mean
the stock is no longer classified as overfished.

Now, the significance of that, at this moment, is the
regulations have provisions for paybacks of quota overages, but
the payback is only required if the stock is overfished, and so,
last year, all the evidence we have is that the recreational
fishery exceeded its annual catch limit, and there would have
been a payback required if the stock had remained overfished,
but it no longer is, and so there’s not a payback required, and
my guess is the quotas will be the same this year as they were
last year.

**DR. CALAY:** I did want to agree with Roy that the decline, the
relatively steep decline, that you see here in the east, there
were two things that led to that in the 2014 stock assessment.
One was that we had some estimates that showed low recruitment
in the most recent years, and, also, we had some information
about declining catch rates in the east, and it does seem like
our most recent evidence that we just received says that both of
those things weren’t as severe as they were thought to be in
2014 for red snapper, and so it may be that this result changes
when we redo the assessment that you will see in 2018. It may
not be as severe of a decline predicted in the east.

**MR. WILLIAMSON:** Let me pose a question to you, Roy. Assuming
that the Secretary of Commerce signs off on the proposition that
the stock is no longer overfished, where do you see this taking
us as far as the available fishing days for the recreational sector?

**DR. CRABTREE:** If we had to pay back the overrun last year, I think we would have had to pay back probably a couple million pounds of fish, and that would have made it difficult to have a season, and so it means the season will be longer than it otherwise would have been.

Now, that is all complicated by we don’t know how the fishery will be managed come later this year, because all the states have applied for exempted fishing permits to allow state management of the fishery. The council is going to look at those at the next council meeting.

If that is put in place, then we will have different season lengths off of different states. Whether that is going to happen or not, I don’t know yet, but, generally speaking though, that means there will be more days than there otherwise would have been had there been a payback.

**MR. BROWN:** So we can look forward to a thirty-nine-day season this year? Is that what I’m hearing?

**DR. CRABTREE:** No.

**CHAIRMAN CAPLINGER:** Shannon, let’s go.

**DR. CALAY:** I am going to try to cover just two more slides of this presentation before our lunch break, and then I’ve got some other things that are kind of on a secondary topic that we can do after the lunch break.

I was asked by John to try to describe how these stock assessment results actually result in OFLs and ABCs, and, without using mathematics, which nobody wants to see, not even me, that’s hard to do, and so I’m going to try to do it just graphically, and maybe I will be successful, and I don’t know.

You probably are aware that the overfishing limit essentially corresponds to the maximum sustainable yield. The acceptable biological catch is a level that is likely to be below OFL, and, if it is below, that buffer is meant to be representative of your scientific uncertainty. Then there is an annual catch limit, which can be below ABC, which might incorporate then management uncertainty, and that’s my oversimplified description of the national guidance.
Essentially, we use projections of the stock assessment to
estimate these OFL and ABC catch levels, and, to do that, we
have to make assumptions about the recruitment that is going to
occur in the future and about how the fisheries will operate in
the future, and so what we’ve done is we’ve assumed that
recruitment will be essentially equal to the average of recent
period recruitment, which we use 1984 through the present.

We assume that the fisheries will continue to operate as they
have in the most recent year, 2014, or, in this case, it was
2012 through 2014 or something like that, but the most recent
years. That means that the sizes that they catch, how they
target animals, that all those sorts of things don’t change, and
that’s complicated, because we work in a very complex regulatory
environment, and so sometimes things do change, but that’s what
we assume.

Then we can estimate essentially levels of fishing mortality
that will lead to rebuilding, and so, for example, in this panel
marked “fishing mortality”, the blue is the F, the fishing
mortality rate, that allows the stock to rebuild to our
management threshold of 26 percent SPR by 2032, and the red is
what will allow the stock to rebuild to that same threshold
eventually, but without a limit on the year that that actually
happens.

We would call those two rates -- The red fishing mortality rate
is FMSY. It achieves our MSY proxy eventually, and I think it
actually happens in 2060-something, according to the stock
assessment, and, the blue, we would call F rebuild. It’s the
level that achieves the management threshold in 2032, by
definition, because that’s the management plan.

We project those fishing mortality rates that are right here
shown, and we assume that recruitment will be about the average
level of recent years and that fishing will continue, fisheries
will continue, to operate as they have operated, and that leads
to essentially an estimate from the stock assessment of your
spawning stock biomass, and, in this case, relative to that
unfished condition, what here is SSB zero, and so you see that,
under red, which is FMSY, your SSB is going up each year.

That F rebuild fishing mortality rate is actually lower, and so
your spawning stock biomass is recovering a little faster, but
the model also then can predict, given that this -- Given our
assumptions, the model can then also predict the catches that
will be achieved under those two fishing mortality rates, FMSY
and F rebuild.
Your OFL is determined from the FMSY projection, and so you see that it starts in 2015 here. In 2015, it starts a little above fifteen-million pounds, and it declines a little bit to equilibrium here, at roughly thirteen-and-a-half-or-something-million pounds, and the blue, because it’s a slightly lower level of fishing mortality, allows a slightly lower catch, and so that’s ABC. ABC comes from your projection of F rebuild. It’s also a little bit buffered to accommodate scientific uncertainty.

DR. CRABTREE: This is assuming that the recruitment levels stay roughly where they are now. If it turns out that recruitment goes up as the stock spawning potential increases, then those yields will go up in the future. We don’t know if that will happen or not.

DR. CALAY: It also depends, unfortunately, on allocation and selectivity, and those things change. Selectivity changes if you change the size limit. Allocation changes if you -- The selectivity patterns also change if you change allocations, because the commercial and recreational fisheries have different inherent selectivity patterns, and so the advice always changes based on what really occurs, based on compared to what we assumed would happen, and so, every time you make a management change, we essentially are going to have to rerun projections to give you better information about OFL and ABC.

DR. CRABTREE: I think any stock assessment scientist will tell you to take projections into the future with a big grain of salt.

DR. CALAY: Exactly.

DR. CRABTREE: They are very uncertain.

DR. CALAY: That’s why, when you look at SSC reports, for example, we typically only prefer to give information roughly three years into the future, or maybe five, and we have shown you to 2032 here because that’s the rebuilding plan, which ends in 2032 for red snapper, but, because we can’t predict what will happen with fishing operations or recruitment thirty years into the future, these have very large uncertainty estimates.

That is essentially how the stock assessments produce catch advice, and that’s the overly-simplified version. Now, it is a little bit -- Maybe some of you have noticed that it’s a little bit strange to think that a stock is not fully rebuilt and yet
we’re saying that, in 2015, you will actually have a higher OFL than you would way out here in what we call equilibrium.

We think we’re riding those high recruitments still. They are still influencing our perception of the spawning stock biomass, but those fish will eventually die of either fishing mortality or natural mortality, and the levels of recruitment that are projected are actually lower than those high years that occurred in 2004 through 2006, and so this is a recruitment feature, we believe.

Now, the last slide that I am going to talk about, before lunch at least, is some of the primary criticisms that we have received about the stock assessment, and these are the major ones, certainly.

There is a widespread belief that NMFS overestimates the recreational catch, and I will touch on that a little bit after lunch. There is also a common misunderstanding that NFMS does not count fish on artificial reefs, and I can address that a little bit after lunch.

What I won’t get too much into, unless this group prefers to, is the rebuilding target itself. In the case of recreational fisheries, recreational anglers, MSY is not really relevant. What’s really more relevant is maybe maximum sustainable fishing opportunity, and so Magnuson itself does specify MSY, and the rebuilding target that we have given you is kind of a -- It’s consistent with Magnuson, to some extent, but we have spent a great deal of time examining other potential rebuilding targets, based on council requests and other primary literature.

Certainly the stock assessment model -- Basically, the council needs to agree upon, with feedback obviously from NOAA, what are acceptable reference points or rebuilding targets. The stock assessment model itself is flexible.

I mean, we can provide the information, no matter what rebuilding target is eventually agreed upon, and we can explore how well those rebuilding targets function, using management strategy evaluation and the stock assessment model constructs, and so we can certainly provide information on that, and we have in the past, and we’ll continue to do so, but I don’t want to comment on which one I think is most appropriate, because that’s really way above my paygrade.

Certainly we can get into that discussion, if you would prefer, and so I will go into these primary criticisms a little bit
The Meeting of the Ad Hoc Red Snapper Private Angler Advisory Panel of the Gulf of Mexico Fishery Management Council reconvened at the Gulf Council Office, Tampa, Florida, Thursday afternoon, January 18, 2018, and was called to order at by Chairman Charlie Caplinger.

CHAIRMAN CAPLINGER: We’re going to move on to the next section with John, but I wanted to make two other quick comments. Doug Gregory passed around this MREP program to everybody. If you or if you know people back home that want to see how the sausage is made and learn more about how it’s made, these are two opportunities for you to increase your knowledge here, one in St. Petersburg and the other in Tampa.

Then, secondly, I’ve been jotting down notes for recommendations, because I know that’s the purpose of this, at the end of the day, to come up with some suggestions to the council, and so, if you feel strongly about something that we need to definitely bring up and reiterate and this is something that needs to be messaged to the council, please say that. Hit me with a hammer and make sure that I write it down as such, so that, at the end of the day, we have time to go through the handful of suggestions and maybe prioritize them or highlight them, so that we do end up doing something productive today. With that, I think John is going to talk about state snapper management.

DR. FROESCHKE: Actually, Ava Lasseter, Dr. Lasseter, is going to go through the amendment. She is the lead staff on that, and then I’m going to follow up with some additional information, and so I’m going to turn it over to her first.
DR. LASSETER: Thank you, everyone. We have the presentation up for you that we put together in regard to the state management program for recreational red snapper. The full documents are provided on the server, so you can look through those, and I would encourage you to do so, specifically for kind of a history of where we’re at with this program.

I’m not going to go into too much detail with that, but, of course, and I think Dr. Crabtree touched on this, that we did start, a few years ago, with an amendment, Amendment 39, and we termed it regional management for recreational red snapper. Here, we’ve just tweaked it to state management, just to kind of help us differentiate what we’re working on.

This idea, this concept, has been brought back up, and the council has been moving forward quite quickly with the development of these documents, and so I’m going to kind of start with an overview, as the slide is up right now, on these amendments, and then we will go into each one and each of the actions in more depth.

Actually, what we have here are six amendments, and so there is one amendment, and we’re calling that the program, the programmatic amendment, and this is the state management program for recreational red snapper.

Separately, the council has initiated development for a separate independent amendment for each of the five Gulf states, and so you have a Louisiana, and on down through the states, management for recreational red snapper, and so we have six amendments total.

We will go back to the programmatic one, the state management program, first. This amendment addresses actions that would affect all of the states, whether or not they are participating in state management. Therefore, this amendment must be approved first. It could be approved at the same meeting as one of the additional individual state amendments, but this one does have to come first, because it has the actions in it that determine how much quota each state would get, which components are going to be participating, and so those are our two actions.

The first action is to determine which components to include in state management, and so, again, we have the recreational sector
is divided into two components through the 2022 fishing year, the private angling and the federal for-hire components, and so the council will decide whether to manage both components or just one component underneath state management, and the second action is how to divide the recreational red snapper ACL amongst the states, and so you can see how these actions would affect everybody. It kind of sets the stage for how state management would work.

Individually, there are a couple of actions in each of these five individual state amendments that first address the authority structure, how state management is going to be enacted, how we’re going to change the regulations, the rules, to accommodate to allow individual states to adopt the state management. Then post-season accountability measures as well, this ability to modify those so that they apply to just a state rather than the Gulf-wide ACL.

We will go to the next slide, or, actually, let me take a moment here. First, just to point out, this lays out where the boundaries would be. This was decided during Amendment 39. The council agreed on the lines that would be used if necessary in state management, and we can kind of come back to how this would actually work as we go through this, but the idea, to this point, has been that -- The idea that all states, if all states were participating and had active state management programs, essentially there would be no lines in federal waters, because, essentially, federal waters would remain open, and, through an exemption -- Each of the five states would receive an exemption from the federal regulations and would be able to -- Their anglers would be able to fish in federal waters off of any of the states.

It gets a little trickier when you have neighboring states with one participating and one not, and so those distinctions get a little more complicated, and we can raise some of those hypotheticals, if you’re interested, later, and I’m just going to touch on that, at the council meeting in January, the council will be reviewing exempted fishing permits, EFPs, from the states. This was NMFS’ approach to how they’re interpreting a congressional mandate to allow the states to do a pilot program for state management. How this is all going to work is still developing, in order to accommodate this new step in the process.

Now we’re in the state management program amendment. Again, this is the one that would have to be approved first, passed first, and so the first action addresses the components of the
recreational sector to include in the state management programs, and, in our council documents, there is always an Alternative 1, which is always your no action, and this is for the purpose of analysis, in order for staff to provide council members with an analysis that compares what they’re going to be considering against what is currently in place, more or less status quo, and so you will always see an Alternative 1 that is no action.

Then follows our suite of alternatives that are actually under consideration, and so, for a state with an approved state management program, we have three alternatives. First, the Alternative 2, the state would manage the private angling component only. Alternative 3 is the state would manage both its private angling component and federal for-hire components. Alternative 4, which the council has -- It’s currently their preferred alternative, and that is that each state could choose whether to manage its private angling component only or to manage both its private angling and federal for-hire components.

For all of the alternatives that I just described, states without an approved state management program, the separate components, private angling and federal for-hire components, NMFS will estimate a separate fishing season for each of those based on the balance of the recreational sector ACL after, the states that are participating, their quota has been deducted. Again, at the federal level, for those states not participating, the remaining balance of the ACL will be reduced by the established buffer.

I believe Dr. Crabtree also kind of touched on the status of some of the individual state data collection programs. Louisiana has been discussing this, I believe, with NMFS a little bit more. When we were still discussing Amendment 39, none of the states were as far along in their individual state data collection programs as they are now, and NMFS was going to require each state, under state management, to manage towards the ACT, and that’s your buffer.

Now, LA Creel, it’s my understanding, has finished being certified, and Tails and Scales and Alabama Snapper Check are coming along, and NMFS is reevaluating that. If a state is able to show that it could maintain, constrain, its landings to within its ACL, this may not be a requirement. I have left a little note here on this particular slide, but, if you look at the document, the full-length document, that language is tempered a little bit, because that is part of the ongoing discussion for state management. That’s the first action, which components are going to be participating.
Let me show you a little further how, visually, the recreational sector ACL would be divided. For the Alternative 2, for the private angling component only, which is not the council’s preferred, the recreational sector ACL, you can see how it’s divided between the two components. Then, that private angling component ACLs, five of those would be created.

Even if your state is not participating, it has an assigned recreational sector ACL that would be used in the event that your state is participating. If your state is not participating, that then goes towards the Gulf-wide, with any other states that are not participating, and NMFS establishes the common federal season for those states.

This is how it would look if the states managed both the components. Because that component allocation is already on the books, the recreational sector ACL is still divided first into those component ACLs and then each one of those ACLs is divided into the five pieces.

That way, if your state has your private angling and your -- It’s not averaging your private angling and your state’s federal for-hire landings. It’s giving credit, respective to all the other states, for each of those components, landings components.

Then, finally, the council’s preferred alternative is to allow the states to decide, each state to decide what they would want to do, and so, in the example here, you can see State C -- On the federal for-hire side, State C has decided to manage its private angling component only, and so you can see that quota that would have been that state’s component ACL going to a federal for-hire component ACL, and NMFS would estimate the season based on the quantity of that quota. I don’t see any questions, and so I’m going to move on.

The second action in this amendment determines the apportionment, the allocation, of the recreational ACL amongst the states, and there we go again. We have the Alternative 1, no action, and then the remaining alternatives, which carry on to the next slide, would allocate the recreational sector ACL among the states, first based on the average of historical landings for the years, and we have two sets of years. Alternative 2 ends, all of the alternatives, in 2015. Alternative 3 ends them in 2009.

What we have are the Options a being the longest time series with the respective terminal year and Options b back off ten
years. Options c back off ten more years, and then our two Options d are most similar to the way the allocation was determined in the sector separation amendment, where it gives half the weight to the longest time series and then half the weight to the most recent time series, which is essentially doubling the weight on your more recent time series.

To go along with these two alternatives, we have Alternative 4, which allows the council to select various years that they could exclude from those preceding alternatives. Now, Options 4a and 4b are excluding 2006 landings, and that was because of the storms in 2005. In 2010, that was BP oil spill.

4c and 4d we provided because, in the sector separation amendment, the terminal year for the allocation was 2013, and that has now been several years, and so we set this up as the Alternative 2 allows the council to select through 2015, but, if they would like to be consistent with the sector separation time series, they could select Options 4c and 4d to exclude those two most recent years, and that just seemed the most efficient way to lay out those alternatives for the council.

Alternative 5 would allocate the recreational sector ACL based on each state’s best ten years of historical landings for the longest time series, 1986 to 2015. Alternative 6 takes a different approach, and this is the most recent alternative the council has added, and it would allocate the recreational sector ACL among the states based on combining biomass, estimates of biomass, off of each state and recreational trips.

Then the council also specified options that weight each of those factors differently, and so you have a, b, and c, and you’ve got increasing weight on the biomass, 25, 50, or 75 percent, and decreasing weight on the trips on the other side for those alternatives.

**MR. KENNEDY:** A question, please. When it comes to this Alternative 6, and maybe the lady that did the presentation before lunch can weigh-in on this also, but, according to the biomass, I presume that’s the sampled biomass now, or is it where red snapper are supposed to be? Is there any consideration given to like -- I don’t know how you would figure that out, but is there an assumption that red snapper are supposed to be uniformly distributed throughout the Gulf or red snapper -- Are there supposed to be more of them off of the Alabama coast than there are off of the Naples coast? By supposed to be, I mean you would think they have a preferred habitat.
DR. CRABTREE: Yes, and I don’t think we ever expect any fish to be uniformly distributed everywhere, because that’s just not the way the world is. I think where the council is coming from here though is what’s the distribution of the biomass now, and there are different ways to look at that, but I think what we’re looking at here is there is a paper that was published last year that actually looked at the different habitat types and how they’re distributed in the Gulf and then looked at the abundance of snapper on all the habitat and then calculated out where is the biomass.

Then you can go into that and draw the state lines out and estimate what fraction of the biomass is off of each state, and I think that’s probably what we’re looking at here. The other way you could do is to take the stock assessment and say, okay, here is the west Gulf biomass and here is the east biomass and then somehow allocate that out, but I think this is relying on that paper.

MR. BROWN: Okay, and so that paper seems to be weighted based on preferable habitat a little bit anyway, correct?

DR. FROESCHKE: Yes, and the next item on the agenda here is I have a map of that that’s based on the paper, and I can show it and we can put it up on the screen and take a look at it.

MR. BROWN: Is there any historical data as to compare what the biomass is out there today to what there was in 1960 or before, so that we could know, as was just said, what’s it supposed to be?

DR. CRABTREE: I think that would be the stock assessment, and you could look at the stock assessment and see what historically the west was relative to the east, but I don’t think you could parse it any finer than that in the assessment.

DR. LASSETER: This will be based on a snapshot in time of biomass, and John, again, will pick up more on this when he gets to the decision tool, but the approach is based on a peer-reviewed paper that the SSC then reviewed and supported using how NMFS interpreted, applied, the paper to this issue of trying to estimate the biomass, and that is going to be presented to the council for the first time in January, and so the council has not actually seen, as a body, those values yet. They will be reviewing that.

I do want to also point out in here that, for all of these
alternatives for allocation, it is a method, a formula, that is being determined for the allocation that the council is determining and not the final percentages, and the significance of that is that, should information change, should there be another calibration of MRIP landings, should some other information change, say the biomass be selected and then more recent information becomes available, the most recent information would be plugged into the formulas. Again, keep in mind that it’s the method, it’s formula here, that is being selected and not the resulting percentages.

With that, I’m going to turn this over to Dr. Froeschke, who has put together a decision tool that is actually web-based, and the link is available in your briefing book, that lets you kind of look at the different alternatives and put in the different time series, and I will turn it over to him and let him explain it more thoroughly.

RED SNAPPER STATE MANAGEMENT DECISION SUPPORT TOOL

DR. FROESCHKE: Hopefully you can see this. What I did on this is we determined, not surprisingly, that there might be some public interest in this, and, in order to consider -- To jump to the question on the allocation part about what do I get in a particular area for each of the alternatives, we wanted to make something that was a little more interactive to explore these kinds of things, and so we built a website. It’s available at the URL up here, and it’s in your briefing materials. If you go to the portal.gulfcouncil.org, you can link to it through there.

What it is, on the top, there are a number of tabs representing each of the alternatives, and these are the alternatives reflected in Action 2 on the programmatic document, and I’m just going to skip to Alternative 2, but, essentially, what this does is it provides a panel on the left with the options that are currently in the document. On the panels on the right, it shows the data, and these are landings data that are used to inform the various options, and so you can look at those and inspect them, and you can turn them off or turn them on. It’s an interactive web plot kind of a thing.

Then the tables on the left show the result of the allocation for each state based on the options, and so you can click through the different time series, and you can see the plots and the data and everything, and it provides a different way that you can kind of look through and see what you get.

The idea was that this was available, and it would work for
everybody, and it was supposed to be simple, and so I won’t spend too much time telling you how to use a website, but the idea is, for Alternative 3, and, again, these mirror what’s in the document. The Alternative 4 here is a little bit different, but, again, you can select the years that you would start, either the 1986, 1996, or 2006, that is reflected in the Alternatives 2 and 3, and then the little box down here for those various years.

There are some scenarios that maybe aren’t so likely. For example, if you were to select Option c that began in 2006 and then turn off all the excluded years, you would be left with not much, and so some of these may not be particularly useful options, but this is what the council has asked to see.

Alternative 5, I just wanted to get -- It’s a little bit different, and Ava described it earlier, but the other alternatives are based on predefined set of years, for example 1986 through 2015, and Alternative 5 is different, in that it selects -- Each state could select, would select, the years of the ten highest landings in each of their states, but the understanding is that the actual year that that occurred would not be the same in each state, and so everybody would get their ten best.

I was a little bit curious, on my curiosity, on, well, did it matter if it was nine or eleven, or what is something magic about that ten years, and it turns out not very much. This slide right, right up here at the top, you can explore different numbers of years, and you can select the minimum and maximum range with this bottom slider. On the panels, I should point out, for each of these, the private rec are on the top and the for-hire are on the bottom.

If you look on the charts, the ones that actually have little circular shape markers, for each of the alternatives, those would be the years that would actually be included in the calculation, and so the potential years are the 1986 through 2015, and what is selected on the status quo, if you look at the charts, you can see what years that would actually work out to be.

CHAIRMAN CAPLINGER: John, can I ask you a quick question? Are you saying that -- I was under the impression that there was going to be an ACL across the Gulf and that each state -- You’re saying each state is going to be assigned some type of percentage of that ACL?
DR. FROESCHKE: Yes.

CHAIRMAN CAPLINGER: Each state is going to be able to select which years they want to, to obviously get the best ACL possible?

DR. FROESCHKE: That’s how this alternative would work. However, you would -- You would still base it on a percentage basis, and so --

DR. DIAGNE: I think this would be, I guess, similar to what was done, I believe, in one of the IFQ programs, by which individuals were allowed to select their best set of years, if you would. Obviously, if everyone did that, by the time you sum it up, it will be way more than 100 percent, but then you use those relative proportions to calibrate back to 100 percent, if you would, if that’s what you were asking.

CHAIRMAN CAPLINGER: Yes.

DR. FROESCHKE: Ava mentioned Alternative 6, which is kind of what I started with, and that’s a little more complicated, in terms of the options. Before I kind of walk you through this, this panel on the right was the question that Marcus asked about.

This area here reflects the distribution of biomass. This was based on a paper from Mandy Karnauskas and her colleagues at the Southeast Fisheries Science Center, and it came out last year. The reference is down below that, and that paper is freely available on the internet. If you’re interested, you can go to it and download it and have a look. It’s a very interesting paper.

This was used, as Roy described, and, if you zoom in, you can kind of see that each of those boxes is sort of color-coded, and each has a numerical value, and then these green lines are the state boundaries that Ava mentioned, and so you can sum the values of each box within the state polygon.

If you compute those all up, you will see, in this table on the left, this biomass column, which works out to be 29.9 for Florida, 6.3 for Alabama, 1, et cetera, on down. That is where those values come from.

What the council is considering is, in addition to just basing the allocation on landings, for example Alternatives 2 through 5, this one, what they have currently considered is biomass or
trips as two metrics that you could weight. We have put in landings, just for their consideration, as something that they have done in the past.

The way this is set up, it can be explored by either the recreational sector as a whole, or you can do it by either the private or the for-hire. Just like the Alternatives 2 and 3, you could select your time series that you were interested in, and these would calculate the weighted percentages of both the trips and the landings. The biomass, we only have a single estimate in time, and so that’s not a dynamic variable at this point.

At the bottom here, what this does, in this orange box, it calculates an allocation for each state based on the values that are in the table, and then these green boxes are a relative weighting for each of the variables, and so, for example, if you were to make the biomass 100 and the trips zero and the landings zero, your allocation would just be an exact mirror of the biomass, because all the weighting of the variable would be to that one.

You can explore any combination of these trips or landings or biomass and recalculate them, and, so long as they all add up to 100, you’re in a reasonable space. The council currently has three options, which I have sort of just provided as hot links in these buttons up here, and so 25 percent biomass and 75 percent. Currently, they don’t have landings as part of their decision criteria, but we have included it, in case they do. Then the 50 percent, 50/50, and then the 75 percent biomass and 25 percent trips.

Again, I wasn’t really getting too tangled up in the actual numbers, but this is a formula or a process, and we were trying to make something that was interactive by council members and stakeholders and everybody that has a vested interest.

A couple more things, and then I will move on. If you were to, for example, find something that you’re interested in sharing, you can always just click it and grab a very long URL, and you could email it to someone or save it or something and reopen it later.

The last thing on the page load is there is sort of a fine-print box, but, down there at the bottom, there is a link to submit public comments. All of our ongoing actions, we always accept public comments through our website, in-person or otherwise, and so, if you have something to tell us, you’re more than welcome
to go there or any of your friends or colleagues or neighbors or whatever.

CHAIRMAN CAPLINGER: Excuse me, John. Before you go on, is there somebody that could send us the link for that tool, because I’ve been searching since you started, and I still can’t find it.

DR. FROESCHKE: Yes.

DR. LASSETER: It’s on the very last page of the presentation that I am in.

CHAIRMAN CAPLINGER: John, if you think you know where the biomass is, to make this easy for the council, why wouldn’t you say the biomass is here and this is where we’re going to set the ACLs, because of that biomass? Otherwise, this is going to be a catfight for the Gulf Council.

I mean, every state is going to be fighting, and nothing is going to get done. I mean, are you worried about that? It just seems like we’ve given them so many alternatives, and there is so much politics involved, that this is going to be an absolute bloodbath, and nothing is going to get done.

DR. FROESCHKE: Just to be clear, it actually kind of works in the reverse. The council tells us what they want to see, and then we provide it. It isn’t the other way. We have a long history of struggling to -- The council has a long history of struggling with this.

They were interested, and there was new scientific information available, and they were interested in trying to see if it was worth incorporating that into the decision process. I do think it’s sort of interesting, in the table there, that it does show the disparity in the distribution of the biomass and the distribution of the landings. It just further reflects that the biomass tends to be in the western Gulf and the landings are more heavily weighted to the eastern Gulf.

CHAIRMAN CAPLINGER: But you could actually encourage states to grow their biomass, through artificial reef programs and whatever kind of enhancements they can do, and so you could motivate states to create habitat, essentially.

DR. FROESCHKE: You could if biomass was the main objective of the recreational fishery, but, in fact, it doesn’t seem to be, because the artificial reefs drive up the catch rates and
shorten the seasons, and so it’s -- You’ve got to really narrow in what is it that you want. If the charge is more access, it’s not clear, from the data, that more artificial reefs get you more access, but it does get you a higher catch rate.

CHAIRMAN CAPLINGER: You would think that it creates more habitat, and so it would create more biomass, but I know that gets into the whole argument of aggregation and creation, which we can’t discuss today.

DR. FROESCHKE: Well, we can, but it’s just that the catch rate is so much higher on the artificial reefs that artificial reefs tend to increase the removals more than they increase the biomass.

In this paper, and it’s actually worth looking at, but they actually calculated the biomass both ways and looked at just the effects of the biomass and things, and it’s not my paper, and so I wouldn’t feel too comfortable in explaining the finer details, but it is in there, and they do acknowledge the contribution of artificial reefs and biomass. It’s minor, but it certainly does make a difference.

DR. CRABTREE: Charlie, in the last part of Shannon’s presentation, it partially addresses this issue, because I think the artificial reef issue is front-and-center to the whole problem with red snapper.

MR. KENNEDY: Remember John earlier said that Bob Shipp had a unique perspective on this, and it wasn’t unique, but it’s just different from theirs.

DR. CRABTREE: Well, I don’t know that that’s true. I mean, I don’t dispute that artificial reefs may increase productivity. That may well be the case, and that’s Bob’s argument.

MR. KENNEDY: Just the argument is over the net result, because the net result, we think, is positive.

DR. CRABTREE: That’s partly what I think that Shannon is going to address a little bit, and I think we need to talk about that.

DR. FROESCHKE: One quick point about that, and then I will leave, but one thing I found very interesting in putting this together is, if you look at this table, for example, you will see, in this column for Alabama, where they only have 6 percent of the biomass, but they have 31 percent of the landings, which means that the catch rate must be higher or they’re fishing
somewhere else, but it is interesting, and I would sort of attribute that to the artificial reef effect, and you could see why an observation there, or at least it seems to me, could be different than an observation somewhere else.

CHAIRMAN CAPLINGER: If they were doing that year-in-and-year-out, you would clearly think that they have more biomass than is being modeled or that the habitat, the artificial reefs or whatever they have there, is enhancing the population in some way. How can you catch more than the biomass can support, year after year after year?

DR. FROESCHKE: Yes, that was the question, and so either they’re catching it somewhere else or -- It’s not something that you can declaratively answer with the data, but it is an interesting observation.

MR. BLANKENSHIP: I’m from Alabama, and I have fished the same reefs, artificial reefs, for twenty years, and I don’t ever go more than about eleven or twelve miles offshore, and I have never fished one of them out, in twenty years of fishing.

MR. MARQUEZ: I couldn’t help but comment on this Option 6, because it seems bizarre to me that there would be a reward for fishing pressure. I mean, you’ve got the biomass in here, and you’re saying here’s what the result is, but we’re going to look at rewarding additional quota because you’re in states that have close proximity to the fishery and can run two-a-days.

The charter industry over there runs a trip in the morning and runs a trip in the afternoon, whereas, Mississippi and Louisiana and Texas, I think you have a longer distance to get there. It just doesn’t make sense to me if we’re identifying the stronger biomass in the western part of the Gulf. As I read this model, it is set up where you can show increased fishing pressure. Therefore, you get more increased trips, and you’re going to get more quota.

DR. FROESCHKE: That is definitely the input that we’re looking for from the AP, is how you feel like this would best serve your needs, and so we’re not here to tell you what to do. We’re asking for your help, and so this is just the information that we’ve been asked to provide.

CHAIRMAN CAPLINGER: Thank you. We have a question in the back.

DR. CARRIE SIMMONS: Thank you, Mr. Chairman. I’m Carrie Simmons, Gulf Council staff. I just wanted to mention that I
believe this paper is really based on 2011 information, as far as the artificial reefs and the natural habitat out there and the increased sampling that was done at that time, due to the congressional funding as far as the surveys. John, is that correct?

I think that was one of the items that was discussed when the SSC reviewed this, and the fact that habitat has probably changed out there, and the biomass has probably changed out there, but then they did some various, I guess, analyses, and, again, we can get into this more at the council meeting, but to try to, I guess, incorporate that into these estimates, but, again, I believe it’s mainly based on the 2011 information.

DR. FROESCHKE: I will take a go at that. A couple of things. Yes, it is based primarily on 2011 information. Two points. One, it’s important to understand that the color scale, or the response variable, if you will, is a relative index of abundance, or biomass, and it’s not an absolute.

That means that, if the biomass of the stock changed, but it changed the same everywhere, that wouldn’t really -- We could make that adjustment, and we do those kinds of stuff with MRIP and fisheries all the time.

The second point is the headboat information on here, I believe, was from 2007, and it was calibrated in just the way I described, and so it would be possible, with some assumptions, to update it based on the current changes in SPR between 2011 and 2017 or something, although I don’t think that would change the outcome for the kinds of things that we were considering here.

CHAIRMAN CAPLINGER: To this group, to the AP, do you want to point to one of these alternatives, or suggest one of these alternatives, folks, as a recommendation to the council, or do we just want to say this is the direction that we want to go in? We need some feedback on how we want to handle these alternatives.

MS. RALSTON: Rather than getting down in the weeds about this, because this is really all going to change, has the council actually looked at this yet and had this as part of their discussion?

DR. FROESCHKE: Not yet. You guys are the first ones.

MS. RALSTON: I would like to see the states try to work out a
solution between themselves. Personally, I am supportive of
exploring state management, but, as far as making a specific
recommendation, I think there’s a lot of other factors that are
going to come into play before we can come up with a solution.


MR. BROWN: What I was going to say is -- I totally agree with
Kellie, but I was going to say that I kind of almost feel like
we’re in a situation of a divide-and-conquer, that we’ve had the
for-hire sector peeled out, and now they’re somewhat, a little
bit, more satisfied, and so now we’re going to try and peel out
a few states and make them a little bit more satisfied, and that
still doesn’t answer the overriding questions on the amount of
quota being distributed and who it’s being distributed to, and
so I agree with Kellie, because of that.

CHAIRMAN CAPLINGER: The whole question about dividing the
recreational anglers further bothers me, I can assure you, and
so I concur with you.

DR. FROESCHKE: Do you have some general recommendations of
things not to do or to do more of? Do you feel that the
landings-based kind of approaches might be better, if they were
to go to this, or more of the Alternative 6 style or something
else?

CHAIRMAN CAPLINGER: John, hasn’t the ACL increased over the
past several years as the biomass has increased?

DR. FROESCHKE: It has, but the recreational season has
decreased, because the changes in catch rate have eclipsed the
increases in biomass.

CHAIRMAN CAPLINGER: So has the ACL increased recently? Has it
been on an upswing?

DR. FROESCHKE: Yes.

CHAIRMAN CAPLINGER: Wouldn’t we naturally prefer to have the
more recent years, say 2014 or 2015, be considered as our ACL?

DR. FROESCHKE: It’s not to consider the ACL, but it’s to
consider -- If you think about whatever the pie is, in
percentage basis, how would that be divided among the five
states, and the idea is that it’s a formula. If that percentage
basis would stay the same, but it would -- If the total ACL went
up, then, obviously, in terms of pounds, every state would get
more fish.

We’re just trying to understand, from your perspective, one, if state management is something that you guys feel is of interest or is not of interest, or somewhere in between, and, if so, do you have some specific directions that you feel like you would like to explore one alternative more than another or if something is more or less appropriate than another one.

MR. KENNEDY: It’s absolutely we’re interested in, because we’ve go down to the mess we’re in now without it, and so surely it won’t be any worse.

CHAIRMAN CAPLINGER: I would say just, in my opinion -- I think, in general, what I’ve heard is that we are in favor of state management, and we do want to pursue that. As far as the technical alternatives, I am not a biologist, and, like Kellie said, I would hope that the gurus in each state could come together and decide which they would prefer to manage this by, but, in general, I think the states have the boots on the ground, and I think they’re developing the programs, and they have the scientists and the enforcement agents out there.

I think we as recreational anglers have better input with our own state managers, as well as legislators, and so I am certainly in favor of going the route of state management. Now, how do we best do that? I don’t have a good idea for you right now. I would love to play with this model.

MR. LANDGRAF: Charlie, pardon me if I’m a little off base here, but the ultimate goal is for each state to get certified by NOAA, like Louisiana is, in their assessment program?

DR. FROESCHKE: Perhaps, but that doesn’t change -- That would affect the ability to monitor their catch, regardless of whether it was a state-managed program or a federal program.

MR. LANDGRAF: Wouldn’t you want to get there first, before you would -- It’s the chicken-and-egg thing.

DR. FROESCHKE: I don’t see one being required to do that. I mean, if landings occur in their state, we have estimated those landings, and MRIP will continue to do that if there’s not a certified state program that supersedes that.

One thing is -- Many of you are sort of new to the council, and we, as staff, want to provide your feedback to the council as clearly and accurately as possible. The easiest way for us to
do that, when you have a recommendation, is to make a motion.

CHAIRMAN CAPLINGER: I’ve got you. Just to throw this out to the group, I would think that we would want it managed to where the fish are. If the fish are not in an area, and we’re saying go ahead and keep fishing, then that doesn’t help the situation in that specific area, in my simplistic view of it.

If the biomass is off of Texas, and they can handle more pressure, then certainly that would be my preferred way to manage, and I don’t know how the landings skew things from 1986 to 2009 or 2015, and so I can’t comment on that, but I would imagine that states are going to go after the one that’s best for them, unfortunately, and that’s why I think this is going to be difficult.

You as a scientist, I would think, would say the fish are here and this can take more pressure and fish there. The fish are not here, and, if we continue this type of pressure, we’re never going to rebuild this area or whatever. That would be my gut.

DR. FROESCHKE: Yes, I think that’s a reasonable --

MR. BROWN: I am trying to think of maybe a motion to support state management of red snapper, but leave it up to the states to decide and agree on what that management entails and stop there.

MS. RALSTON: The only thing I would add to it, and, John and Ava, you all may have touched on this and I missed it earlier, but I know there was a pretty extensive discussion about flexibility in state management and kind of the tools in the toolbox that the states can use to get there, and so the only thing that I would add to Jim’s motion is maybe to allow the states or that the states would select those options that would provide them with the most management flexibility under this program.

DR. LASSETER: While they’re getting this up, I will just comment on that. The actions in the individual state amendments, and we’ll get to that next, that’s where we’re going to discuss delegation, and so we’ll touch on that a little bit more, but that would be great, if you want to add that clause onto this motion.

MR. BROWN: That would be a friendly amendment.

MR. LANDGRAF: Do we feel that the council and NOAA is working
with the states enough to advance them towards certifying the program in each state? Is there a gap there that we need to close, maybe through a motion or a suggestion, that more -- I hate to use word “effort”, be provided to those states to get their programs certified in an expeditious manner?

MR. KENNEDY: There is a state marine resources rep from every state on the council.

MR. LANDGRAF: So maybe that’s moot then.

MS. RALSTON: I think the states, and Roy can correct me, but it takes about three years for that certification program. I know Florida and Alabama started in 2015, and so we’re coming up on that three-year timeframe for them, and Louisiana started in 2014, and that’s why theirs is already done, and so I think we’re getting close on those that are working on it.

DR. CRABTREE: Right now, Alabama and Mississippi are fairly close, and they could well be certified by the middle of this year. There are some issues with Snapper Check and how the expansion factor works to account for non-reporting that need to be resolved.

Florida is not -- My understanding with Florida is they are not prepared, at this time, to go very far in certification. They’re still working on some of the details of their own program, but the Fisheries Service has, in part, funded these programs, and I think our interest is to see them certified as quickly as we can, but we need to make sure that the programs are statistically sound, and so I think all of that is happening. I wish it would go faster too, but it just takes time to work through all that.

MR. LANDGRAF: My comment was more around -- Pardon me if I don’t know the differences in each state, but making sure those states have all the tools that they need, from a federal level, to understand the requirements that need to happen for them to be certified.

DR. CRABTREE: Yes, and I think that they do understand that, and that’s all being worked through, but it’s just working through the time it takes to deal with the issues, because they’re complicated.

DR. LASSETTER: I just wanted to check. Mr. Brown, is this the correct motion?
MS. RALSTON: If we can add the part about encouraging maximum flexibility in that management system, and I don’t know how to word it exactly.

MR. BROWN: That’s good.

MR. MARK LUITJEN: Should this motion limit itself to recreational and to not include headboats and charter boats or just recreational, which includes headboats and charter boats, or all red snapper, because what it says right now is all red snapper.

AP MEMBER: I think the charge is only for recreational.

MR. LUITJEN: It needs to say that then.

AP MEMBER: That would include for-hire though, wouldn’t it?

DR. LASSETER: If I could speak, that would be a very constructive recommendation that we could present to the council, whether or not you support state management being for private angling only or if you do support it being for both components. Just to refresh, the council does have a preferred alternative right now, and that is to allow the states to decide whether to manage private angling only or to manage both.

AP MEMBER: Both meaning commercial and recreational?

DR. LASSETER: I’m sorry, but we’re only talking recreational here.

AP MEMBER: That’s correct.

DR. LASSETER: Within the recreational sector, you have two components, and that first action that I went over in the program document addressed which of those components the states would manage under state management. There was an alternative for private angling only, there was an alternative for both, and there was an alternative, which is the council’s preferred, to let each state decide whether it will manage private angling only or to manage both.

I will note there, if it’s not the obvious, that there is no alternative to say that the states manage for-hire only, and that’s really a history of state management, and, also, the council has two other amendments going forward right now that address separate management for charter and headboats, and so that does not seem like a reasonable alternative within this
document at this time.

MR. BROWN:  For my motion, it would be for all recreational.

MR. KENNEDY:  Who has the authority to relieve the restrictions on federally-permitted charter boats that they can only fish in the federal waters for snapper?

DR. CRABTREE:  That would require a plan amendment by the council. They requested that a couple of years ago, and it was disapproved by the Fisheries Service, because, if we had done that, it was going to lead to even bigger overruns in the quota, and we had just lost a court case about that, but, if you turn the charter boats loose and let them fish in the state-water extended seasons, it will result in much shorter seasons overall, and so you can recommend that, but then you’re recommending something that is likely to shorten the season.

MR. KENNEDY:  But if they’re combined under state management, the states would have to have two different plans, and one of the plans would be only for federal waters.

DR. CRABTREE:  If you did it with state water -- If there wasn’t a disparity between the federal season and the state season, that requirement is meaningless and doesn’t do anything, and so, if we go to this state management, the state would manage all landings in that state, and so you wouldn’t have the discrepancy between state-water seasons and federal seasons, and so it would become moot at that point.

MR. KENNEDY:  So the rule would still be there, but it just wouldn’t be --

DR. CRABTREE:  It would be there, because it applies across all sorts of species, but there wouldn’t be any discrepancy anymore with red snapper. Now, including the charter boats has been very controversial, and there are a lot of charter boats that don’t want to be included in state-water management, and that’s been one of the tough things. I think, Doug, we’ve made four or five motions about who to include, and every one of them has always failed.

MR. BOYD:  Yes, and the issue, I think, is that, as I read it, and from public testimony, that the charter boat operators from around the states are about 50/50 on having the states manage them. Louisiana, if I remember correctly, their charter boat organization wants state management, and Alabama’s does not. There is a contingent in Florida that does not and a contingent
in Texas that does not, but it appears that the numbers are 50/50.

I would like to say one other thing. We have said, a few minutes ago, that the preferred alternative -- We mentioned that the preferred alternative of the council is. Preferred alternatives can change at any time, based on a council member’s motion and a vote by the council, and so, whatever you see in any document that shows as the preferred, that can be changed at any moment in a council meeting and voted on, and so don’t hang up on something is a preferred and that’s the way it’s going to be at this moment, because that could change.

DR. LASSETER: If I could add to that, thank you very much, Mr. Boyd, for bringing that up. I probably didn’t explain enough of that clearly. For each one of these actions, there are numerous alternatives. I noted that the Alternative 1 is always your no action, and that’s for staff to analyze all the other alternatives against, but this is a range, a reasonable range, of alternatives for the council to decide.

If it is appropriate, if you think that there is something that you could make a recommendation on, either in support or possibly to ask the council to consider a different alternative, that would be a very constructive, concise recommendation that we could take to the council, and I will always note if they have a preferred in there, and that it can be changed, and the council very often does select a preferred and get public testimony on an issue and then reconsider and even change their preferred alternative.

CHAIRMAN CAPLINGER: Do we want to vote on this motion? Is there a second?

MR. BLANKENSHIP: No, I don’t. I think -- I promised myself that I wasn’t going to talk much during this meeting, but I can’t help it. If you allow one state to have one way of doing things with charter boats and headboats and another state the flexibility, the way this is written, quite frankly, it means nothing will get accomplished, because every state then is -- We’re telling them nothing.

We’re saying, hey, we hope that you can work it out, but I think we should be recommending that all the states do it the same way, so that it encourages all of them to come to an agreement. If you leave the wording of this the way it is, we’re saying, you know, Louisiana, we kind of like what you’re doing, and that’s okay and do what you want. Alabama, we don’t agree with
you, but do what you want.

We’re not going to get anything accomplished this way. I think there needs to be a certain level of continuity across all five states and that we recommend to them that they all do the same thing, because, otherwise, they’re never going to agree, because everybody is going to have a different way of looking at it. If we, as a panel, are making a recommendation, I think that it should be that it be all the same.

MR. BROWN: The only problem I have with that is that, if you’re allowing them -- If you’re allowing each state to have the flexibility, Texas could say we want June and July to be open, and Alabama could say that our best time is spring break and we want whatever time is available, and so it gives the states -- It allows the states the opportunity to manage this fishery according to how they see it on the ground, and that’s my only problem with trying to make a cookie-cutter across-the-board. Otherwise, we have that right now.

MR. BLANKENSHIP: No, what we have is somebody telling us that it’s going to be more than what it would be otherwise, which was zero, and we’re not getting any guidance in that respect, but if we -- Look, every state, they all have the same seasons, the best times.

They’re all the same along the Gulf Coast, and so I don’t see that it’s -- If there is a continuity, if all of them -- They know that we don’t have any power over what they do anyway, but, if we tell them that we all agree, and we should all be in the same boat here. We should all be in the same -- As far as the flexibility is concerned, what we’re inviting each state to do is say, well, pay no attention to us, because we can’t agree either.

MR. BROWN: I thought that the purpose of this motion really was for us to get behind supporting state management for recreational snapper, and the question was is that just private recreational anglers or private and charter boat, and that’s what we were trying to get at. It was to say we want you to look at the whole what used to be the recreational fishery, both private recreational and charter/for-hire, but this group really can’t get out in front on how we’re going to slice that pie. That’s what the states have to get together on.

Once they have decided how they’re going to divide that up, that’s what state management is all going to be about. They are going to manage the private recreational and charter/for-hire in
whatever way works best for them, and I don’t necessarily agree that it’s the same in every state. I mean, I know, depending on other fisheries, and amberjack is a good example. In Florida, they may have amberjack closer in, and they may want to -- If amberjack is open and available, they may want to do their red snapper a different time.

Other states may want to do it a little bit differently, but, to me, what’s important is that we manage that entire recreational sector together, if the states can ever agree on how we’re going to divide it up amongst the states, but I don’t think this panel can come up with that agreement.

DR. LASSETER: I just wanted to -- In order to facilitate staff being able to present your recommendations to the council, I am hearing three different discussions going on, and it might warrant three separate motions, and that might be an easy way to tease them apart.

I understood this motion as starting through -- You did not want, as a body, want to dictate to the states how to divide the quota up, and so it seemed to be a message of support that they would do for the allocation decision, and then there’s another component of it of which components to put under state management, and so you may want to tease those two separately.

Then there is the issue of different regulations across the Gulf, and I’m kind of hearing that level of flexibility as well, and so we may want to tackle these individually as motions that could each be a concise statement.

MR. BLANKENSHP: All I’m saying is the motion should be to support state management of all recreational red snapper, period, that’s it. All that other surplus is not necessary for this motion.

MR. BROWN: I agree with that.

DR. FROESCHKE: So a substitute motion, I guess, would be the --

CHAIRMAN CAPLINGER: Okay. Can we live with that? Do we have a second? Okay. We will write this as to support state management of all recreational red snapper, period. Do we have a second? Rudy seconds. All of favor of this substitute motion; any opposition. The motion passes.

MR. LANDGRAF: Charlie, wasn’t there another recommendation that we talked about before lunch also that we need to -- Is that
something that we need to try to --

CHAIRMAN CAPLINGER: We talked about allocation review, and I have that in my notes, so that we can -- Hopefully, at the end of this, we can go back to that.

DR. FROESCHKE: Did you have any further guidance on the state management? Ava has got more, I forgot.

PRESENTATION: SUMMARY OF RED SNAPPER AMENDMENTS CONSIDERING STATE MANAGEMENT FOR THE RECREATIONAL RED SNAPPER COMPONENT

(Continued)

DR. LASSETER: We have five more amendments to go through. I think we are done with the decision tool, and so we’re going to bring back up the PowerPoint that I was going through for state management, and, as that’s coming up, I will note, again, that the very last slide on that says “Questions”, and there is your link to that decision tool that Dr. Froeschke put together.

That was the second action in the program amendment, and so, again, as a recap, we had the first action of which components will be under state management, and the second action is how to divide that recreational ACL up amongst the states.

Then we have individual state amendments. The individual state amendments, we actually have five amendments, and they are identical except for the name of the state is different for each one of them, and one other difference is that, the Louisiana document, the council has selected preferred alternatives for Louisiana. The other four state documents do not have preferreds at the moment.

Again, in these five amendments, there are two actions, and the first action that we have up here on the board addresses the authority structure for state management. It’s basically how do you give control, authority, to the states, and there is two main methods for doing so. One is delegation and one is called conservation equivalency.

On this first slide here, we have the delegation alternatives. Of course, we always start with Alternative 1, which is our no action, for analytical purposes, and then we have two alternatives, 2 and 3, for delegation.

Alternative 2 would be to establish a management program, and remember this is within an individual state’s amendment, and so, when it says, “establish a management program”, we’re within one
state’s amendment, and so this is specific to that state. Establish a management program that delegates some management authority in federal waters to a state, and, in each amendment, it doesn’t say “to a state”. It says the respective name of that state, which must establish the red snapper season structure and bag limit. They must formally establish those for the harvest of its assigned portion of the recreational sector ACL. It’s noted there that Louisiana’s document does have this selected as their preferred.

Alternative 3 was added more recently, and we’re still exploring this alternative, and so Alternative 3 would establish a management program that delegates management authority in federal waters to a state. When this motion was made to add this, Florida actually made the motion, and they termed it “full delegation”, but what we need to understand is the scope of authority, what is the scope of authority to include in the delegation of that state, and so a couple of things here.

First of all, delegation is a provision in the Magnuson-Stevens Act, and the full text of that provision, and it’s less than a page, is one of the appendices of the full document that is provided in your briefing materials, if you would like to look at that.

Basically, it provides NMFS the authority to delegate to a state to let a state manage vessels registered in that state while in federal waters, and so it’s not putting federal rules onto the states. It’s turning the authority over to the states to manage its vessels in the federal waters.

Now, one important note of this provision, and it’s specified in Magnuson, is, unlike other decisions that the council makes, which can be passed by a simple majority, approving delegation requires a three-quarter majority vote of the voting council members, and so your Coast Guard representative and State Department representative are not included. You have seventeen voting members on the Gulf Council, and so it does require -- It’s a higher vote, a higher bar, for passing delegation.

I am going to say a little bit more about Alternative 3. When this motion was put forward for the expanded full delegation, staff, as well as NMFS staff, needs to understand what this means, and so there are regulations on the books that are specific to red snapper that include red snapper, affect red snapper, but are applied more generally to reef fish, and there’s thirty-one species in the Reef Fish FMP, and there are regulations in the Federal Register, on the books, that apply to
just fishing in general.

Then there are some things that a state may want to do for management for which a regulation does not currently exist. Why we need to know what a state would want to do, as far as this expanded delegation, is, if it’s something that there are regulations that currently are in place for, NMFS would need to know that, in order to modify those regulations.

There are some regulations that, because of other requirements, other applicable law, statutes in Magnuson, the National Standards, that they could not delegate, and one of those would be setting the ACL. Some of the other things that perhaps a state might want to do for which regulations do not currently exist would just require a conservation with NMFS and then possibly additional analyses, and possibly it would be something that could be done or could not be done.

At the last council meeting, the council moved to send a letter to each of the five states asking what is it that you would want delegated to you, and so we will be presenting those responses to the council at the meeting in a couple of weeks, and so that’s why this Alternative 3 is still under development, if you will. We’re still working on identifying and defining what this more expansive delegation would be.

Now, that said, under Alternative 2 delegation, although it specifies that a state must establish its season and bag limit, they must do those two things, because, under delegation, that state with an approved plan would be exempted from those federal regulations, and we know those two things the states would be able to designate on their own, but there could be additional things, even under Alternative 2 delegation, that a state could do without requiring regulations to be changed.

There’s an example in the document for Florida. Say Florida wants to establish a Panhandle season and a West Florida Shelf season, because the weather is different or there is preferred fishing times that are different. Florida could do that under the Alternative 2 delegation, and so that’s why we’re still waiting for Alternative 3, to get a sense of what is the scope that the states might want to do.

It’s possible that these might be collapsed into a single delegation alternative, or they may remain separate, but we’re waiting for more information from the states, to see what they want to do. That’s kind of an overview of delegation. I will pause there for a moment.
MR. KENNEDY: You mentioned, and I don’t have it in front of me, but the page that deals with delegation under the Magnuson-Stevens Act would allow states to regulate the boats that were registered in that state, and is that the way it reads, or can it be boats that are landing fish in that state, because I’m registered in Alabama, but I frequently fish out of and return to Mississippi and Louisiana and Florida. Is that actually the way it reads, is that the delegation of authority can go to the state to regulate boats that are registered in that state?

DR. LASSETER: That is the exact language within Magnuson.

MR. KENNEDY: Well, that’s not going to work.

DR. LASSETER: The way the document is also written is that state management is primarily a landings-based program and that, no matter where the fish are caught, where they are landed is the state that they would count against the quota.

Now, how this works for law enforcement, in your example, in terms of you departing and leaving from a different state and your vessel is not registered in the state which is delegated the authority, I would have to ask GC about this, and so I’m going to turn this over to Roy.

DR. CRABTREE: Well, my understanding of how this would go is, when you land in a state, you would have to conform to that state’s regulations when you land.

MR. KENNEDY: But if it says they’re regulating boats that are registered in that state, that’s going to foul us up.

DR. CRABTREE: I think that part of it has to do with at-sea enforcement, and, if we go down this path, at-sea enforcement is going to be extremely difficult, and, virtually, we’re not going to do it. We’re going to rely on enforcement at the dock, because, to do at-sea enforcement, you would have to know where the boat is going to land before you know what rules it’s faced with.

Now, the reality of recreational enforcement, at least for private vessels, is that most of that is done at the dock anyway, and this would actually, I think, make dockside enforcement more straightforward, because now, when enforcement stops a boat at the dock, it depends on were they fishing in state waters or federal waters as to what rules they comply with, and this fixes that.
There are a host of enforcement concerns and things that the details still need to be worked out, and, at some point, I think you ought to ask Shannon to comment on the implications of this for the stock assessments, because I know one of the things that I keep hearing from recreational fishermen is you want better science and better stock assessments.

Going down the path we’re talking about is going to lead to much less certainty in the stock assessments and create a host of problems, and I think you ought to have Shannon comment on that whenever you think that’s appropriate, Mr. Chairman.

MR. BROWN: If I could just comment real quick and follow-up on Roy’s comment that I totally agree that it would actually simplify law enforcement, because, right now, they’re dealing with state and federal and where were you fishing and that type of thing, and it’s much easier to determine where you’re coming from in a state, and I think, Marcus, your concern would get worked out, because I really believe that it’s where the fish are landed.

MR. KENNEDY: If the federal law specifically says the state is delegated authority to regulate boats registered to that state, that thing has got to be fixed formally before we can go down this -- That’s a practical issue.

MR. BROWN: Right, but I think it probably already is. I think we’re probably missing something, because that would mean, like in Florida’s case, like I said earlier, we have -- At certain times of the year, the majority of boats are coming from Georgia, and so they’re not even -- They’re launching and recovering in Florida, and they’re not even going out, and so I think it’s already handled someplace, and I don’t think it’s anything that --

MR. KENNEDY: It’s not a rule yet, but, if it is a rule, the provision is there.

MR. BROWN: I think it is, is what I’m saying.

MR. KENNEDY: Okay, because it was just that one page, and that’s what it said on that one page.

CHAIRMAN CAPLINGER: Go ahead, Shannon, please.

DR. CALAY: From the stock assessment perspective, the biggest degradation you would see from going to a state-specific
approach could occur if the states implemented different management measures, say different size limits and different bag limits, et cetera, different open and closed seasons.

That substantially degrades our fishery-dependent indicators of abundance. Our fishery-independent indicators, and this is just my personal perspective, I suppose, would need to be enhanced in order to give the value of information that we obtain from having both fishery-dependent and independent sources of information.

You’re really talking about a wholesale restructuring of the way we conduct data collection activities in the Gulf of Mexico to actually provide you with the same quality of information in a state-wide way, and so indices of abundance would be a massive problem, especially fishery-dependent.

The other problem that you’re going to have, which hasn’t been directly addressed yet, is that it isn’t sufficient to just certify a state program for collecting landings information from the recreational fisheries. In order to conduct a stock assessment, you need an actual time series from the imposition of the fishery to present day, and so you have to also calibrate those estimates and extend them backwards in time to be able to know your removals.

Those processes are all underway in the various states, but they haven’t been addressed yet. I think Louisiana is the farthest along in trying to create those calibrations that we need, and so you’re really a long way from having the information you need to conduct a data-rich stock assessment state-by-state, and that’s our fear.

What you’re going to likely end up with, if you move forward, is something far simpler than what we’re doing today, something that essentially is a step backwards in the stock assessment complexity, and certainly a step backwards, as far as we’re concerned, for what we consider to be -- We rank stock assessments based on essentially -- We considered age-structured stock assessments to be generally superior, NOAA does, to a surplus production model, for example.

My fear is that, if you do go ahead and impose this, we’ll have to take a step backwards towards simpler model structures, like surplus production models, which don’t consider age-based fecundity and age-based mortality and age-based growth, for example.
Basically, we’re essentially silent on this, because, whether or not you choose to go with the state, we’ll still be asked to do what we can, I suppose, and we will probably find something we can do, but the likelihood is the uncertainty will increase until such a time as we completely restructure the data collection activities to accommodate this new state-wide approach.

**MR. KENNEDY:** Surely it’s not worse than now, because, now, if the states are harvesting 80 percent of the recreational catch, you already have that, because Texas has a year-long season, and Louisiana has a six-month season, and Mississippi and Alabama have a one-month season and Florida a three-month season, and so it probably won’t be that bad. It will probably be better, because they might be a little closer than they are now.

**DR. CALAY:** Well, the season length, we do attempt to accommodate within the stock assessment standardization, and we’re already seeing the complexity of management for red snapper and a few other stocks has already degraded our ability to use fishery-dependent indicators of abundance.

We are not able to model our way out of all of the management complexity that has developed in the Gulf of Mexico, and so we’ve already truncated the commercial fishery-dependent series with the imposition of IFQ. At the latest red snapper meeting, now we’re talking about truncating the MRFSS and headboat, due to short recreational seasons.

**MR. KENNEDY:** So we’re already significantly degraded.

**DR. CALAY:** We’re already degrading the stock assessment.

**MR. KENNEDY:** So going to state management will just do it a little bit more.

**DR. CALAY:** It will potentially further degrade the stock assessment.

**MR. KENNEDY:** Not a whole lot, but just a little more, because we’re already there.

**DR. CALAY:** One thing that will be important though, if you want to go state-by-state, is MRIP may not get you there in all cases, because one of the things that is basically -- Let’s put it this way. There is a diversity of -- The way fishermen have reported their fishing location in the recreational varies tremendously trip-by-trip.
In some cases, we have latitude and longitude, and, in some cases, we just have -- All the information is missing, except maybe they’re fishing off of western Florida or some such thing.

We also have situations where fishing trips begin in Florida and fish in areas off of Louisiana, which we can see in MRFSS, and so, until such a time as these state programs can give us more detail about where the fish are being removed, there will always be an additional source of uncertainty there as well, and so, once we get the state recreational surveys in place and certified and calibrated, so they can give us a historical time series, we may start to see the stock assessment improve again, but, until such a time, we’re really kind of stuck with MRIP and all of the difficulties we have with MRIP. That won’t be solved for some period of time.

CHAIRMAN CAPLINGER: Ava, do you want to continue?

DR. LASSETER: Thank you, Mr. Chairman. The next alternative, or the next approach, for which we also have two alternatives, is called conservation equivalency. This approach was developed based on the summer flounder management in the Mid-Atlantic, which each individual respective state underneath that council has its own quota, and so it’s something similar to what we’re talking about here in state management. There are positives and negatives, as far as their management program, but that’s what designed this approach around.

The idea is that management still does remain with NMFS, and each state participating in a conservation equivalency program writes a CEP, conservation equivalency plan, which it submits to NMFS, in Alternative 4, or, in Alternative 5, the state submits that plan first to a technical review committee, which consists of representatives of the states, the state directors.

The technical review committee reviews it, and it goes back and forth to the states, just to make sure that everything is good, before forwarding it on to NMFS, and so NMFS is still the final approval under both of those Alternatives 4 and 5.

Under all of these alternatives -- I’m sorry, but let me do the note first. For conservation equivalency, the state’s plan must specify the red snapper season and bag limit, just like delegation, because, again, those are going to be removed or modified from the federal regulations. They would remain as default federal regulations for states that are not participating.
For a conservation equivalency plan, the state must have its season and bag limit, and the plan must be reasonably expected to limit the red snapper harvest to that state’s assigned portion of the recreational sector ACL.

Further details on what would be required in a CEP are in the full amendments, which are provided in your briefing materials, and there’s a list of what would go into a CEP. There is a sample timeline of that process would be carried out, and the council seems to be leaning more towards the delegation, and so I have focused more on discussing delegation right now than CEP.

If you have more questions about the conservation equivalency approach, I can answer those as well, but the general sentiment is that having delegation gives the states greater flexibility, because they’re not having to resubmit plans every year or two years. The CEPs could be submitted for one or two years. Rather than having to come back and forth with NMFS on this, delegation would afford the states great autonomy and flexibility than does the conservation equivalency approach, but, for all of these alternatives, both delegation and the CEP alternatives, if a state’s plan is determined to be inconsistent with the requirements of whichever approach is selected, then the recreational harvest of red snapper in the federal waters adjacent to that state would be subject to the -- Here’s this concept of default federal regulations for red snapper.

Right now, those refer to the current bag limit and season start date of June 1, with the season ending when NMFS estimates that, under status quo, the Gulf-wide recreational ACL is going to be met or if your individual state’s ACL would be met, and there would be a bag limit of two fish per person per day. Let me stop there for just a moment. Any questions on the conservation equivalency part or any recommendations regarding authority structure to the council?

CHAIRMAN CAPLINGER: Ava, why does the adjacent state get penalized if the state -- Am I reading that wrong?

DR. LASSETER: I’m sorry, but federal waters adjacent to the state. I apologize if I have a typo there. Yes, it’s federal waters adjacent to that state.

CHAIRMAN CAPLINGER: Okay, and so not adjacent, but farther out.

DR. LASSETER: Correct.
CHAIRMAN CAPLINGER: Perfect.

DR. LASSETER: That does highlight a sticky point, which we won’t go into all the hypotheticals, but you could have issues with one state participating and one state not participating and the council and NMFS would need to work out what would happen in these different situations when you have some states participating and some states not.

Then also the to-be-reviewed EFPs that are coming up would work differently than how we envisioned state management working, and so a lot of the details of how all of this would work have yet to be worked out.

CHAIRMAN CAPLINGER: Do we need a motion on this one or --

DR. LASSETER: If the AP does have --

CHAIRMAN CAPLINGER: Does anybody have a strong opinion on delegation versus CEP? I know Louisiana would prefer some delegation of management authority, but I would be -- I would support basically full delegation.

DR. LASSETER: Just to explain Louisiana’s, the vote by the council to select that as Louisiana’s preferred was actually made before that Alternative 3 motion was made to put in that Alternative 3.

CHAIRMAN CAPLINGER: So they may prefer that, maybe?

DR. LASSETER: If we even know how it’s defined. Again, we’re not quite sure what that is. This idea of a more expanded delegation was raised and then added to the document after Louisiana knew that they wanted delegation, but that Alternative 3, full delegation, still needs to be defined.

MR. WILLIAMSON: Ava, maybe you know this, or not, but, if state management was adopted totally, everything would have to be consistent with Magnuson, and so, any regulations that were adopted on a state basis, everything would have to be consistent with Magnuson.

Now, assuming that that were the case, where are these -- Obviously the states get a lot of federal funds for carrying on these programs to help assist in stock assessments, and is NOAA, the feds, are they going to pull these dollars from the states and say, if you want to be managing this resource, then, baby,
it’s yours and there is no longer any funding here?

DR. LASSETER: I am going to let Roy speak to that specifically, but, as far as this document is concerned, red snapper is still remaining a federally-managed species, and, as far as I know, there would be no changes in anything funding-wise by delegating authority to -- Red snapper is still maintained a federal species. There is an ACL, and things have to be required, but I see nothing funding-related, but let me turn that to Dr. Crabtree.

DR. CRABTREE: I would not expect there would be any reduction as long as red snapper remains in the fishery management plan.

MR. WILLIAMSON: So there would be no reluctance in that arena for a state to oppose taking over delegation of the resource?

DR. CRABTREE: None that I see.

MR. WILLIAMSON: Okay.

CHAIRMAN CAPLINGER: Please go ahead.

DR. LASSETER: Thank you, Mr. Chairman. Delegation and conservation equivalency, that’s Action 1. The second action, and final action, in the individual state amendments concerns post-season accountability measures. Again, Alternative 1, no action, remain status quo, which I just didn’t repeat here, is essentially the same as Alternative 2, except Alternative 2 applies that post-season AM to the individual state and that state’s ACL.

Then there is options which would apply if a state is managing both of its components, and so let me go through the full text of the alternative. Alternative 2 is, while red snapper is overfished, and so this comes back to this recently-approved Amendment 44 that will redefine, or has redefined, red snapper as no longer overfished, but, when red snapper is overfished, if the combined state recreational landings exceed the recreational ACL -- So we have two “ifs”. First, red snapper has to still be classified as overfished, and, two, the total recreational ACL has to be exceeded before this post-season AM applies.

In those two situations, in the following year, reduce the recreational quota and the state’s ACL by the amount of the ACL overage in the prior fishing year, and then here is our qualifier, unless the best scientific information deems that an overage adjustment is not necessary.
This is basically saying, under those two situations, the AM would no longer be applied Gulf-wide, but it would be applied to that state’s ACL if that state allowed their portion of the ACL to be exceeded.

Now, again, the options are if they have both components, and so Option 2a would apply it to the component that exceeded the ACL, and so, if only one component exceeded the ACL, that component would pay back the overage entirely, and Option 2b would split the overage between the two components and apply it equally, 50/50.

Louisiana did select a preferred option and alternative through the council vote, which was, yes, to support Alternative 2, with Option 2a, to apply it to the component that exceeds its applicable ACL. I will stop there for just a moment and see if there’s any questions or comments. Okay.

That is the final action in these amendments, and, the next slide, here we have our link to the decision tool, and I noted again that John presented, and so those are the six amendments for a state management program, if there’s any questions, or I will just turn it back to Mr. Chairman.

CHAIRMAN CAPLINGER: Thank you, Ava. John, where are we heading next?

DR. FROESCHKE: I think we should finish with Shannon’s presentation and then maybe take a short break and then spend the remainder of the time to let you guys discuss and hopefully make some specific recommendations to the council.

CHAIRMAN CAPLINGER: Okay. Do you all want to take a quick break right now, before we start with Shannon? Let’s take five minutes. Thank you.

(Whereupon, a brief recess was taken.)

CHAIRMAN CAPLINGER: All right. Pushing to the end. Let’s see. Let’s hear the rest of Shannon’s presentation, and then we can go in and start talking about recommendations and whatnot.

PRESENTATION: RED SNAPPER STOCK ASSESSMENT PROCESS (CONTINUED)

DR. CALAY: All right, and so I left off talking about some of the primary criticisms that we’ve heard regarding the stock assessment, and the first one that I would like to address is
the contributions of artificial reefs, and, frankly, we could
talk for an entire meeting about this alone, and I’ve only
prepared a few slides, but hopefully they will at least lead to
some discussion topics.

There is a perception that we are ignoring information from
artificial reefs, and I want to make it very clear that the
assessment does in fact use catch data and catch per unit effort
data and indices of abundance from all habitats in the Gulf of
Mexico, natural and artificial. Wherever fishing is occurring,
we are receiving that fishery-dependent data from those fleets,
and we are creating catch and catch rates that do include those
artificial reef habitats.

NMFS SEAMAP surveys using the assessments do not specifically
cover artificial reefs, in particular the trawl surveys, because
they don’t want to trawl over structure, necessarily. However,
the larval survey, which I mentioned as an indicator of the
spawning stock biomass, implicitly does represent the spawners
on all habitats in the Gulf of Mexico, because the larvae don’t
just occur from the artificial reef structures.

It’s all the larvae that we encounter are included in that
survey, and there are a number of third-party surveys of
artificial reefs off of Alabama and Florida that are used in the
stock assessment, in particular the Alabama Reef Survey, which I
have outlined there in red.

The results from that Alabama Artificial Reef Survey is
described by a presentation by Sean Powers, and the survey
estimates of abundance for ages-three through eight in Alabama
reef survey area are about 30 percent of the estimates from the
stock assessment in the eastern Gulf. Actually, that’s
surprisingly consistent with our expectation.

It has often been said in blogs, for example, that there are
more fish in that Alabama survey area, by a large margin, than
the entire Gulf of Mexico from the stock assessment, and that is
not true. That is not factual.

The number of fish from the Powers survey indicates that, in
that Alabama survey area, about 30 percent of the animals ages-
three through eight in the eastern Gulf occur there, and that’s
consistent with our understanding, based on the removals that
occur there as well.

Now, there is also a conversation occurring about whether these
artificial reefs simply aggregate fish or whether in fact they
increase production, and, in all honesty, the studies that we’ve
done in this area, although they are very interesting and
they’re in the publication record now, we’re still working on
this. This is still an area of active research.

However, we can definitively say that artificial reefs make red
snapper easier to catch, for sure. The catch rates are almost
tenfold on artificial reefs, and so they are definitely making
the red snapper easier to catch, and they are increasing,
therefore, the catchability of the fisheries that occur there,
and, in effect, they are shortening the fishing seasons, because
the fishermen can catch the fish much faster than they used to.

However, do they also increase production? We have done one
study, which is published in Marine and Coastal Fisheries in
2016, and it’s by Mandy Karnauskas, et al., and she looked at
the percentage of eggs that are produced on artificial
structures relative to natural structures.

What she found is that the total eggs that are produced on the
artificial reefs is small, in fact, compared to the natural
reefs, even though the animals are aggregated, and that’s
because artificial reefs only make up a small fraction of the
total reef structure in the Gulf of Mexico.

Here is what her results say, and, like I said, we’re still
actively conducting research on this topic. In the eastern
Gulf, about 10 percent of the total eggs that are spawned are
spawned on artificial structures, about 10 percent. In the
west, it’s about 5 percent, and, over the Gulf of Mexico, it’s
about 7 percent.

Even though there are large aggregations of animals on the
artificial reefs, and they do spawn there, the actual extent of
artificial reefs in the Gulf represents a small proportion of
the total reef structure that exists.

MR. ANDRY: I have a question, and maybe I’m missing something.
Would oil and gas platforms in the western Gulf be considered
artificial reefs?

DR. CALAY: Yes, they were.

MR. ANDRY: Okay, and the western Gulf seems to be where the
largest biomass of red snapper is coming from, and is there no
correlation between the abundance of oil and gas platforms in
the western Gulf as artificial reefs?
DR. CALAY: Well, I’m not an expert, necessarily, on the distribution of the oil and gas platforms, but my understanding is that most of the artificial reef structures occur in the eastern Gulf of Mexico.

MR. ANDRY: There’s way more oil rigs.

DR. CALAY: There are more oil rigs in the west, and so I’m not the author of this paper, and I did want to say that I don’t think we have made strong conclusions yet about how important enhancing production might be. There is still research ongoing today about this, both in the Science Center and academia. It’s an open topic. One paper suggests that the production that’s occurring on these artificial reefs may not be large. They certainly aggregate fish, and they certainly make it easier for fishermen to catch fish. That is no doubt.

MR. BRAD MILLER: What is determining the eggs produced on the reef? Is it that they trawl near artificial reefs versus natural reefs?

DR. CALAY: I think this is just based on where adults occur, where spawning sites are, the hydrodynamic model that Mandy has developed, and so they’re not able to track a particular egg to where it was spawned. They are just suggesting that, based on the distribution of spawning sites, the circulation in the Gulf, and the distribution of natural artificial habitats, this is the best estimate they can make of what percentage of eggs occurred on those artificial structures.

MR. SEPP HAUKEBO: I have heard the numbers for artificial reefs off of just Alabama range from 10,000 to 20,000, and that can be somebody that went out and dumped a Volkswagen or a dishwasher out there. I know there’s not 10,000 oil rigs in the western Gulf, though. They’re much larger, but the total number in the eastern Gulf is much larger as well.

DR. CRABTREE: If I could, the number of oil rigs in the western Gulf is declining, because they are removing oil rigs, but you’re right that it’s the Panhandle. Alabama has the biggest artificial reef program in the Gulf, but there are a lot of artificial reefs off of parts of the Panhandle of Florida, too.

If you look at these numbers, even if you believe these are bad underestimates of it, and so say that the production of eggs on artificial structure is twice as high as that, then it’s 12 percent. Let’s say it’s four or five times higher than what this indicates. Then it’s around 30 percent, and so we might
have increased -- If you believe all of that egg production from the artificial reefs wouldn’t exist if the artificial reefs weren’t there, which seems a stretch to me, but, even if you accept that, then we may have increased productivity of red snapper in the Gulf by 25 or 30 percent, but the evidence we have on catch rates indicates that the catch rates on artificial reefs are ten to twenty times higher than the catch rates on natural bottom.

To have this be a wash, you would have to believe that you’re increasing the productivity of the Gulf by ten times, and that flies in the face of everything that we know about red snapper. There just isn’t, I don’t think, any credible argument that we have increased productivity by that much.

I have thought about this for a long time, and I find it very difficult not to reach the conclusion that artificial reefs are significantly shortening the red snapper season, and I think that is just inescapable.

Even if you believe these numbers are way off, it’s just hard to see how they could be so far off that you come to a different conclusion to that, and I think that’s an important thing, and I wish Bob Shipp could have been here today, because I think that would have been a great discussion to have with him, but I think that’s something people really need to think about, because I am concerned that, when people talk about artificial reefs, they’re only seeing the positive part of them, and they are not seeing the impact on catch rates.

If you have a set amount of fish to catch, and you want to have a longer period to catch them, then you’ve got to reduce the catch rates. There is no other way to get there.

**CHAIRMAN CAPLINGER:** Roy, the other side to that is -- If you make the other side of that argument, you would say, if there are so few fish on artificial reefs, 20 or 30 percent of the overall Gulf or whatever, and they’re so easy to catch, and so you can catch those as fast as you want, then the Gulf must be full of red snapper, because, if 70 percent -- If you’re talking about that 70 percent of the fish are not on artificial reefs, then we aren’t even touching the amount of fish out there.

**DR. CRABTREE:** That’s a conversation that we’ve had quite a bit, and it really comes down to how much do the fish move, and so, if red snapper don’t move at all, then you could, in theory, fish the hell out of the artificial reefs and have a pretty limited impact on the overall stock, and I have had this
The problem is we know that red snapper do move, but what we don’t really know is exactly how much do they move. If it’s the case that when you catch a fish off of an artificial reef, if, the next day, a fish swims over there from natural bottom and occupies the reef, then you’re sucking the fish off of the natural bottom, and I don’t think that’s the case either, but we don’t really know how much that happens.

We do know, when you put an artificial reef in the water, there is snapper on it very quickly, and so it didn’t create those snappers. They swam there from somewhere else, but the question of how much the fish move -- Because one thing I have talked to people about is could we just partition off the artificial reef zones off of Alabama and the Panhandle and essentially say, have at them, guys, and you can fish all you want on these artificial reefs, and could we do that without having a significant impact on the overall status of the stock?

If it’s really only about 6 percent of the spawning biomass, and if the fish don’t move much, we maybe can, but, if it’s like this black hole that just is sucking fish in from everywhere else, then it probably wouldn’t work. I am talking to Clay and folks at the Science Center and in Florida about how to design some studies to try and look at that and trying to get better information on how that might work.

CHAIRMAN CAPLINGER: Isn’t there a ten-million-dollar grant right now that’s out there trying to identify what the real fish population is?

DR. CRABTREE: Yes, and I think a big part of that grant is going to look at habitat mapping, and so I think we’ll have a much better understanding of how many artificial reefs there really are and where they are, because the way you’ll get to the estimate of population size is to get to, okay, over this type of habitat, we find these kind of fish densities, and then you will categorize how much of each type of habitat is there in the Gulf and then calculate it out. There is also a big tagging component of that study, which I think will shed a lot of light on how fish move around.

MR. BLANKENSHPH: Roy, that’s why I was just going to ask you about the tagging part of it, because I know we tag a lot on the reefs, but do they tag them from natural habitat, and do you have any information about them moving from natural to those reefs?
DR. CRABTREE: There has been tagging on natural habitat, and I’m sure, as part of the study, they will try to tag fish on all types of habitat. My understanding, and I’m out of the science end of all of this and so I can’t really tell you, but I’m not convinced that we have enough of any of that to really understand it.

Now, I think Chris Blankenship and Kevin Anson are talking to me about having some sort of artificial reef symposium or something in Alabama sometime this year, to try and pull all the information that we have about it and try to get some better understanding of how it works, and so I don’t have all the answers to this, but I think it’s important to understand that artificial reefs are probably having impacts that aren’t what you might think they are, and we don’t really understand how they play into this whole scenario.

MR. TURNER: I know you’re not the author of this paper, but do we have an idea of the percentage of artificial reefs out there versus natural bottom land mass, when we’re talking about percentage of egg production?

DR. CALAY: I hate to say, because I am not certain, but the results would certainly imply that the natural reef habitat -- that there is far more natural reef habitat, but the actual density of spawners might be lower on natural reefs than it is on the artificial, but the natural reef habitat is much larger than the artificial reef habitat, and that’s why you end up with more egg production actually on the natural habitat than on the artificial reefs, because there is just so much more natural habitat.

DR. CRABTREE: I think that’s exactly right, and my memory is only about 2 to 3 percent of the habitat in the Gulf actually has artificial structure on it. Now, that may be way off, and so maybe it’s three times that, but that’s still a relatively small amount of habitat.

DR. FROESCHKE: We did a white paper on the council, a few years ago, and looked at that, when Bob Shipp was on the council, and I think it is about 3 percent. The other thing to remember, based on the figures that Shannon showed, is the artificial reefs typically only support red snapper between the ages of about two and seven. If you remember, those don’t have near the reproductive capacity as the larger animals that aren’t really on those reefs.
Mr. Kennedy: The larger animals are on a lot of the reefs, and it doesn’t really make them easier to catch. It makes them easier to locate. If you can locate the fish, then the small ones are easier to catch, but it’s really, really hard to catch the real big fish off of artificial reefs and oil rigs, I mean like really, really hard. You damned near can’t catch them.

That’s why, when you go diving, you look down there and all the big ones that have got hooks in their mouths with leaders hanging off of it, because they’re almost impossible to catch, but, on natural bottom, where you don’t have a lot of relief, that’s where we catch our big tournament grade thirty to thirty-five-pound red snapper. We just about can’t do on artificial reef. We have to go out to the flat bottom, where you don’t have a lot of structure to cut them off.

Dr. Crabtree: My suspicion is, and, of course, I don’t know the answer to this, but, I mean, you’ve got about 80 percent of the catch coming off of Alabama and the Panhandle of Florida, and my guess is, Gulf-wide, I would guess 80 or 90 percent of the recreational catch of red snapper is coming off of artificial reefs.

Dr. Calay: We absolutely see that impact on the age composition data. I was alluding to that when I made the presentation, where the age composition data essentially says the population is between ages two and eight from the landings, and, if the landings are in fact coming predominantly from the artificial reefs, and, if in fact there are older animals there that we’re not observing, then it’s an important — It’s an element of the stock assessment that you need to be aware of, because there is tension then between your indices of abundance, that suggest an increase, and the length composition data, which is saying the stock is not increasing.

We are well aware of it. It’s been discussed at a number of stock assessment meetings, and we tend to weight higher the indices of abundance and the length composition data, but it is an important element of what the data tell us to be aware of.

All right, and so, to better address these questions about production on artificial reefs, kind of alluding to or segueing to what you already discussed, but we need improved maps of the artificial and natural structures, and we need also fish surveys on these structures, maybe by some advanced technological camera or ROV.

We also need more process studies to address the relative
quality and quantity of eggs produced and post-settlement survival on artificial reefs versus natural habitats, and that would help us address this question about how much production is enhanced by artificial reefs.

The remaining things I have are really just more information about the way the recreational landings are done, and so perhaps it’s not that important. I can go over it fairly quickly, because you’ve already seen it in a number of other presentations. I will just go over it very briefly.

There are a variety of recreational data collection programs that occur throughout the United States and territorial waters. In the Southeast, we use TPWD, LA Creel, the Southeast Headboat Survey, the MRFSS access point interviews, as well as the telephone survey data, which is what we traditionally call MRIP. Now we have these new supplemental surveys coming onboard.

Just kind of a picture of what the present looks like today, for MRIP APAIS, we still have that Access Point Angler Interview Survey going on in Florida, Alabama, and Mississippi. It’s still used in conjunction with the telephone survey. However, in 2018, this year, it will be replaced with that FES, we’re calling it, the Fishing Effort Survey, which is that mail-in survey.

That’s going to have an important impact on our perception of recreational landings. That’s why we’re putting a lot of effort into trying to calibrate that number and extrapolate it backwards in time to create a new time series of recreational landings.

We’re going towards the for-hire survey for the charter boat, which is another animal entirely. For headboats, in all five states of the Gulf, headboat landings and discards now are measured by the Southeast Regional Headboat Survey, which is administered by the Southeast Fisheries Science Center, and it’s logbook based.

Now we have the Louisiana Creel Survey coming onboard, which has been certified, and it’s been instituted by the state as a replacement for MRIP as a general survey, and it’s intended to achieve higher sample sizes and greater precision than MRIP, at least, and I will get a little bit more detailed about that in a moment.

We also have TPWD, which has been going on since the 1970s, and it’s an angler-based survey out of Texas. It looks at private
and charter boats, and so all of these sources of recreational information have been included in the stock assessments that we have conducted throughout time at the Miami Laboratory.

The status of the LA Creel survey right now, on December 29, we did certify the LA Creel survey, but still we need that calibration, so that the estimates from 2014 through 2017 can be used now in combination with MRIP estimates to estimate prior years of catches in Louisiana, and so, basically, we need that time series extended backwards in time to use for recreational removals in the stock assessment. NOAA is working with MRIP consultants and with Harry Blanchett and Joey Shephard to develop these ratio calibration estimates.

We are aware of -- Well, obviously, there is a concern that MRIP is not very effective for these short-season fisheries, these pulse fisheries, and, the red snapper season being very short, we do consider it now to be a pulse fishery, and so that’s why we have worked -- When I say “we”, I’m really talking NOAA, but we have worked to develop these supplemental surveys to address this in cooperation with our Gulf partners.

What’s been done, to date, is that NMFS and GulfFIN have conducted three workshops in 2013, 2014, and 2015, in consultation with MRIP experts, to develop testable designs for state-based supplemental surveys. Based on these workshop results, four of the states are pursing implementation of surveys, and I will tell you about them in a moment.

NMFS did fund pilot projects in Alabama and Texas, and we have also made MRIP expertise available to all those states to assist in their survey development and to conduct peer reviews of the pilot test results, and so the progress to date, that I am aware of at least, is that, in Mississippi Tails and Scales, the pilot testing and peer review are complete, and certification is expected soon. Likewise in Alabama, the same story, but the next steps for both Alabama and Mississippi will be deciding how to integrate these supplemental surveys with the general MRIP survey.

To do that, we require the development of calibration methods to convert these new estimates backwards in time, essentially to create a landings series of removals in those states.

The Gulf Reef Fish Survey, pilot testing is ongoing or complete, and I’m not sure which one. The peer review will actually occur next month, in St. Petersburg, and they are also looking for now methods to integrate and calibrate that survey for use.
In Texas iSnapper, all I’ve been told, to date, is that the testing is complete and they are awaiting a state decision for how Texas wants to proceed. Now, perhaps John or someone else knows more than that about Texas iSnapper, but that’s the information that I have, to date.

DR. FROESCHKE: I don’t have any more current than that.

DR. CALAY: Okay. That’s really all that I prepared. I mean, I did hear someone -- The general perception has been that perhaps the MRIP has underestimated the recreational landings and what implications will that have on the stock assessment, and certainly it’s in our plan to actually produce new estimates of the stock assessments once we do receive the new recreational estimates.

I just did want to caution that sometimes the results can be counterintuitive, because, if you actually have more landings than you expected, and, if those higher landings have been consistently higher throughout time, the stock assessment model will generally compensate by saying, if there were more landings, then the stock must have been larger and more productive, and so, at the end of the day, what you see is the stock status actually remains relatively unchanged, but your catch limits might be higher than what -- Your catch limits actually increase, and so you can take more catch out of that stock.

Now, the problem occurs when it’s not a consistent bias through time. Say maybe in 1980 MRIP was doing a fairly good estimation of recreational, but it got worse and worse as people moved toward cellphones and as people stopped answering the telephone. If in fact that recreational catch had been larger now, but it was actually fairly accurately estimated back in time, that can have different implications in the stock assessment. That result tends to be less optimistic, say.

We have produced a few test cases, where we have examined the impact on stock assessment of different recreational estimates. In most cases, the impacts have not been enormous, but we’ll be doing a full analysis of that once we do receive the actual recreational estimates. It’s on our annual plan, but those estimates have been delayed, and so we’re waiting to get them as well. I can answer any questions you might have.

MR. LANDGRAF: I have a question, and pardon me, but it’s from a layman perspective, but, as we were talking about different
areas, and going back to what Dr. Crabtree was mentioning about catches on artificial reefs, do more commercial -- Are more commercial fish caught in the west or the east? If so in the west, are they caught on artificial reefs or on natural reefs?

DR. CALAY: Well, it looks like -- It’s hard to -- I don’t know the answer as to the artificial and natural reef habitats in the west and what percentage of commercial landings occur. I know that -- This shows you the recent landings history by fleet, and so the dark-blue color on the top, those are the handline landings in the east, and then the medium-blue color below it is the handline landings in the west, and so you can see that the handline landings in the west are larger than they are in the east, by millions of pounds, at least.

MR. LANDGRAF: Right.

DR. CALAY: Longline, you’re looking at -- In the east, you’re looking at very small longline landings in the east and considerably larger in the west, but still relatively small, and so I would say the commercial landings in the west are larger than they are in the east, but I don’t know what fraction of those occur on natural versus artificial habitats.

MR. LANDGRAF: Handline, just because I work in the industry and I work offshore, or I had for many years, I would see a lot of commercial boats fishing around platforms, at many times during the year. Making the argument that fishing around the artificial structures depletes the stock faster, because they’re easier to catch, because you know they’re around a structure, and so you probably know where I’m going with this already. Should you go to the commercial folks and say, hey, you shouldn’t fish around artificial structures?

DR. CRABTREE: I don’t think we’re making the argument that it depletes the stock faster. I mean, the stock has a certain level of productivity, and it can support a certain amount of catch, whether you take it off of artificial structure or natural structure. My point is that you catch your quota faster.

MR. LANDGRAF: Right.

DR. CRABTREE: Now, for the commercial guys, they want to catch fish fast, because they don’t want to spend any more time out there than they have to.

MR. LANDGRAF: Their optimum size is --
DR. CRABTREE: My guess is most of them are fishing, a lot of them are fishing, on artificial structures and things, and so it’s probably platforms, like you say, in the western Gulf, and I don’t know that that’s necessarily bad. My concern with it is just more about how it impacts the recreational season.

MR. LANDGRAF: It seems like the more -- Getting to Marcus’s point about not being able to catch, which I somewhat respectfully disagree, about catching quality fish around platforms, but I think it depends on the area and the way you fish, but, if the recreational are going out and they want to catch quality fish, and there is so much pressure on these artificial platforms throughout the entire year by commercial, et cetera, it becomes a difficult proposition, and it also leads to recreational bycatch in trying to catch the bigger fish, right, when you can only catch a few of them and you only have a very few days to do it.

DR. CRABTREE: I do think, based on conversations with Greg Stunz and a lot of people who have done a lot of work on this, that rigs are different than the artificial reef zone off of Alabama. They have differences on it, and I can’t speak to how hard it is to catch big fish off of a platform relative to natural bottom, because I don’t have any basis to know one way or another.

MR. KENNEDY: A quick question for you, or maybe not quick, but anyway. In the state management, when it comes to all the data acquisition and such, currently, everything has -- All the management plans have to be operated for maximum sustainable yield. Earlier, there was an alternative mentioned of managing for maximum opportunity, and whether they can or can’t, under the law, all of the states are going to try to manage for maximum opportunity, meaning maximum days.

As the data is collected, it seems like there is always a catch-22 for recreational landings. If we catch a lot of fish, it seems to indicate a healthy stock, but it also makes us catch our quota quicker, and we have less fishing days, but, if we catch less fish, we don’t necessarily indicate that we have a healthy stock. We indicate that we have an unhealthy stock, but we don’t reach the quota quicker, and so we have more fishing days, and so that seems to be a no-win situation in the landings data for recreational anglers.

Then we’ve got this conundrum with being required to manage for maximum sustainable yield, which sends us down one road, versus
managing for maximum opportunity and access.

DR. CALAY: Well, I can address at least one part of that question. Your concern is really with regard to catch rates. I mean, that’s where you see it in the stock assessment model. If the catch rates decline, that indicates that abundance is declining in the stock assessment model, and so there is always a concern that, if the catch rates go down for any reason that is not correlated directly to abundance, that there is a hesitancy to provide that sort of information, fearing that the stock assessment model will misinterpret it.

We have a scoping process for data that’s fairly -- It’s very open and transparent, and we spend a lot of time talking about whether these indicators of abundance truly track abundance or whether there might be management effects or fishing behavior effects, and so I think you can rest assured that, if that sort of information is provided, that there has been some decision to reduce the catch rates by moving fishing off of artificial structures, for example, that we’ll be aware of that change and we will try to incorporate it into the stock assessment so it won’t have a negative impact on your perception of the trends in abundance.

It does point out the need for emphasizing the collection of fishery-independent information in the Gulf. Most of our stock assessments here do rely on fishery-dependent information, and some of our stock assessments, and not red snapper, but some of them are fully dependent on fishery-dependent information.

As we introduce these management complexities, and as we increase the number of management regulations that exist and the differences between how they operate in different areas or states, we will need to depend more and more on fishery-independent sources of information.

That’s something that I have been screaming from the rafters at Bonnie for years, is that the value of our fishery-dependent information is currently being degraded over time, and it’s becoming less and less useful to us, and now we’re really in the position where we’re starting to truncate series and not consider them anymore, because we can’t determine what has been a management effect or a fishing behavior effect versus an abundance change.

Now, you also talked about reference points, and all I can really say about that is that the Science Center and SERO certainly have been communicating about what sorts of reference
points might be considered. Under Magnuson -- I don’t want to really talk about -- I don’t understand fully what flexibility that we have under Magnuson.

It specifies maximum sustainable yield, and I’m not a lawyer, and I don’t work at Headquarters. I just execute stock assessments, and there may be more flexibility, and there may not be, but certainly we have discussed that, in a recreational context, where biomass is not your objective, where fishing opportunity and days-at-sea are your objective, that a reference point might look very different, and so we’re certainly communicating about what options might exist.

What’s legal under Magnuson or under any changes, any modified law, that might come up, I can’t comment on that. I am not willing to comment on that. I am not informed. I don’t know if you want to talk, Roy.

DR. CRABTREE: Well, I will just say that maximum sustainable yield makes sense for a commercial fishery, because profits equal pounds, but imagine if you had a fishery that was only charter boat, and that was the only sector that was there, and your goal was to maximize the amount of economic gain you make from it.

You would want to maximize the number of trips, right, because that’s how it would produce profits, and so what you would want, in that case, is the fishing to be good enough that people -- That it kept their interest and they had enough fun that they would pay to go fishing, but you wouldn’t want to have it so good that you caught them all up too fast.

When you get into a mixed fishery, like red snapper, where you have charter boats and private and commercial interests, it gets a lot more complicated, but it’s not clear to me that maximum sustainable yield means much to how you would manage a recreational fishery, but it is what is in the statute, and I think to go towards some other measure would require legislation, and I’m not aware of any -- Of all the legislation that is being considered now, I don’t believe any of it addresses the issue of the reference point.

CHAIRMAN CAPLINGER: Dr. John.

DR. FROESCHKE: It’s 3:37, and I think it would be the time, if you guys have some general discussion or some overall recommendations or something, I think this would be the time to have that discussion.
PANEL DISCUSSION AND RECOMMENDATIONS TO IMPROVE ACCESS FOR 
RECREATIONAL ANGLERS IN THE RED SNAPPER RECREATIONAL COMPONENT

CHAIRMAN CAPLINGER: This part of our purpose here, we were 
supposed to provide more -- We were supposed to look into 
management measures which would provide more quality access to 
the resource in federal waters, reduce discards, and improve 
fisheries data collection.

I think we need to work towards those three buckets of 
recommendations, but what I would like to say quickly is that, 
personally, I am kind of the cup is half full kind of guy. I 
have heard everything today, and I maybe I read it that way, but 
it sounds positive. I hear that we have more fish, and I hear 
we’re probably not overfished, and I hear that just a tiny 
portion of the fish are on artificial reefs, and so there must 
be this giant swarm of fish out there that we clearly cannot 
find, and so that’s a good thing.

I hear that the management tool we’re using is overestimating 
the amount of fish we catch, yet we clearly haven’t hurt the 
fish population, and so that’s a good thing, and we’re in favor 
of state management, which I think gives us a better voice and 
allows some flexibility, which we’ve never had in the past, and 
so that’s a good thing.

Just as a simple guy, a simple philosophy, a simple point of 
view, I think that things are a lot better than where we were a 
year ago. I think there is still -- We’re waiting on the latest 
stock assessment, and that should help clarify, maybe, some of 
this, and there is also that ten-million-dollar grant study 
that’s been used to maybe identify what -- Maybe clarify or 
provide a little more insight to how many fish we have.

I think we’re headed in the right direction, and the council is 
going to be -- I think it’s going to be a tough spot here, and I 
think that they are being placed in a position where they’re 
going to be against each other to try and come to a conclusion, 
and so, the more clarity we can provide to them as recreational 
anglers, the better off, I think -- Hopefully, the better off 
their decision, or the easier their decision, might be.

I am encouraged about the fact that this fishery may get removed 
from the Gulf Council and into the states’ hands, and so, as far 
as access, we made a motion earlier to support state management 
for recreational red snapper, that we support recreational state 
management for red snapper, and we also had a suggestion to
review the allocation, which it’s clearly been too long, and things have probably changed a good bit.

We have some issues with separating the for-hire and the recreational anglers, and does anybody else have any suggestions to help with access to federal waters? Is there anything else that we need to mention? John, if there are things that we should be talking about that we like or talking about that we don’t like, please help us throw some stuff on the wall, and we’ll figure out what sticks.

MS. RALSTON: Charlie, can I ask a question?

CHAIRMAN CAPLINGER: Yes, ma’am.

MS. RALSTON: I know that there has been some discussions within I believe it’s the SSC about some additional flexibility that the council may already have in management, apart from state management, and could somebody, either from the council or Roy or Shannon, speak to that, just kind of beyond this hard-poundage ACL? It seems like there are some other options that may be available, and am I misstating that?

DR. CALAY: I’m not sure that I understand your question completely. Are you asking if there are alternatives to ACLs, in terms of how a fishery can be managed?

MS. RALSTON: I think in terms of managing to a hard-poundage ACL, and it does seem like there is some flexibility, even within Magnuson, that could be used by the council, particularly for the recreational sector. We’ve had a lot of conversations about how MSY is not probably the most appropriate management tool for recreational anglers, and so are there things outside of that box that we could encourage the council, and by extension the SSC, to further explore that might open up some more doors?

DR. CALAY: All I can really tell you in that regard is that we have argued for a number of years, particularly in the context of the U.S. Caribbean, that these hard ACLs may not be the most appropriate management tool. We have been given various guidance over the years. At times, it’s been a very, very strict interpretation that there were no other options and that ACLs had to be put into place and complied with, essentially.

Lately, all I can say, from personal experience, is that there does seem to be more discussion now about whether there might eventually be more flexibility. I don’t know, currently, how
much flexibility General Counsel, for example, is willing to consider, and so it would really be, probably, a more appropriate question for the Office of Science and Technology or General Counsel.

DR. CRABTREE: It’s more difficult with red snapper, because you have specific language in Section 407 that requires us to have quotas, and it requires us to close the fishery when they’re reached. Now, we’ve been round-and-round about quotas being in pounds or numbers, but I don’t think it really makes much difference one way or the other about that. I have testified in front of the Senate Commerce Committee and expressed the agency view that we think that Section 407 should be repealed, and I did that years ago, and it’s still there.

MR. LANDGRAF: The 407, is that -- Repealing that, is that a part of the Modern Fish Act?

DR. CRABTREE: Yes.

MR. LANDGRAF: Okay.

DR. CRABTREE: There are revisions that would get rid of it.

MR. LANDGRAF: That’s one of the notes that I had earlier, and I’m assuming that this committee supports the Modern Fish Act, and I know we’re taking resolutions, and does it make sense to reinforce that resolution to the council to support the Modern Fish Act?

CHAIRMAN CAPLINGER: Yes, I would think we certainly should bring that motion up.

MR. LANDGRAF: Okay. I will make it. This committee would encourage the Gulf Council to join our ad hoc sub-committee in supporting the Modern Fish Act.

MR. DOUGLAS GREGORY: The council is prohibited from lobbying Congress, and so we could not -- The council could not send any letter to Congress advocating for any measure or bill. All we can do is answer questions that Congress poses to us.

MR. TURNER: The Senate Committee and the House Committee. Make that motion to them, because I thought I heard earlier that the Gulf Council cannot do it, but I don’t believe that that applies to this ad hoc committee.

MR. GREGORY: This committee can only make recommendations to
the Gulf Council. You cannot make recommendations directly to National Marine Fisheries Service or any other entity.

MR. TURNER: So write your congressmen and your senators.

MR. LANDGRAF: But that doesn’t mean that our motion still can’t go to the Gulf Council in our body of work.

MR. TURNER: I second it.

MR. LANDGRAF: Whatever you want to call our committee, ad hoc public snapper recreational committee, fully supports and endorses the Modern Fish Act, and I think it’s H.R. 200.

CHAIRMAN CAPLINGER: Can we have a second on that?

MR. LANDGRAF: Let’s see how the language reads and let people see if it’s adequate.

MS. RALSTON: It’s my understanding that the Modern Fish Act, which is H.R. 2023, was incorporated into H.R. 200, which is a little bit broader Magnuson-Stevens reauthorization, and so however you want to word it is fine.

MR. LANDGRAF: If that’s more appropriate.

MS. RALSTON: Maybe you could just say the “Modern Fish Act as incorporated into H.R. 200” or something.

MR. LANDGRAF: Okay.

AP MEMBER: Second.

CHAIRMAN CAPLINGER: All in favor; any opposition. That motion passes.

MR. LANDGRAF: Charlie, one other thing that I heard earlier was some discussion around the black market of fishing in Mexico and the lack of either awareness or enforcement in that, and I don’t know if there is some kind of motion or recommendation to the Full Council to possibly learn more about that issue and explore opportunities that can be done to help mitigate that.

I don’t know if that’s a motion-able or if it’s just a recommendation, and it might be just a comment, and I don’t know if the committee wants to do anything with that, but I did hear that as some discussion earlier.
CHAIRMAN CAPLINGER: It’s clearly an issue, but I just don’t know what to do about it.

MR. LANDGRAF: I guess my question to Doug is do you feel that this issue is attracting enough attention at the Gulf Council level? If it is, then so be it. If we need to just make it as a point of emphasis for the council, it might be good to add.

MR. BOYD: Yes, that’s what I was going to say, was I think that, if you want the council to take further note, no matter whether they are addressing it or not, you ought to go ahead and make a motion on it.

MR. LANDGRAF: Okay.

MR. BOYD: I would like to just throw something out after we get finished.

MR. LANDGRAF: Does somebody want to help me with that motion?

MR. TURNER: Just as a clarification, we’re making these in the form of motions, but these are recommendations, because we were asked earlier to make them in the form of a motion.

CHAIRMAN CAPLINGER: Correct.

DR. FROESCHKE: Yes, that just helps us, such that we don’t misinterpret your advice, which we try to turn these around correctly.

MR. LANDGRAF: I will throw this out, and we can nitpick with the wording, and so the recommendation from this AP is to bring -- It’s for the council to investigate the -- Help me out there, Mark.

MR. TURNER: Investigate the impact of the illegal red snapper fishery occurring in U.S. waters operating out of Mexico.

MR. LANDGRAF: That is exactly what I said.

MR. TURNER: Illegal fishery occurring in U.S. waters operating out of Mexico.

CHAIRMAN CAPLINGER: Is there a second?

AP MEMBER: Second.

CHAIRMAN CAPLINGER: All in favor; any opposition. The motion
passes.

MR. BOYD: If you don’t mind, there is an issue that’s been batted around at the council for a couple or three years, and I just wanted to make sure this group is aware of it. There is a circumvention, if you want to call it that, of the law, basically, and it’s legal.

In Texas, we have a very creative charter/for-hire guy who went and bought commercial quota, and what he does is he takes recreational fishermen on his boat and they volunteer to catch his commercial quota for him, and then he takes that into a fish house, and the fish house cleans them and sells them to him at a, quote, unquote, preferred rate, and they don’t pay anything to him, which circumvents the law, and it’s legal.

I’m still kind of unsure whether they’re considered crew or not, since they’re volunteers, and the Coast Guard has looked into it, and they don’t think that there is anything wrong there, but it obviously is getting around the fact that we don’t do intersector trading in red snapper or any other fish that’s in an IFQ program.

He is very creative, and he’s a very smart guy, and he has created a way for him to shift commercial fish to the recreational fishermen, and I don’t know how many of you all understand that or know about it, but, at some point, if you all meet again, you may want to discuss that. It’s a pet peeve of mine, and it’s a pet peeve of, I can tell you, the State of Texas game and law enforcement people, because they can’t touch him, and it’s just something this group ought to know about, because you’re dealing with both recreational fishermen who fish in their own boat and on for-hire boats, and so I just wanted to put that out there. Thank you.

CHAIRMAN CAPLINGER: Roy, is it possible right now for recreational anglers to buy commercial quota, if I wanted to take my family out, and I said, you know what, I don’t know if I’m going to get to fish next year and I’m going to go buy 500 pounds of quota from some guy that wants to sell it?

DR. CRABTREE: You can buy it, but you can’t fish it unless you buy a commercial reef fish permit and put it on your boat, and that means you have to put a VMS on it, which would essentially make you a commercial fishing vessel.

MR. MILLIER: Kind of along those lines, I think, last time, we talked about tournaments having a quota specific for them, and
is that related at all to the tournaments? When the quota has
been met, can they buy commercial quota for their weekend?

DR. CRABTREE: They cannot right now. I mean, they can buy it,
but, again, they wouldn’t be able to fish it. Now, I have long
felt like one way to get around some of this would be to set up
a situation where a tournament or someone could apply for a
special -- We could create a new permit, and they could apply
and get the permit. They would have to have a weighmaster and
ways to enforce it, and then they could buy or lease shares, or
fish, from the commercial guys, and they could have a fishing
tournament out of season, but that gets into what Doug says
about intersector trading.

I can remember, ten years ago, that was what the recs wanted,
and they were going to buy out all the commercial guys and get
all the fish. Somewhere along the way, it became a dirty word,
and everybody turned against it, and it’s never been clear to me
exactly why.

What Doug described with these charter trips like that, there is
some of that going on, and I have had the attorneys and everyone
look at it, and it is legal. To my knowledge, the council has
not once proposed looking at a way to stop that, and I think
largely because people look at it as what is it hurting, and
that’s kind of my attitude. It’s not clear to me what it’s
hurting.

MR. BOYD: My feeling, just so everybody will know, and I have
said this to the guy who is running most of these trips, is
that, if we’re going to have intersector trading under the
table, quote, unquote, legally around the law, why don’t we do
it for everybody? Let’s have a free market in these fish, and I
don’t know why the intersector trading issue has not been more
popular.

I can tell you that I talk to a lot of recreational fishermen
who would like to see intersector trading, and they would like
to be able to buy and fish, just like you said, 500 pounds for
my family over the year, and so that’s -- I am not going to
encourage you to do some motion, but I want you to understand
that that’s going on out there, if you didn’t already know.

MR. VALENCIANO: The motion that I have was to explore the
requirements of descending devices to reduce discard mortality.

CHAIRMAN CAPLINGER: Can you read that again? I’m sorry.
Mr. Valencia: Explore the requirements of descending devices to reduce discard mortality.

Mr. Box: To kind of interrupt, Rudy, just for a second, because I had a question, for anyone, in regard to discards and mortality, and I’m going to try to make this short, because it could go into something else.

Assuming that all commercial activity goes on in federal waters, and also assuming -- What I’m hearing here is that almost 80 percent of recreational catch is in state waters, and is that reflected in the adjustments for when it’s allocated out to each sector that the rate of mortality would logically be greater on the commercial side than on the recreational side, or is that something that’s already been addressed that I missed?

Dr. Crabtree: That is built into the stock assessment and the release mortality rate.

Mr. Box: The fact that a lot of the fish comes out of the state?

Dr. Crabtree: It is much higher for the commercial fishery, and that’s based, I think, more on the way the commercial fishermen fish and the observer studies that we’ve done.

Mr. Box: Okay. What made me think of this is, in the state waters, I think we all agree that the fish has a greater chance of survival to be released, and I can’t help but notice, and I have talked to other people about it, that, out on the market, in the finished market, when you go into the fish markets and what have you, you very rarely see big fish, and I think the recreational guys would be more likely to keep those, for whatever reason, but I am just wondering if there is any data that shows that, with the exception of maybe an observer on the boat, that the commercial guy -- If we’re getting an equal allocation on the actual mortality of probably these big fish, in particular, and I understand about the twelve-inch limit for the commercial guys, so they don’t want to throw it back, but I’m wondering, if they want to throw the bigger fish back, is there -- I guess where I’m going with this is I heard allocation review come up.

I just wondered if this could be part of possibly getting the recreational guys some sort of a -- Without changing the whole scenario, getting the recreational fishermen maybe a little bit bigger slice of the pie, just based on some sort of review in regard to this.
DR. CALAY: I believe that, currently, and I can look it up and be certain, but I believe that, currently, we’re talking about a 10 to 20 percent release mortality rate on the recreational sector versus 50 to 75 percent on the commercial sector.

The stock assessment is already aware -- I mean, we are already provided with discard mortality estimates, and so it’s already -- We know the discards from these fisheries, and we’re applying a discard mortality, which is obtained usually from academic partnerships, and I think that the catch limit we’re providing is really the landings that you can allow, and we’re assuming that the discards are going to remain proportional to the landings within a given sector, and so, where you would have any kind of ability, maybe, to get a larger number of fish is if you could demonstrate that you can reduce the discard mortality in some way, even though your discard mortality has changed.

MR. BOX: So the discards in shallow water and the discards in federal waters is already calculated into the --

DR. CALAY: Correct.

DR. CRABTREE: The statistic of 80 percent from state waters, that was the case, I think, in 2013 or 2014, and it varies a lot from year-to-year. For example, I’m sure last year, in 2017, a much higher proportion of the catch came from federal waters, because we had that forty-day federal season, and I’m sure, if we do these exempted fishing permits, or regional management, my guess is that’s going to shift more effort back out into federal waters, and so it’s fluid, and that makes it difficult to make real management changes, because it’s constantly changing. It’s not stable.

DR. FROESCHKE: The 80 percent was based on the estimate in the 2017 recreational season that Nick and I put together prior to the additional supplemental season, and so, if it had went on as it was originally established, that’s what was estimated.

One other thing, just while I’ve got it, but I guess I would just like some feedback, so I could provide the council on your behalf, but the feeling that I’m getting is that, the concepts of changing bag limits and size limits and things, you’re not really interested in those kinds of shifts.

AP MEMBER: I am.

DR. FROESCHKE: Okay, and so we talked about those last time.
If you have some more general recommendations or specific recommendations, it would be great to get those on the record.

CHAIRMAN CAPLINGER: We have a motion to explore the requirements of descending devices to reduce discard mortality, and I think -- I will just speak as a recreational angler. I got one of these devices as a test program, and we’ve been using it, and it’s a Seaqualizer. You set it to your water depth and drop the fish down, and it’s perfect. We have never had a problem, and we’ve never seen a fish float up.

I think that, as recreational anglers, that we’ve always been willing to self-regulate ourselves, and we should be willing to require these on boats, on recreational boats, even though the discard is not as great, 10 to 20 percent, but it’s still -- That’s significant, and, just as a matter of ethics, we should try and reduce fish mortality at every chance we get.

I am absolutely in favor of this, and my question to you all is should this be mandatory, should this be suggested, and I’m in favor, personally, of making this mandatory, as long as the device isn’t hundreds of dollars or cost prohibitive, but I think it is a good thing to do, as recreational anglers.

For that point, to that point, if the commercial discard is 40 or 50 percent or worse, those guys can do their part too and sink some of these fish back down without a big deal, and I would suggest to the council that, as a fishing group entity, commercial and recreational, we should be working towards zero discards. We as recreational anglers will certainly take a leadership role, but commercial anglers should feel some responsibility to this as well. Shannon.

DR. CALAY: Just so we’re clear, what we actually use in the stock assessment is that, in the eastern Gulf of Mexico, prior to venting, the recreational fishery had a release mortality rate of 21 percent. After the venting requirement, it was reduced to 10 percent. It’s very similar results in the west.

For the commercial vertical line fishery, before venting, it’s 74 percent mortality. After venting, it’s 55 percent. In the west, it was even higher. It was 87 percent mortality prior to venting and 74 percent after. The longline fishery also had 74 percent mortality prior to venting and 55 percent afterwards, and it was higher in the west.

These numbers are all in the stock assessment report, but we have already considered the fact that the recreational fishery,
because it predominantly in shallower water, and the handling
time of the fish is much shorter, and the fish are not remaining
on deck for a long time prior to venting, for example, but the
release mortalities are substantially smaller in the
recreational sector.

These numbers were reevaluated at the recent data assessment
workshop for red snapper, and they may have changed somewhat,
but the general magnitudes are similar, and so the challenge
would be to reduce these mortality rates even further in the
recreational and commercial sectors.

CHAIRMAN CAPLINGER: What is the difference in us catching over
our limit and being penalized and the commercial fishermen
killing a mortality rate of 70 or 80 percent and then having no
issues whatsoever, no ramifications?

DR. CALAY: I am going to try and answer this correctly, and,
again, I will call on Roy and John and others to add, but we are
asked to produce ACLs in just landed number, and so the
assumption is that we’re not directly managing discards. What
we’re assuming then is that the magnitude of the landings and
the discards are proportional.

As you allow the fishermen to catch more fish, they will also
discard more fish, and that’s the assumption we make. If you
restrict landings, you will also reduce discards, but the ACL is
landings only. It’s actually what the fishermen are allowed to
land, and so the stock assessment model counts the dead fish.
All removals are counted in the stock assessment model, and the
allocation is applied to the landed fraction, and so we’re
basically saying that the --

CHAIRMAN CAPLINGER: The dead fish, there is no ramifications
for killing fish, because you don’t bring them in.

MR. KENNEDY: Commercial could bring more in if they didn’t kill
as many with the dead discards.

DR. CALAY: Right.

MR. KENNEDY: That’s their problem. They’re killing more than
we are incidentally.

DR. CALAY: I am not entirely certain how it interplays with
allocation. It is true that, if you killed less fish, you could
catch more fish, but I’m not sure how it plays out when you look
at the allocation, because the allocation is applied just to the
landed fraction.

DR. CRABTREE: Don’t confuse the mortality rate with the number of dead discards. The mortality rate in the commercial fishery is higher than in the recreational, but I think the number of discards in the recreational fishery is much higher than in the commercial fishery.

The IFQ program has been effective at reducing discards, I think, in the commercial fishery, by and large. The biggest problem we still have is in the eastern Gulf with the grouper fishery, where some of those guys don’t have enough IFQ shares to cover the incidental catch of red snapper that they have. I think that’s gradually getting better over time, but it’s not as good as we want, but it’s not just the rate that counts. It’s the number of discards.

MR. TURNER: May I make a friendly amendment? The motion should be to explore the “requirement”, and take the “s” off, of descending devices to reduce discard mortality in all sectors, and that includes commercial, headboat, and recreational.

CHAIRMAN CAPLINGER: Yes, sir. We have a question.

DR. KAI LORENZEN: We are doing a study on barotrauma mitigation measures, and one of the results is that venting is still much more commonly used than descending, and so about 80 percent of barotrauma mitigation uses venting tools rather than descenders, and so there is some confusion, I think, about the usefulness of venting, because there was a venting tool requirement that was taken off the books, and people see descenders to be more cumbersome and more expensive, and they perceive a stronger social norm to use venting.

One of the things, and I’m bringing this up because I think, if you only make descending devices mandatory, you may actually lose overall barotrauma mitigation if people reduce venting, but don’t adopt descending. I would suggest to consider moving descending or venting.

MR. DYLAN HUBBARD: On that same note, as a partyboat operator, it’s very difficult to use descending devices. We have four charter boats and two partyboats, and, on a six-pack charter boat, descending devices are realistic, as long as there’s not sharks around. If there is sharks around, venting becomes highly regarded as a better option, because you can vent the fish and throw it away from the shark and it’s able to escape. With a descending device, you’re basically just feeding the
sharks and increasing dead discards.

In a six-pack atmosphere, without sharks, descending devices are regarded as a better option, in our opinion, in our experience, but, in a partyboat setting, it is unrealistic, and it would increase dead discards, because a venting tool is easy. Everybody has got one, and it’s easy to vent a fish and let it escape quickly, whereas, using a descending device, you’re going to have to have a rod and -- With a descending device, you’re going to have to stop fishing and walk that fish to that rod and hook it up.

On a partyboat, when you’re on a good bite of fish, these endangered red snapper, we can’t get away from them. There is basically sixty of them on deck, and it just simply won’t work. You can’t descend that many fish quick enough before they pass away, and so venting, I would agree. Venting tools being a part of this would be very important as an option.

CHAIRMAN CAPLINGER: I don’t think we’re saying not to vent. I think if you are more comfortable and you think that’s a better alternative, then absolutely. The bottom line is we’re trying to reduce dead fish. All I’m saying is that these descending devices work, and it’s new technology. When applicable, they work great. The question is should we require these or should it be voluntary, but we ought to use different techniques to get the fish back down safely.

MR. HUBBARD: Requiring them on a vessel would not be a bad thing. I think that would be a wise thing, but I would just caution the fact that it be very important, especially when recommending to the council, to include venting as an option.


MR. GARY JENNINGS: I would suggest that the council look at the credit that the west coast council gave to recreational anglers for using descending devices with I think it was rockfish, and they were able to increase the recreational allocation by the use of descending devices.

CHAIRMAN CAPLINGER: That would be one of the goals, yes, absolutely.

MR. TURNER: After the word “devices”, put “and/or venting”.

MR. LANDGRAF: I hate to nitpick the statement, but should the word “feasibility” be in there, to explore the feasibility,
rather than “requirements”?

MR. TURNER: We want it to be required though.

MR. LANDGRAF: Okay. Fair enough.

CHAIRMAN CAPLINGER: Is that right, everybody, that we want --
Yes, sir.

MR. HUBBARD: I apologize that I keep interjecting, and I’m not on the AP, but, as far as feasibility, what we were discussing earlier, what you guys were discussing earlier, was the requiring that one be onboard a vessel, and so having it onboard the vessel -- Just because there is a shark underneath you and you want to use venting, it doesn’t mean that you can’t require it to be onboard the boat. I think it should still be on the boat. That way, if there is not a shark there, you can use a descending device.

MR. LANDGRAF: I was more talking about what Charlie mentioned about how costly are these devices, et cetera.

MR. TURNER: $69.95. That’s what one costs, retail.

CHAIRMAN CAPLINGER: Are we good with this motion? Do we have a second? We have a second. All in favor; any opposition. The motion passes.

MR. TURNER: I have a motion.

CHAIRMAN CAPLINGER: Yes, sir.

MR. TURNER: I would like for us to recommend to NOAA that they find a way to give the states authority -- We have, in Texas, a thing called the shrimp buyback program, the shrimp license buyback program.

I would like us to recommend to NOAA that they give the states the opportunity to do the same thing with commercial quota. It’s readily available, and they could take it and buy it, whoever it was, whether it’s, I don’t know, CCA or some other group, and then reallocate it or take it out of the market altogether, whatever would best serve the fishery.

AP MEMBER: As a management tool.

MR. TURNER: Right, and I know that I just heard a minute ago that somebody -- I think Dr. Crabtree mentioned that they talked
about it a few years ago, and it didn’t go over, but it worked in Texas, as far as the shrimping, and that’s one of the things that probably helped the redfish stock, because of all the bycatch from the shrimpers, particularly with regard to redfish and trout and so forth for the bait shrimpers, or the bay shrimpers. The motion is for commercial quotas to --

**MR. BOYD:** You want to buy back the permits, or do you want to buy back the quota?

**MR. TURNER:** Well, the poundage or both, either one.

**DR. FROESCHKE:** What would happen with the quota once it was bought by the state?

**MR. TURNER:** Then the state would determine what to do with it.

**DR. FROESCHKE:** So the state would have to basically become a quota holder?

**MR. TURNER:** Well, it doesn’t necessarily have to be the state. It could be, like I say, an organization or a conservation group, whatever.

**DR. CRABTREE:** I think what you’re doing is asking the council to revisit intersector trading.

**MR. TURNER:** I don’t know, because I’m not that familiar with it.

**AP MEMBER:** It could be just another management tool that a state could use.

**MR. KENNEDY:** Boy, that’s a slippery slope, because you would really have to be specific on the wording on that for what organizations or who may be able to buy the catch, because EDF may have enough money to buy it all, and nobody would ever go fishing. That may ultimately go that route.

That may sound good to some, sure, but there are just so many possibilities there that I think it would be tough, is all I’m saying. It would be tough to figure that out.

**CHAIRMAN CAPLINGER:** Go ahead, John.

**DR. FROESCHKE:** I just had a quick question, but I think that you can already do this. Like a conservation group could buy quota today. I don’t think the council has to do anything. In
order to fish it, you need a permit, but, if you’re just
interested in not using it, you could already do that.

MR. TURNER: Well, again, the idea is to give the state or the
entity the ability to utilize this sector, if you will, for the
best use possible for the fishery and not just buy it and sit on
it. There could be other things that it necessarily could be
used for. I mean, they could use it as a non-profit and allow
people to -- If states take over, which I think is like -- I
don’t think the chances of that, with a 75 percent necessity of
a vote, is ever going to happen, but, if they did, then they
would have that flexibility and the ability to do with it what
they will.

DR. FROESCHKE: I just want to try and understand your intent,
so, when I pass that on, that I don’t get it wrong, and so I
think I understand what you’re trying to say.

DR. DIAGNE: In line with what John just mentioned, if the maker
of the motion would just elaborate a little bit to give a way to
the states to buy, I guess, commercial quota and utilize it or
fish it or whatever, but just grant, I guess, that additional
authority, quote, unquote.

MR. TURNER: It’s creating the non-consumptive value.

DR. DIAGNE: For the option value, the bequest value, all of
those, you can do it today.

MR. MARQUEZ: Do we want a motion that really is targeting the
states to do this? I mean, we seem like we’re putting the cart
before the horse when we’re talking about state management, and
that hasn’t really happened yet. If that was in place, then it
seems to maybe this would be more appropriate, but we really are
getting at the question of intersector trading, if we want to
broaden this up more, rather than the focus being on the states.

MR. WILLIAMSON: I want to reiterate my objection to this whole
idea. You’ve got a public resource there that, if it is
something that the recreational community has a need for, then I
think there should be a concerted effort for a reallocation of
this public resource to the public, which the private sector is,
and not a commercial sector.

The idea of the states going out and buying a public resource
with my tax dollars offends me greatly. I am offended by the
give-away program of the council to endow a few, initially,
without any program to redistribute it to the other commercial
folks who would like to have some of it, and it’s held by a few folks. I know I’m singing to the choir here, but I just wanted to voice my opinion and put it on the record that this motion, to me, it just makes no sense. Thank you.

CHAIRMAN CAPLINGER: That is a great point. That is a great point, and we have already given the go-ahead to talk about reallocation, and we’ve already made that statement, haven’t we, John? Isn’t that what you’re going back with, that we have an allocation issue and that needs to be readdressed?

DR. FROESCHKE: Yes, you made an earlier motion about that, if I recall.

CHAIRMAN CAPLINGER: Okay, and so that is already there. I think something like this though, Troy, could at least -- It is another tool, and it is not ideal, because it is a public resource, and those individuals who have been given it don’t pay any royalties, like you would timber or minerals or anything else.

DR. FROESCHKE: Okay, I guess you did not make a motion yet on revisiting allocation.

CHAIRMAN CAPLINGER: Okay. Well, that will be next. Let’s go back to the motion that Mark put up. Does anyone -- Can we vote on this? Is there a second for this, this intersector trading? No? We do not want to pursue this, and is that right? Okay. That motion does fail.

We do need a motion to -- Kellie, why don’t you help us with this? A motion to review the historic allocation between the commercial and recreational sectors.

MS. RALSTON: Maybe we could say for the council to reconsider red snapper allocations and incorporate a discussion of a broad suite of factors in their evaluation, and so the implication there is it’s broader than it was with the previous Amendment 28 conversation. Feel free to wordsmith that.

CHAIRMAN CAPLINGER: Assane, yes, sir.

DR. DIAGNE: Just a question, if I may. If you guys could help in listing some of those factors, that will be great, I think, to make this more specific, if you have some of those factors in mind.

MS. RALSTON: I think if you could look at social, economic,
historical catch, and, if anybody else has any other ideas, I’m happy to include those, but I just remember -- Unfortunately, Roy is in the other room, but the ruling on the lawsuit had to do with the fact that there were certain things that weren’t considered and fully discussed, and so perhaps -- She was specifically referring to the fact that the commercial harvest was constrained under the IFQ program and that the council didn’t give that full consideration. I know there’s some disagreement about how that might play in, but, in order to avoid future concerns and conflicts, I think that does need to be addressed.

MR. BROWN: We could look at the change in effort, the change in how many commercial fishermen are out there today versus recreational fishermen when the data was originally looked at.

MS. RALSTON: Yes, and it seems to me that the big component is really looking at that historical basis and then also updating it with current information as far forward as we possibly can, and so I don’t know how you capture that.

MR. MILLER: I have a question, just for my knowledge, I guess. How much of the commercial fish are sold outside of the five Gulf states? Does anyone know?

DR. FROESCHKE: I don’t know. I don’t know that there are many dealers outside of the Southeast Region. You have to sell a commercial fish through a licensed federal dealer. Do you mean that is consumed in Chicago?

MR. MILLER: Yes, and it’s a federal resource. Someone in Chicago can order a red snapper, right?

DR. FROESCHKE: Is Jason Delacruz still here?

MS. KAREN HOAK: No, he’s gone.

DR. FROESCHKE: I think he was the one -- They had those tag things, where eventually the tag followed the fish all the way to market, and so, when you got your meal, you could -- Gulf Wild is what it was called. You could scan it with like a QR code and see where that fish was caught and all that, and so it seems like the opposite would also be true, that you could track where it eventually ended up, but I don’t have that information.

MR. BOYD: I think it depends on which fish house they go into. I know that there is a large operation in Florida who sells mostly up the east coast, and I know our guys, our commercial
guys, in Texas sell quite a bit to Sysco, a food service company, and then also they sell a lot locally into smaller grocery stores, and so I think it has something to do -- I think Harlan sells mostly to restaurants in the New Orleans area, doesn’t he? Roy, do you know about that?

DR. CRABTREE: I think Harlan mostly sells catfish. I don’t know, but we might have some data on where red snapper goes, but I am not sure if we do or don’t.

MR. BOYD: I think it has to do a lot with where they offload those fish and then where they go.

MR. MICHAEL MCDERMOTT: I just wanted to get in line with the motion. I know we’re still hashing this one over, but I think we need to make some motion to fast-track the Snapper Check and Tails and Scales data to be accepted. I know, when I reviewed the PowerPoints that were in our materials, there was like a 200,000-pound disparity in the Tails and Scales data and the MRIP data, and there was like a million-pound disparity in the Snapper Check and the MRIP data for Alabama, and so that will get us some fish right there, if we can get that fast-tracked.

CHAIRMAN CAPLINGER: All right. Let’s vote on this motion.

MR. KENNEDY: Can I add one more thing? The most important thing they need to consider is the increased participation in the recreational sector here when they’re reallocating, because the commercial sector is fixed participation, and the recreational sector is ever-increasing, and that’s why we need reallocation consideration.

AP MEMBER: I agree. That’s why we’re here, right?

CHAIRMAN CAPLINGER: Can we add that to the motion?

MR. WILLIAMSON: I would make a friendly amendment to this motion to the effect of reconsider red snapper allocation, including all relevant factors, not limited to the following. Including, but not limited to.

CHAIRMAN CAPLINGER: It’s in there. Including all relevant factors, but not limited to the following. Is that right?

MR. WILLIAMSON: Yes.

CHAIRMAN CAPLINGER: Is that correct?
MR. WILLIAMSON: After “allocation”, change that to “considering all relevant factors”.

CHAIRMAN CAPLINGER: Okay. Do we have a second on this? We have a second. All in favor; any opposition. The motion passes.

To Michael’s point about getting each state up to speed and getting their management plan or management tools certified, should we make a motion to the Gulf Council asking them to make their best efforts to work together to come up with a plan for state management of red snapper, because my fear is that they’re going to get so caught in the politics of my snapper versus your snapper and your line versus my line and all that that we’re going to have a mess. Is that something that we should --

MS. CAMILLA SHIREMAN: You have a motion. Your first motion was to support state management of all recreational red snapper. Basically, it’s a statement of support.

CHAIRMAN CAPLINGER: Sure.

MS. SHIREMAN: If you want to reword it -- It was to support state management of all recreational red snapper.

MR. MCDERMOTT: The state management and the data collection methods, like the Snapper Check and the Tails and Scales, are two separate things, as far as I understand it, and so they could fast-track the data collection methods and spend as much time as they want debating the --

MR. LANDGRAF: Your motion, your point, is more specific to your state, because it’s the state with the most distance between each of the two datasets.

MR. MCDERMOTT: There is a big disparity in Mississippi and Alabama. It’s a million pounds in Alabama, and it’s 200,000 pounds in Mississippi. They said we harvested like 275,000, and Tails and Scales is saying we harvested 75,000 pounds, and so that’s like 1.2 million pounds between Mississippi and Alabama.

MR. LANDGRAF: Your statement is around closing the gap between the two, to have some consistency in the numbers.

DR. CRABTREE: If I could, one year’s estimate from Tails and Scales, though, was in fact higher than the MRIP estimate, and so the catch estimate from Mississippi is extremely uncertain, and so I would be amazed if they weren’t -- That doesn’t mean
that they’re giving different answers. We, effectively, don’t estimate a specific catch for Mississippi that’s usable, because there is so few fish caught in Mississippi.

MR. KENNEDY: Did you say the state plans should be approved soon, this year?

DR. CRABTREE: Yes, we expect that Tails and Scales and Snapper Check will likely be certified sometime during the year, but I don’t know when.

CHAIRMAN CAPLINGER: Yes, John.

DR. FROESCHKE: So two points. One, I think it would be very helpful, in terms of the state management, if you had a recommendation about how you thought the council should go about doing the allocation and whether it should be a landings-based or something else or a long time series or some of those options, if you had some thoughts about what you thought would be the best way, and that’s where the council has really struggled.

The other point is I’m just going to ask Shannon -- Remember, when landings are changed historically, say that you revise and say we caught 200,000 pounds less in some state, it needs to go through the stock assessment to figure out how many days and things you would get in a season, because that really -- If you caught less, the fishing mortality is the same, and so it must mean that the model is going to estimate the productivity is less, and could you just sort of elaborate on that, just so everyone is clear?

DR. CALAY: That is a very -- People often assume that, if the landings are in fact lower than what is in the stock assessment model, that means that they will get more fish. Actually, in general, the opposite is true. If the landings are in fact lower, when you put that into the model, it typically estimates that the standing stock was lower or the productivity of the stock is lower, and that usually leads to catch recommendations that are in fact lower than what you had before.

It’s a counterintuitive effect of stock assessments that the higher -- I don’t want to lead how people could misinform port samplers, but, in general, the higher the removals, the more productive the stock must be, to some extent, and so those removals actually scale your catch recommendation, to some extent. I mean, I am oversimplifying, because there are always situations where the stock is depleted and requires a recovery
plan, but it’s not a simple relationship, where, if the removals are lower, then you can expect the catch limits to increase. It’s not that simple.

DR. CRABTREE: If, for example, you’re going to use catch history to decide the state-by-state allocations, if you believe Alabama’s catches have been overestimated, then you need to correct those back in time, or you’re going to over-allocate fish to Alabama, and so that’s the question. Does Snapper Check -- Is the reality that their catches have been lower all the way back in time, or is this something that just happened?

I don’t think we know the answer to that, but it plays into how all of this works, but you can’t create fish just by switching a survey from one method to the next. That doesn’t put any more fish in the water.

CHAIRMAN CAPLINGER: On our third task, improve fisheries data collection, do we want to say something like recreational anglers would -- We encourage the Gulf Council to look at ways to electronically or to voluntarily electronically report fish or somehow we are willing to look at any method of improving the data collection, so that the modeling and stock assessments can become more accurate, or is there something that we should say in support of data collection, that we’re willing to take this on, as recreational anglers?

MR. MILLER: I may have missed it earlier, but, the ten-million-dollar effort that’s undergoing, that’s going to, obviously, play into this. Is there any input that we can give to that or recommendations or lobby for additional funding for it? Is there some discussion on that?

CHAIRMAN CAPLINGER: I think it’s in progress.

DR. CALAY: Let me just tell you that we think, just from the stock assessment perspective alone -- The objective here is to create a point estimate of the absolute magnitude of abundance of red snapper, and that is a useful piece of information, because we can fit that to the stock assessment. It will help us reduce uncertainty.

There is also information that Roy was discussing about maybe there will be tagging that occurs and other things that we can achieve out of that ten-million-dollar effort, but I think that, largely, there is already a steering committee for that, and it might be hard, at this point, to change the direction of how that’s headed, but there is always a need for additional
research.

I do think it would be helpful to understand that, as we increase the regulatory complexity, there is a need to enhance our fishery-independent sampling information, and so enhance fishery-independent age composition and length composition and indices is helpful.

You also need to realize that, if you want to essentially stratify this assessment into five areas, that does actually increase the amount of information you will need to conduct a similar stock assessment across all five of those areas, and so now maybe you’re looking at whether things like reproduction differ between these areas, and that’s a very difficult question to address correctly. That’s an expensive question to address.

This state management program is likely to incur additional costs to maintain the current complexity and the current quality of the stock assessment. In order to do that, multiplied by five, you’re going to have to -- There will be additional resources required. If you want, I can try to give you some kind of a list of what I think are the highest priority items, but --

CHAIRMAN CAPLINGER: Electronic reporting or electronic data collection, something that an angler comes into the dock and says, okay, I’ve caught -- Like iSnapper.

DR. CALAY: One thing that is very -- One of the things we feel about the stock assessment is the least accurate part of the information is our information about discards, the magnitude of discards, how large are the discards. How big are these fish? How old are these fish? Any information that we can obtain from the fishermen about discarding is helpful. We have very small observer programs for these discard estimates, and so that would certainly be very helpful.

MR. DUVALL: As far as the Snapper Check, two of the last three years, my boat has been the most reported in Alabama, and so we report every trip we make, and I think it’s very important, and it’s easy to do. It takes like -- We’re idling into the dock, and we get on our phone and we do the report, and it does ask for your discards, how many did you discard dead and that type of information, and I think, as recreational anglers, it’s our responsibility to provide the data, and so anything we can do like that to encourage or require, whatever you want to call it, to get good information, we need to recommend that, I think.
CHAIRMAN CAPLINGER: I agree, and it engages the fishermen, and I think, if they feel like they’re a part, then they will be more willing to help, more willing to report.

MS. RALSTON: I just threw this together to see what you all think about this. To request that the council explore voluntary angler reporting options of harvest and discards and how that information can best be incorporated into stock assessments and management decisions.

MR. LANDGRAF: Is that for all states or with applicable states, like Louisiana has the LA Creel, which is already an approved method?

MS. RALSTON: I would say it’s for all states. It would be separate from the state reporting, and so you would be looking at some sort of a phone app that you could voluntarily report your information.

As Roy said, what we need to understand is how that voluntarily-reported data comes in and how do we calibrate that with the harvest information that we’re getting from the state programs, that we’re getting from MRIP, and then how can we take that and use it, whether it’s to inform discard mortality estimates, whether it’s to kind of make our estimates of harvest more robust, and those sorts of things.

CHAIRMAN CAPLINGER: All right. Do we have a second? We have a second. All in favor; any opposition. The motion passes. We have fifteen minutes to get your motions in. We’re running out.

MR. KENNEDY: I will make one. Don’t start writing it yet, but just a little background. We went through many years of decreased creel limits on red snapper, and it has resulted in increasingly-short seasons, and so that’s counterintuitive. It’s not what they thought would happen.

You think, if you reduce your creel limit, you’re supposed to be able to fish longer, but it doesn’t work like that, and so, at our last -- Maybe at our last panel meeting, or maybe the last council meeting, Dr. Crabtree suggested that, if the stock gets fished down a little bit, then the size of the fish would go down and we wouldn’t reach the quota as much, and that’s one thing to consider.

The other thing to consider is, if we increase the creel limit, perhaps we’ll protect more of the bigger fish, and so maybe we can ask the council to consider increasing the recreational
creel limit on red snapper say to three fish with one fish over  
twenty inches, and the other two fish have got to be under  
twenty inches.

That way, I don’t think our pound catch rate would go up, but  
perhaps that would give us a longer season, something in that  
regard, going the total opposite direction that we keep going,  
and so ask the council to consider a three-fish recreational bag  
limit with a two-fish twenty-inch maximum with one fish over  
twenty inches.

CHAIRMAN CAPLINGER: I have no idea how that would work.

MR. KENNEDY: Maybe it will go in the other direction.

CHAIRMAN CAPLINGER: A comment from me would be it would hard to  
catch any under twenty inches where I fish, but I tell you that  
you bring up a good point, and something we discussed earlier,  
and that is, if there was a way that we had a slot and that we  
maybe either did not keep the big fish, or it would be one per  
boat, instead of you going out and catching six twenty-five-  
pound snapper, or twenty-pound snapper, and one big fish, and  
you focus on smaller fish, or a smaller size limit, and maybe  
you just kept one to bring back to the dock.

I don’t think there is any -- The meat quality of those big fish  
is not there, and to bring back ten or twelve of these big fish,  
I just think it’s just -- The signal is kind of ethically poor.

MR. KENNEDY: It seems like the average size has gotten close to  
ten pounds, and so, basically, that means a person’s limit is  
two ten-pound fish, and so each person brings twenty pounds in.  
Well, the idea is to fix it so that you make people bring in two  
three-pounders and one ten-pounder. You’re bringing back  
sixteen pounds instead of twenty pounds, and that train of  
thought might fix it so that we get more days, being that the  
other train of thought is continually decreasing our limit  
results in fewer days.

It doesn’t have to be twenty inches. It can be twenty-four  
inches, but I just want to force people to bring less pounds in,  
and maybe that will get us more days, because, in the stock  
assessment deal, we can’t win.

I am hearing, both options, we’re fouled. If we catch more  
pounds, great, the fishery is thriving, but we reach our quota  
too quick, and we get less days. If we catch less pounds for no  
apparent reason, that means the fishery is stressed, but we
don’t reach our quota as quick, and so we should get more days, but we might not, because, if the fishery is stressed, then the stock assessment is going to be worse.

What we have to do is figure out a way to catch less pounds, but for a reason, so that we don’t get tagged with the stock is stressed and making us catch less pounds.

CHAIRMAN CAPLINGER: Shannon, what do you estimate when it’s a two-fish limit and you put that into the model? What size fish are you estimating that each recreational angler brings in? I mean, is that a six-pound fish or --

DR. CRABTREE: The average fish size differs depending on where you are, but I think that the average has been around eight pounds or something like that. It varies depending on where you are, but I think the average, overall, is somewhere in the neighborhood of eight pounds. It varies from year-to-year.

MR. KENNEDY: But it’s growing, it seems like, every year, right?

DR. CRABTREE: I wouldn’t say every year, but the general trend over the past decade has been up, but it’s different on charter boats, and it’s different on headboats, and it’s different on private boats. It’s different east versus west. It’s based on fish that are actually measured dockside by the state people who do the dockside intercepts.

MR. LANDGRAF: My comment, I actually, personally, I like that idea of increasing the creel limit.

MR. KENNEDY: Do something out of the box that’s opposite of what we’ve been doing.

MR. LANDGRAF: Right. Well, I mean, I was born in a landlocked state and fished freshwater, and every lake that I ever went to had some kind of size limit or slot limit. Even on the coast, you’ve got trout limits, and so, to me, size limits are -- Even with snapper, as they are now, right? So having something like that between that sixteen and twenty or twenty-two --

MR. KENNEDY: A minimum size limit, that just makes us upgrade and kill bigger fish, which is counterintuitive when you’re trying to protect the species.

MR. LANDGRAF: Maybe we don’t actually put the size up there. Maybe that’s something that more science can help justify.
MR. KENNEDY: Yes, and we want to keep one big fish and the other one can be two little ones. I would put that out there, maybe, a three-fish bag limit with two small fish and one big fish, with sizes to be determined.

MR. LANDGRAF: To me, a seven or eight-pound snapper is the perfect fish, and it’s --

CHAIRMAN CAPLINGER: Marcus, rather than say three-fish bag limit, do you want to say explore --

MR. KENNEDY: Increasing the current two-fish bag limit.

CHAIRMAN CAPLINGER: Yes, or explore a slot limit to see if --

MR. KENNEDY: Not a bonified slot limit. I don’t want to say that we can keep three fish between twenty and thirty inches. I would like to see us be able to keep two fish, or three fish, under a certain size and one fish over that. I want to always allow somebody to keep that big one that’s probably going to be put off dead anyway.

MR. LANDGRAF: In Louisiana, that’s like our redfish. We have one over twenty-seven, and the other four are between sixteen and twenty-seven.

MR. KENNEDY: It’s like the comment was made earlier. Nothing gets on people’s goat worse than catching a really nice something-or-other and having to send it floating off, especially a big snapper.

CHAIRMAN CAPLINGER: When I say, “slot limit”, it means that you could keep one or some amount above, but you don’t have to keep all of them that size.

MR. KENNEDY: Yes, one big one and the rest of them little.

CHAIRMAN CAPLINGER: You shouldn’t be encouraged to keep all of them that size. That’s what you’re inferring to.

MR. KENNEDY: Right now, we’re forcing upgrading, and so doing this will take some of the pressure off of doing that.

MR. MCDERMOTT: I agree with the spirit of the motion that we need to do something different. I think I said it, the first time we met, that, if we continue in this model, you’re going to catch your limit from the couch, and that’s true, because you
are assigned a certain -- There is too many assumptions in there and so, obviously, we’re going to catch over our limit, but the only concern I have about this is possibly, possibly, trading some of the smaller fish dead discards for now larger dead fish discards, and that’s all. That’s my only comment on that.

MR. LANDGRAF: That was the point that I was going to make. Aren’t you going to increase your discard problem by having a slot?

MR. KENNEDY: I doubt it, but that’s why I said I don’t want a slot limit. One of any size that’s outside the slot --

MR. LANDGRAF: Are you going to throw away, throw back, three ten-pounders trying to get the other two?

MR. KENNEDY: No.

MR. LANDGRAF: So you can keep them all?

MR. KENNEDY: Like I said, currently, the system ain’t working. We made that same argument against the current deal. I’ve just got to do something, because we’ve got new problems that they ain’t even thinking about, and I hate to even mention them to them, but we’re training sharks and porpoises to come to boats now to eat our fish when we throw them back, at least off of Alabama, inside of a hundred foot, where the fish have the best chance to live.

We have maybe five minutes to get our fish and then leave, because the porpoises come. If you’ve got a slow boat, they will follow you to the next spot, and the same thing with the sharks. I can’t believe we’re training sharks, but I think we’re doing that too, because they will sit there, and I don’t care if the fish is half dead or alive, but the things eat them, and so we’ve just got to do something different.

I say increase it over two, but I just want it over two, where we can keep three or four, and then all of them except one that we keep will be the smaller version, and then one will be the bigger version, and I don’t think that we’re going to increase our discards or anything significantly. They will do the number crunch on it, and no telling what their number crunch will come out to be, but at least it will be different than what it has been, going in the total opposite direction, because what they’ve been doing is resulting in an increasingly small season.

CHAIRMAN CAPLINGER: All right. Do you want to take a stab at
this? You’ve got two minutes.

MR. BOX: Charlie, can I say one thing? First, this is a slot limit, because it’s the minimum, and you said you didn’t want a slot.

MR. KENNEDY: A slot limit plus an over.

MR. BOX: The slot is the minimum, whatever is legal, and you’re creating the upper end, and only one over that, and so it’s a slot.

MR. KENNEDY: Yes, a slot plus an over, yes.

MR. BOX: Do we want to get into making motions like this, when it seems like the other motions that we were making were pushing for state management and letting the states have the tools and –

MR. KENNEDY: John asked us for with specifics like this.

DR. FROESCHKE: Well, I guess I didn’t prompt a particular motion. It’s just that, at the first meeting, we had a sort of full range, based on that report that you all reviewed, and so state management is one option. There are other of these controls, bag limits and size limits and things, and so I just wanted to not get off the radar, but you guys are clear to make any recommendations, or not, that you feel is appropriate.

MR. BLANKENSHIP: I kind of have the same concern that Ray does. I mean, going back again, this is my specific fishing that I do, and there is sometimes that I go to some places that I go, and I guess maybe it’s the fishing method, and maybe I would have to go back to using double hooks and cut bait, if you wanted to catch small ones, but I can go to a spot and not catch anything under twenty to twenty-five inches.

MR. KENNEDY: There’s a lot of people that ain’t like us. That’s the way we are, and we go and everything is ten to twenty pounds and that’s it.

MR. BLANKENSHIP: I’m not exceptional. I’m just your average old sixty-five-year-old fisherman that don’t go out more than ten or fifteen miles and still catch them like that, and so I would hate for us to recommend something that, like Ray was saying, where people are going to go out there and discard oversized just to catch something smaller.
CHAIRMEN CAPLINGER: We’ve got another comment from the back.

MR. RUSS DUNN: Just one totally outside-of-the-box thought, if you’re interested in looking at pounds, is what about an aggregate pounds limit per angler, instead of a fish limit? Instead of two fish, you get fifteen pounds or twelve pounds or whatever, and you could apply that by the angler or by the boat or whatever. That way, you keep whatever it is you catch, be it small or large, to whatever that aggregate per angler pounds limit, and I don’t know of any analysis that’s ever been done on the idea or anything, but it’s one --

CHAIRMEN CAPLINGER: I don’t know how you would -- The enforcement might be a disaster.

MR. KENNEDY: But that would keep them from keeping the big fish.

CHAIRMEN CAPLINGER: Okay, and so, like Ed mentioned, in Louisiana, it’s a slot, and we have a five-redfish limit. Only one can be over twenty-seven inches. The rest have to be between sixteen and twenty-seven inches. Is that kind of what we’re talking about here, or do you want to -- Instead of getting specific, do you want to just say that we ask the council to consider other options, other bag limits or other size, slots --

MR. KENNEDY: Just increasing the two-fish bag limit with the slots is fine.

CHAIRMEN CAPLINGER: That could perhaps increase our opportunity, and I hate to catch three fish and then, all of a sudden, we go from three days to a day.

MR. LANDGRAF: I think, just like you posed it, you can consider increasing the bag limit, for example, and list that example.

MR. KENNEDY: That will be great, yes. Consider increasing the current recreational bag limit, for example, to three fish, with two fish under twenty-six inches and one fish over.

MR. LANDGRAF: Yes, and we all don’t have to agree on everything in here.

MR. KENNEDY: I just wanted to do something different.

MR. LANDGRAF: We can throw it up there.
CHAIRMAN CAPLINGER: We don’t know what a twenty-six-inch fish.

MR. LANDGRAF: I don’t know that I know either.

CHAIRMAN CAPLINGER: Exactly.

MR. VALENCIANO: We’re already telling the state to manage the stock. I don’t see the need for this, and, if you compare it to redfish, you don’t have a mortality problem with redfish. You’re catching them in three feet of water. You throw them back, and he goes off and swims off. You can’t compare the two.

DR. FROESCHKE: At the risk of speaking on behalf of Dr. Shipp, I asked him if there was anything that he wanted me to convey on his behalf, and he said the one thing that he was going to emphasize, if he were here, was the concept of depth and distance management. We know that bigger fish tend to be in deeper water, and that perhaps changing the way we fish and restricting that to shallow waters, in some mechanism, could achieve both a reduced catch rate and direct towards smaller fish. That might be more of -- I think you would benefit from having him here to speak on his behalf, and perhaps, sometime soon, we could do that, but just to think about it.

CHAIRMAN CAPLINGER: I think, when we talked last year, you talked about an area offshore that would essentially be a breeding ground and off limits, maybe 300 feet and deeper, or 400 feet and deeper, or something like that. Is that right?

DR. FROESCHKE: Yes, and, if you think about it, the way that red drum -- Red drum are basically depth and distance. It’s not necessarily depth. It’s offshore, most of those, but you can’t catch them in federal waters, and obviously those exact boundaries certainly would not work for red snapper, but I think that’s the concept that has been introduced.

CHAIRMAN CAPLINGER: Okay. We have a motion on the table right now. Do I have a second?

MR. LANDGRAF: I will second the motion.

CHAIRMAN CAPLINGER: All in favor; all opposed. The motion fails.

John, are we done? Is there anything else? All I would like to say is I know this is a big effort. It’s a big effort for you all to come, and these were pretty tough traveling scenarios, and we certainly appreciate you coming and doing this, because
this is the only way we are going to get anything changed, and, like I said, I’m a cup-half-full guy, and I heard a lot of good things, and I think we’ve come a long way in just a year.

Maybe next year things will be even better, but I want to thank Dr. Crabtree for this opportunity, and I want to thank Shannon and Assane, and I want to thank Ava, and, of course, John. Thank you so much. Karen, thank you for keeping me on track. Kathy certainly was a big help in getting this organized and getting everyone here, and so this is a good opportunity for us, and don’t think that we don’t appreciate it.

Sometimes it may seem contentious, and it may seem like maybe we’re not grateful, and it is because we have been frustrated for quite some time. It is certainly not personal. It is an opportunity that we appreciate, and so I can’t thank you enough for being here, everybody.

MR. WILLIAMSON: I don’t think that our work here is done. I just want to point out that the headboat snapper boat people spent over three years to get where they are today. We have had two meetings, three days, and there are a whole bunch of things that are getting ready to happen with respect to the Modern Fish Act and with respect to the ten-million-dollar study, and we haven’t even heard what the numbers are going to be for this latest MRIP, and so I suggest that we meet again, approximately the same time we did the first time.

I mean, there’s a whole lot of unfinished business, plus the council is going to be meeting, at least once, between now and May or June, and so I just want to point out to you that, in my opinion, we haven’t even begun to address the issues, and it will be very interesting to see what happens in Congress and with the states and the reports that are coming up in the next couple of weeks.

MR. LUITJEN: I think Key West for the next meeting.

MR. WILLIAMSON: I like this travel business, but I mean, honestly, and I believe this so strongly, but you can have it in San Antonio and I will just drive down to wherever you’re at. That’s fine, but we do need to keep on working on this stuff.

DR. CALAY: I wanted to thank everyone for the opportunity to speak. I found this meeting actually productive, and I thought your questions were both very interesting and also extremely appropriate, and so I was very pleased by what I heard, and I actually learned quite a bit, too.
I also wanted to stop by saying that we are currently conducting the 2018 red snapper assessment, and the assessment webinars are open to the public. They are open to anyone who wants to participate, and I think that the announcements can be found on the Gulf Council website.

Yes, they can, and so feel free, if you are interested in participating in that process, to register for the webinars. You can listen only, if you want to, and so it is a very open process, and we actually encourage the participation of the fishing community. That has been a very productive collaboration, and so you’re very welcome.

CHAIRMAN CAPLINGER: Thank you. Do we have a motion to adjourn or any other new business? Then we have a motion to adjourn.

MR. MARQUEZ: Hold on. I’m told that I need to make a motion to meet again down the road at some time that they determine.

CHAIRMAN CAPLINGER: Okay. Does our budget allow for another vacation? Okay. Then we have a motion to continue these meetings, and it’s seconded. All in favor; any opposition. The motion passes. Within a year?

MR. MILLER: Charlie, I’m in it for the long haul, but when we signed up, it was a two-year commitment. Are we bound to just two years? Is the nature of our existence two years, period, twenty-four months?

DR. FROESCHKE: This committee was an ad hoc committee, and it would be reviewed and potentially renewed, or reappointed, in two years, and so the council could do a few things. They could disband the group and say the work is done, they could renew the AP and then reappoint, and people would have to reapply and be reappointed, or they could -- That is the council’s choice.

MR. MILLER: When is our two years up?

DR. FROESCHKE: I believe it should be April of 2019.

DR. SIMMONS: The ad hoc APs are reviewed every year, and so the council will be reviewing all of the ad hoc APs at the January council meeting, and so ad hoc is every year, but, typically, the council keeps the group until your work is done or they’re satisfied with the recommendations that have been provided by the group.
(Whereupon, the meeting adjourned on January 18, 2018.)