NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

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NATIONAL MARINE FISHERIES SERVICE

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OFFICE OF SCIENCE AND TECHNOLOGY

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ATLANTIC HIGHLY MIGRATORY SPECIES ADVISORY PANEL

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THURSDAY
SEPTEMBER 6, 2018

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The Advisory Panel convened in the Magnolia Room of the Sheraton Silver Spring Hotel, 8777 Georgia Avenue, Silver Spring, Maryland, at 8:30 a.m., Bennett Brooks, Facilitator, presiding.

PRESENT

BENNETT BROOKS, Facilitator

JASON ADRIANCE, State Representative; Louisiana Department of Wildlife and Fisheries

PATRICK AUGUSTINE, Recreational

ANNA BECKWITH, Council Representative; South Atlantic Fishery Management Council

RICK BELLAVANCE, Recreational; New England Fisheries Management Council

STEVEN CANNIZZO, Recreational; Proxy for Bob Bogan

BENJAMIN CARR, Environmental Representative ANDREW COX, Recreational; Costa Sunglasses

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WASHINGTON, D.C. 20005-3701

PRESENT (cont.)

- SONJA FORDHAM, Environmental; Shark Advocates International
- TOM FRAZER, Council Representative; Gulf of Mexico Fishery Management Council
- GRANT GALLAND, Environmental; Proxy for Shana Miller
- WALTER GOLET, Academic; University of Maine School of Marine Sciences; Gulf of Maine Research Institute
- RANDY GREGORY, State Representative; North Carolina Division of Marine Fisheries
- MARTHA GUYAS, State Representative; Florida Fish and Wildlife Conservation Commission
- MARCOS HANKE, Council Representative; Caribbean Fishery Management Council
- LUKE HARRIS, Commercial; Pure Harvest Seafood DEWEY HEMILRIGHT, Council Representative; Mid-Atlantic Fishery Management Council
- RUSSELL HUDSON, Commercial; Directed Sustainable Fisheries, Inc.
- ROBERT HUETER, Academic; Center for Shark Research, Mote Marine Laboratory
- STEPHEN IWICKI, Recreational
- WALLACE JENKINS, State Representative; South Carolina Department of Natural Resources
- RAYMOND KANE, Commercial; Cape Cod Commercial Fishermen's Alliance
- DAVID KERSTETTER, Academic; Nova Southeastern University Oceanographic Center
- CHARLIE KLUCK, Commercial
- GREG MAYER, Commercial; F/V Fishin' Frenzy
- ROBERT "FLY" NAVARRO, Recreational; Fly Zone Fishing
- JEFF ODEN, Commercial; F/V Sea Bound
- TIM PICKETT, Commercial; Lindgren-Pitman, Inc.
- MICHAEL PIERDINOCK, Recreational; CPF Charters
 "Perseverance"; Recreational Fishing
 Alliance
- GEORGE PURMONT, Commercial
- MARK SAMPSON, Recreational; Ocean City Charterboat Captains Association

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MARTIN SCANLON, Commercial; F/V Provider II

PRESENT (cont.)

- DAVID SCHALIT, Commercial; American Bluefin Tuna Association
- JASON SCHRATWIESER, Recreational; International Game Fish Association
- GREGORY SKOMAL, State Representative;
 Massachusetts Marine Fisheries
- SCOTT TAYLOR, Commercial; Dayboat Seafood
- PERRY TRIAL, State Representative; Texas Parks and Wildlife Department
- RICK WEBER, Recreational; South Jersey Marina
- KATIE WESTFALL, Environmental Representative; Environmental Defense Fund
- ANGEL WILLEY, State Representative; Maryland Department of Natural Resources

ALSO PRESENT:

- KARYL BREWSTER-GEISZ, HMS Headquarters
- ENRIC CORTES, NOAA Fisheries Southeast Fisheries Science Center
- GLENN DELANEY, Glenn Roger Delaney Consulting GUY DUBECK, HMS Headquarters
- JOHN FOSTER, Office of Science and Technology JEFF HEISNER*
- YONG-WOO LEE, Office of Science and Technology*
- CAMI McCANDLESS, NOAA Fisheries Narragansett
- BRAD MCHALE, HMS, Gloucester Office
- LISA NATANSON, NOAA Fisheries Narragansett MARIAH PFLEGER, Oceana
- *Present via telephone

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1	P-R-O-C-E-E-D-I-N-G-S
2	8:42 a.m.
3	MR. BROOKS: All right. Good morning,
4	everybody, and welcome back. Thank you for a
5	good conversation yesterday. We have another
6	busy day today, though we'll get you out here a
7	little bit sooner. Again, a 3:00 p.m.
8	adjournment.
9	We'll start off the morning again,
10	just a reminder that if you're looking at your
11	agendas, we are going to follow the original
12	agenda. We were not able to turn things around.
13	So, in a minute here, we'll get an
14	update on the NMFS Bottom Longline Shark Survey
15	History and Results.
16	Then, we'll move into Trends and
17	Indices of Abundance on Dusky and Sandbar Shark
18	Stock Assessments. After a break, we will come
19	back and pick up Amendment 11 around shortfin
20	mako sharks. And then, into a presentation from
21	MRIP on its Fishing Effort Survey transition

1	plans.
2	After lunch, we'll come back and talk
3	about Amendment 14, the Domestic Shark Quota
4	Management. And then, we will take public
5	comment, get the traditional HMS summary, and
6	then, we will adjourn.
7	Are there any other topics, again,
8	that we any of you want us to try to squeeze
9	in here today? Or are we good with this? Okay,
10	we'll assume we're good then.
11	If your phones are not on silent or
12	off, if you could do that now, that would be
13	great.
14	And then, let me just check and see,
15	for teleconference, do we have any folks or
16	teleconference? And if so, operator, if you
17	wouldn't mind opening the line, so we can at least
18	know who is on the line.
19	OPERATOR: Yes, we do have two in
20	conference and another one signing in right now.
21	One moment. All right, your lines open on the

1	audio side.
2	MR. BROOKS: Great, if you could just
3	introduce yourselves?
4	MR. HEISNER: Jeff Heisner.
5	MR. BROOKS: And, Jeff, you're with?
6	MR. HEISNER: Our Dream Chargers in
7	Huntington, Connecticut.
8	MR. BROOKS: Okay, thank you. Anybody
9	else?
10	OPERATOR: We do have two other lines.
11	If you have your lines muted on your own end,
12	please unmute and give your name at this time.
13	MR. BROOKS: Or not.
14	MR. LEE: Yong-Woo Lee, NOAA Fisheries.
15	MR. BROOKS: Great. All right. We'll
16	assume there's a third person on who is a little
17	shy. Okay. And then, is there anyone else in
18	the room today who wasn't here yesterday? If you
19	wouldn't mind introducing yourself? Pat?
20	Anybody? Okay. All right.
21	Then, let's jump in here. And again,

1	we want to start off, Lisa Natanson with
2	Northeast Science Center is going to talk to us
3	about the Bottom Longline Shark Survey History
4	and Results.
5	And I believe Cami McCandless is here
6	as well, to answer questions as needed. So,
7	right in the back there. Lisa, it's all yours.
8	MS. NATANSON: Well, thank you for
9	inviting us here to explain our survey.
10	Basically, I'm just going to take you through the
11	history, how we started, how we do the survey,
12	and then, end with some results.
13	So, our survey essentially started in
14	1986, but that survey was done in the summer, it
15	was done with pelagic Yankee gear, and cannot be
16	directly compared to the survey that we do now.
17	We then started using bottom gear, we
18	weighted the Yankee gear for two years, in 1989
19	and 1991, to try to get the large coastal sharks
20	along the survey. And those surveys were done
21	in spring, which is consistent with the survey we

1 do now.
In 1985, the Southeast Fishery Science
3 Center decided they wanted to do a survey in the
4 Gulf of Mexico and into the East Coast. So, we
5 all got together and redesigned the survey to
6 mimic the current commercial longline methods at
7 the time.
8 So, we talked to a lot of the
9 commercial fishermen and designed a new gear type
10 using monofilament gear, which we have used
11 consistently until this time.
The only difference at the time
between our survey and the Southeast is, we had
started to notice a decline in numbers and a lot
of our work revolves around biological data and
16 tagging, so we wanted to get more fish.
So, we increased the number of hooks
18 to 300. We increased our soak time to three
19 hours. And we changed our bait for retention
20 issues and from mackerel to spiny dogfish.
So, since our 1996 survey, we have

1	done everything exactly the same. You can see,
2	we always use 300 hooks, three hour soak time,
3	spiny dogfish.
4	We have changed vessels, which I'll
5	get into. The dates are all pretty much the
6	same. We do 47 days, at some point in April into
7	May.
8	We used to start in Key West and go
9	up to Maryland. We now start in Fort Pierce.
LO	And due to weather, the four last trips, we
L1	haven't made it past North Carolina, which I'll
L2	also get into.
L3	So, the original survey design on your
L 4	left is 90 stations between five and 40 fathoms.
L5	We have, in 2015, this is the actual survey track,
L 6	there's a lot of stations there that are now
L 7	obstructed by cables, that we can't do.
L8	We also, as I mentioned, back in the
L 9	old days, we were able to complete the entire
20	survey in 47 days. We had a couple weather days
) 1	huilt in Now we get substantially more weather

1	days and we haven't been able to complete the
2	survey.
3	Additionally, a lot of our offshore
4	40-fathom stations, we've had to cut out, due to
5	the Gulf Stream coming in.
6	So, we start the survey here now and
7	we go all the way up, this is the closed area,
8	North Carolina closed area. And that was 2015
9	and 2018, which we just finished in June. I
LO	mean, May.
L1	We did basically the same. It's kind
L2	of a composite of the 2012 and 2015 surveys, if
L3	you look at the sets. And we were, for the first
L 4	time in several surveys, able to do a few sets
L5	above the closed area. And those will come into
L 6	play later.
L 7	So, as I mentioned, the only thing
L 8	that we've really changed is the platform. We
L 9	used to use the NOAA Ship Delaware II primarily.
20	And if we couldn't use the Delaware II, we would
21	charter a university vessel.

1	We had kind of problems with that, in
2	terms of safety and the fact that they were not
3	used to longlining, they really didn't know how
4	to longline very well and we would have to teach
5	them how. So, we felt for our benefit, it would
6	be better to charter a commercial vessel. So,
7	for the past three surveys, we've chartered the
8	Eagle Eye II.
9	It's a 47 total day survey. We break
10	that down into three-week legs. So, we need a
11	large enough vessel to house the food for that
12	amount of time and fuel, obviously.
13	We also work 24 hours a day, so we
14	need essentially two crews at least in the
15	wheelhouse. We take two to three scientists. We
16	try to take three. And we need a fair amount of
17	work space for our data collection.
18	So, the gear configuration, like I
19	said, we use 300 gangions bated with spiny
20	dogfish. We have that weighted with about 300
21	pounds of weight.

1	So, we start with a high flyer, let
2	out the scope, drop some weight down. Every 15
3	hooks, we drop another weight. And every 50
4	hooks, we have a marker buoy, with heavier
5	weights.
6	We end up with five marker buoys, 300
7	hooks, and then, we cut it off. Last hook in to
8	first hook out is three hours.
9	So, just in terms of what we do, we
10	set the gear, it takes about 15 minutes. We then
11	drop a CTD, which gives us our environmental
12	parameters, such as salinity and temperature.
13	We soak the gear three hours. The
14	haul time depends on how many fish. That's
15	another factor that's limited the number of sets.
16	When we first started, as you'll see
17	later, we weren't catching that many fish. We
18	could do a lot of sets, because we didn't spend
19	a lot of time hauling. Now, we often have hauls
20	that are six and eight hours, because processing
21	the fish, we're getting so many more fish.

At any rate, then it takes time to 1 2 steam to the next station and then, start all 3 over again. And we work 24 hours a day. We don't fish in greater than 20 knots or greater 4 5 than four foot seas, for safety and protocol. So, even though we're not actually 6 7 physically the ones setting the gear anymore, we 8 are totally on top of keeping control of what the crew does. We're down there monitoring the gear, 9 making sure it's in the proper condition that we 10 11 like, we're making sure that they set it in the 12 right configuration. And we monitor everything from the wheelhouse as well. And we determine 13 14 the scope and where and when to set. Same with haulback. 15 We're at every 16 haulback. And they're pulling the gear and we're dealing with the science. Which is one of the 17 18 things that allowing us to go on a commercial vessel helps, is we don't have to do the fishing 19 dedicated entirely 20 any more, we're to the science. 21

1 So, just so you know what we do. We 2 bring fish up. If it's a large fish that we 3 can't safely bring onboard or the weather is not amenable to bringing it onboard, we will tag it 4 We then determine the sex and 5 in the water. length estimate and we cut off the fish as close 6 7 to the crimp as possible. If it's a small shark, we do bring it 8 up onboard, we have people hold it while we 9 it, inject it, determine 10 measure the 11 Sometimes, we'll get DNA, depends on who's 12 onboard and what they need. We are also able, at that time, if 13 14 it's previously tagged, like this fish was tagged by two different programs, we can 15 get 16 information and send the fish back. We also have a sling for larger fish 17 18 that we can bring up, measure those fish. benefit -- well, a couple benefits to measuring 19 Of course, it's more accurate data. 20 fish. We 21 also get to inject them. But we can also ground

truth our estimates of length for the ones we 1 2 leave in the water. 3 In this particular case, in 2018, we had someone onboard from Florida Atlantic, who 5 wanted to implant transmitters into the fish, so we were able to do that using the sling. So, we're able to get a lot of biology done. 7 sampling goes from simply getting numbers, which 8 of course is important for what you all want, is 9 numbers and species. 10 11 all kinds of But we also get 12 biological data, as you can see, muscle, liver, 13 reproduction, age and growth, contaminants, 14 stomach contents, I could go on, we've collected quite a bit this particular year. 15 16 And of course, we get a variety of different species. It's time during this process 17 18 that you see some sharks. So, there they are. And just to show you, kind of in real-time, if it 19 20 works, okay. This is our sling operation. The The captain's on the 21 crew handles the sling.

1	winch. And we guide the shark in.
2	It's a nice process. It's safe for
3	the shark, it's safer for us, keeping the shark
4	kind of off the boat. And it is fairly quick,
5	although it doesn't look like it here.
6	The sharks are usually pretty docile
7	about it, though we do hold them down when they're
8	in the sling. That's pretty much it.
9	And then, for a shark in the water,
10	it's a very quick process. The hardest part
11	about this is getting them to turn over to
12	determine what sex they are.
13	The more fish we catch, the more often
14	we have to leave them in the water and do it
15	quicker than bringing them onboard, just to save
16	that time.
17	We find, now, with the weather and
18	number of shark issue, that we have to save time
19	as often as possible. So, then, we cut them off
20	and away they go. So, what you're really looking
21	forward to, of course, is the numbers. The

shaded area are those first two cruises that are 1 2 not directly comparable, but just for example, to 3 show, as we all know, the decrease in the late-1980s, early-1990s. 5 In 1996, we had our lowest numbers, it was actually only about 192 sharks caught on 90 6 sets, it was pretty dismal for us. 7 that time, as you can see, all these numbers have 8 9 come up. So, that data is to 2015. We just got 10 11 off the 2018 survey, so unfortunately, we don't 12 have complete details. But when you add the 2018 data in, and 13 14 one of the things you might notice, if you can tease it out from there, is that the total sharks 15 16 basically follow the sandbar curve, because by far, the majority of sharks we get are sandbar 17 18 sharks. So, at any rate, this year, there's a 19 20 little decrease. This actually only represents 100 sharks. 21

And one of the things that we're going 1 2 to take into account, we're starting to model all 3 these data now and we're taking into account all the environmental parameters, additionally, 5 where we fished, depths we fished, and this and because of course, it's all 6 that, slightly 7 different between each survey, even though we have set stations. 8 9 And if you take into account those five sets that were above the closed area that I 10 11 showed you before, it brings the CPUE up, because 12 that is where the water temperature declines significantly and we just dropped out all the 13 14 fish that we were catching. 15 So, at any rate, when we get all our 16 modeling done, which if you have questions, that goes right to Cami, we should have better numbers 17 18 for you, keeping in mind these are preliminary. So, if you have questions. 19 thank you very 20 MR. BROOKS: Great, 21 much. So, we've got about 15 minutes for

1	questions. Marcos, is that yours?
2	MR. HANKE: When you mention about the
3	time that it takes with sharks, more sharks on
4	the gear, is there any relation when you guys
5	change to fishermen, to execute there the
6	activity?
7	Because boat from university is
8	probably a great idea, but I'm pretty sure that
9	maybe you're going to catch way more sharks
10	performing with the professionals in the water.
11	How you address that difference, if it's the
12	case?
13	MS. NATANSON: The fishermen aren't
14	fishing, the fishermen are doing basically what
15	the chief scientist tells them to do. So, we're
16	not catching more because of the platform.
17	So, for example, when we would go or
18	the university boat, we told them where to set,
19	when to set, and how to set. The experience that
20	the fishermen are bringing is that they know how
21	to lay the gear better.

1	But they're not allowed to look at the
2	sounder and find fish, they have to go to the
3	spot that we tell them to go to. And then, they
4	just judge by wind and tide which is the best way
5	to set to bring the gear back. Okay. So, we're
6	not actually using their fishing expertise at
7	all.
8	MR. BROOKS: Thanks. Mark?
9	MR. SAMPSON: Good morning, again.
LO	Lisa, I was just curious, so, over the years,
L1	from the time that you started doing the surveys,
L2	have you changed in the type of hooks that you're
L3	using on your gear?
L 4	MS. NATANSON: No. We use a Mustad J
L5	hook, three-ought. I don't remember the number
L 6	exactly, I think it's a 34970, maybe. Our gear
L7	person would know that. But, no, we have not
L8	changed it.
L 9	MR. SAMPSON: Okay. And I assume
20	that's just to maintain consistency over the
21	years, you haven't gone to circle hooks or

1	anything? Have you been keeping records of the
2	hook location over these years, as far as whether
3	it's located in the jaw or the gut or wherever?
4	MS. NATANSON: Not in a consistent
5	manner, we have not been taking that into
6	account. We do, usually actually, in a way,
7	we do, because we say whether it's gut-hooked.
8	But we don't say jaw-hooked. And that's
9	depending on how fast the fish are coming in, if
10	people are able to get that data.
11	MR. SAMPSON: And is I guess, in the
12	future, there would be it would mess up your
13	data to switch to circle hooks, just to see how
14	that works out, or whatever?
15	MS. NATANSON: Yes, if we switched any
16	of the gear or anything we're doing, it would
17	essentially start another survey. We'd have to
18	do gear comparison surveys and do relationships
19	to figure that out.
20	MR. BROOKS: Great, thanks, Mark.
21	Let's go over to Bob, then Katie.

1	MR. HUETER: Good morning, Lisa.
2	Thanks for your presentation. It makes me
3	nostalgic for the old days of surveys. I really
4	miss them. Two questions.
5	The first is, when you in your
6	change over in 1995-1996, the low points, ther
7	beginning to rise, can you, for us, rule out any
8	sort of learning curve effect that was occurring
9	in those first couple of years, as you got to
10	know the gear and the process?
11	MS. NATANSON: I can't entirely rule it
12	out, but I had some very good teachers on how to
13	do it. I don't know if you remember Tris Colket
14	and Eric Sander
15	MR. HUETER: Sure.
16	MS. NATANSON: and those guys. And
17	so, I think, we were catching fish, and I think
18	we were catching what was there. But can I
19	guarantee that? Probably no.
20	MR. HUETER: Yes, that was more a
21	guestion for the panel. I know your experience

and I know the experience of your crew. So, I 1 2 just wanted to kind of roll that out. 3 The other question is, Pascagoula, Mark Grace used to do a survey, do they still do 4 5 that survey? Do you guys coordinate? recall, when it started, they were running that 6 survey in the month of August, which didn't seem 7 to be a great time to run a shark survey in the 8 Gulf of Mexico and I think we all talked about it 9 back then. So, what's the current status of that 10 11 survey vis-a-vis yours? MS. NATANSON: That survey's an annual 12 survey, it's been going on since 1995. 13 They do 14 the Gulf of Mexico and they go into the Atlantic. They're actually on it right now. 15 They go from about July 31 to mid to late-September. 16 It's now totally different from our 17 18 When we started out, the only difference was, number of hooks. They wanted 100 and they 19 set it exactly a mile and they set for an hour. 20 Now -- and they also do random stations. 21

1	Now, their survey, they changed hooks
2	and they changed gear, because they're doing
3	snapper as well. So, it's kind of become to
4	keep that survey alive, they had to incorporate
5	other things.
6	So, there's actually very limited
7	ability for us to do a direct comparison.
8	Although, Trey Driggers, who heads that survey,
9	was on our survey this year and we're going to
10	try to do look at differences in catch between
11	the time periods. But they get more sharpnose,
12	we get more sandbar.
13	MR. BROOKS: Katie?
14	MS. WESTFALL: Thank you very much for
15	the presentation, Lisa. I'm curious if you're
16	also collecting environmental data with the catch
17	data, to be able to do kind of analyses on under
18	what conditions you're finding different species?
19	MS. NATANSON: We do a CTD at the end
20	of every set, so we get bottom temperature,
21	salinity. We take some air temperature and wind

1	speed and that kind of thing. Unfortunately,
2	some of the vessels we've been on don't have that
3	capability. We do take sea surface temperature.
4	So, to a degree, yes, we do.
5	MR. BROOKS: Is that it, Katie? Mike,
6	and then, Rusty, and then, Marcos do you oh,
7	Tim.
8	MR. PIERDINOCK: Thank you. Your
9	survey locations, are those the same locations
10	every year or they've changed over time? That's
11	my first question.
12	MS. NATANSON: What we give the captain
13	every time is the survey locations from 1996.
14	And we have to cross so, set one is at 33.42
15	whatever. We have to cross that during the
16	survey. Okay? So, essentially, we are
17	repeating the same stations, we might be going a
18	different direction, but we're on that station.
19	We don't do the exact same stations
20	every year. In other words, I might skip Station
21	2, because we can't do it because of weather or

1	because there's an obstruction.
2	So, in 2015 and 2012, we did 50 sets,
3	but they weren't necessarily exact same sets, but
4	they were the same sets we started with in 1996.
5	MR. BROOKS: Mike, hang on for one
6	second, I think Bob wants to jump in on that.
7	MR. HUETER: Actually, I want to do a
8	follow-up to Katie's question, so I can wait.
9	MR. BROOKS: Go ahead, Mike.
10	MR. PIERDINOCK: So, with that, there's
11	been a climatic shift and movement of fish into
12	different areas over time. Have you looked since
13	1996 to assess that, because these surveys may be
14	taking place in areas where the fish are no longer
15	present.
16	It's almost like looking for deer in
17	the middle of the Sahara Desert and, therefore,
18	you move it, that that would be more
19	representative to assess the stock that may be
20	out there.
21	So, that's one question. To add to

that is, I think you mentioned that you have to 1 2 move some of the stations because of obstacles or 3 I've seen that quite often in our state so on. where we do tows in order to assess waters, 5 stocks, that because of lobster traps, we have to move and do the tow adjacent to it. 6 And that's not in fruitful fishing grounds. 7 So, if the lobster traps are gone and 8 you went down in that area, you're going to get 9 a lot of fish. But then, you go adjacent to that 10 11 and the fish really aren't there. 12 I just would like to get your thoughts, to make sure that we're taking into 13 14 consideration a possible shift and we're sampling 15 in the right areas, number one. 16 And number two, what percentage your tows, not your tows, but your stations, do 17 18 you have to move because of obstacles and is that number so high it could be skewing your results? 19 20 MS. NATANSON: Okay. We don't move 21 that many of them. First of all, we usually will

just eliminate it rather than move it, because 1 2 our stations, some of them aren't that far away. 3 So, because we can't usually complete the survey, I'd rather just eliminate a set and 5 go to the next one, because we're going to have to eliminate some along the way anyway, so that makes the choice. All right. In terms of determining whether we're fishing in the right 8 9 place anymore, we're actually having the opposite issue, we're getting more sharks, not less. 10 11 It used to be that we got a lot of 12 zero sets and, of course, no data is data for us, since we're surveying, not fishing. 13 But now, we 14 don't. I haven't gotten a water haul in years, 15 so we're actually seeing more. 16 Totally anecdotal, from my being on the survey this year, we have had a shift in 17 18 species. We got a lot of blacktips now. to not get blacktips at all and this year, we got 19 tremendous number of blacktips in areas 20 21 normally would have seen sandbars.

1	So, in this particular year, I'd say
2	our modeling is probably going to show a species
3	shift. And like I said, when we put all that
4	together, we will be taking that into account.
5	I don't know Cami's nodding, so that's fine.
6	And I don't remember your question
7	was very long, is that okay.
8	MR. BROOKS: I think you hit both
9	points.
10	MS. NATANSON: Okay.
11	MR. BROOKS: Bob?
12	MR. HUETER: Yes, I mean, this is a
13	follow-up to the same thoughts. So, you're
14	seeing blacktips further north?
15	MS. NATANSON: Yes. We're seeing
16	blacktips all the way up into North Carolina.
17	MR. HUETER: Okay. So, have you
18	plotted sea temperature over time from your
19	stations, to look at any trends since 1995-1996?
20	MS. NATANSON: Yes.
21	MR. BROOKS: And what do you see in

1	those trends?
2	MS. NATANSON: Well, here's sorry.
3	Sea temperature over time, bottom temperature.
4	(Laughter.)
5	MR. BROOKS: For everybody but Brad and
6	me
7	MS. NATANSON: It's kind of a big
8	MR. BROOKS: can you tell people
9	what they're looking at?
10	(Laughter.)
11	MS. NATANSON: So, you're seeing an
12	increase from 1996 1996, even when we were on
13	it, was a pretty cold year and that might explain
14	part of our fewer sharks. Last couple of years
15	have been fairly consistent.
16	MR. HUETER: What's the scale there?
17	MS. NATANSON: This is zero to 25. And
18	this is bottom, this is five. It's not very
19	much, like two degrees. So, it hasn't changed a
20	lot. But yes. But if you look around, it's
21	not like huge, huge changes. They overlap.

1	And it also keep in mind, this is,
2	like, the whole survey together. If you look at
3	area, you get a whole different this is just
4	area in general, and you can see, like when you
5	go to Virginia, I mean, past the closed area, the
6	temperature just dramatically drops and you lose
7	fish. Which is why we did the I don't even
8	have this on, do I?
9	Which is why we did the survey in the
10	spring, like you were talking about, summer
11	versus spring, because we know we'll hit this
12	wall of temperature and we'll run out of fish.
13	And we wanted to be able to fish the whole
14	population.
15	MR. BROOKS: Good. Let's go to Rusty,
16	then Tim, then over to Dewey.
17	MR. HUDSON: Thank you. Rusty Hudson,
18	DSF. Lisa, it's been great knowing and working
19	with you and Nancy for the last quarter of a
20	century, plus.
21	One of the things that I think is good

about you all's survey is that it occurs in the 1 2 spring and a lot of people may not know that we 3 both have а residential and а transient population of sandbar and dusky sharks. 4 transient 5 Particularly, the adults, who go over winter in Mexico. 6 You can find stuff 7 about that by Stewart Springer, notating that. 8 9 With that said, normally, male and female adult sandbars segregate, except in the 10 11 spring. So, in that April period, off of 12 Florida, because they start, I think, about Fort Pierce, somewhere like that, and work their way 13 14 north, that's the perfect area to be able to encounter the male and the female sandbars. 15 16 So, in one part of the question there is, do you notice sort of a pretty equal sex 17 18 relationship at that time, when you're off of Florida going up to Georgia? And also, when 19 you're in that area, do you, over the years, see 20 those super cold water effects, and does that 21

1	mess with your ability to have to move to another
2	station, because it's inhibiting your ability to
3	catch? That's my first question.
4	MS. NATANSON: In terms of temperature,
5	we set at the station regardless. So, I actually
6	don't know the bottom temperature until we get
7	back in June. The surface temperature we know,
8	but that's semi-important.
9	In terms of the sex proportion of
10	males and females, it's going to sound kind of
11	silly, but I haven't noticed one way or another.
12	I notice on the species where they're obvious,
13	like blacktips are all males. But I haven't
14	noticed with the sandbars, so I would have to say
15	they're probably fairly equal.
16	MR. HUDSON: Back to blacktip.
17	Blacktip, of course, since 1992, March, the State
18	of Florida, both coasts, has been closed down to
19	any commercial shark fishing, except for one
20	shark, one hook.
21	And with that said, the blacktips,

historically, were always caught inside of three 1 2 miles, unless you had an easterly flow on the 3 East Coast and then they would get outside the three miles. 5 we have such an abundance of blacktips, because nobody can really catch them 6 that they're actually spilling over into the 7 federal waters pretty good off of Florida. 8 9 And so, our guys are actually able to catch good blacktip, for a change. 10 But that's 11 not the same as, like, Louisiana, they're just 12 the blacktip capital of the world. So, that's actually a good 13 sian, 14 because historically, and I don't think Dewey's here -- oh, Dewey is here. He would follow some 15 16 of those blacktips and stuff in the later summer. And like you pointed out, or Bob did, 17 18 about August, August is like the flattest month of fishing for shark that there is. And I agree 19 with Bob, that it becomes -- but the Gulf of 20 Mexico is a different place, in my book. 21

1	The last thing, and of course, I
2	talked to you about it earlier, I'm looking
3	forward to the 32-year report, because that shift
4	that you all made in 1996 was three years after
5	the FMP started. And, as you know, we had no
6	limits.
7	But since 1993, we have been closed
8	down six months out of the year, virtually, many
9	of those years.
10	So, all of these efforts that we're
11	doing has actually worked for the abundance. And
12	so, since that is sandbar, driven by sandbar,
13	that giant spike up there, in 2015, when you have,
14	what, 1,700, sandbars on that.
15	And you used to be able to get up above
16	North Carolina, on up to Jersey. But you really
17	haven't been able to get up there, sometimes it's
18	a weather thing, sometimes it's probably crew or
19	bait or sets and whatever you've done.
20	But I'm just glad you all have been
21	doing this every two to three years. It's

1	something that is needed, so that we're
2	independently verifying that we have turned this
3	stock around, or stocks of sharks. So, thank you
4	very much.
5	MS. NATANSON: Thank you, Rusty.
6	MR. BROOKS: All right. We'll get in
7	two more folks and then, we will switch to Enric.
8	Tim?
9	MR. PICKETT: This is a quick one. You
L 0	had started, in your earlier surveys, you had
L1	started in the Keys. And now, you're starting
L2	in Fort Pierce. Is there a reason why you're not
L3	going south of Fort Pierce? Because we've got
L 4	plenty of sharks south of Fort Pierce.
L5	MS. NATANSON: Yes, you do, and there
L 6	were some big sandbars down there.
L7	Unfortunately, we lost a lot of gear down there.
L8	And particularly when we were on the
L 9	inexperienced boats, we'd go down there and that
20	would be our first couple sets and we'd get hooked
21	un and it would be a tremendous stress

1	So, it became difficult for us to work
2	down there, because we were kind of hacking up
3	coral. So, we decided it was only six sets
4	that we had coming straight up, because there
5	wasn't enough to zigzag into the different
6	depths, and we decided it was probably better to
7	just stop doing that.
8	MR. BROOKS: Dewey, and then, Jeff, I
9	see your card went up. Dewey?
10	MR. HEMILRIGHT: Yes. Thank you,
11	there, for your presentation. Looking over the
12	chart, these are areas that I've fished for
13	probably 15 years, 18 years, in the winter time,
14	the same, your survey area from about
15	Jacksonville north to North Carolina.
16	I was curious on a few things. We
17	never used I never used mackerel on the bottom,
18	because it wouldn't stay on the hook. So, I was
19	wondering if the earlier days, when you used
20	mackerel, how much mackerel were you getting a
21	haulback versus what you are the spiny dogfish?

And another thing is, I noticed, the 1 2 J hooks you use were probably the first J hooks 3 that we used, looking at how heavy wall that is, and we guit using them because, when you hang 5 upon the bottom, they wouldn't ever bend. So, I was just curious if you could 6 7 expand upon maybe the reason why you didn't see the fish in the first, because you was using the 8 bait that wouldn't stay on the hook, and how much 9 bait you had at haulback. And also, about the 10 11 hook selection, how much you bent up or -- with that hook, you're not going to bend very much, 12 because that hook don't bend. 13 14 And I think it's a good survey and I hope you get to continue it, and I just wish that 15 16 there was funding to continue that survey from north of North Carolina all the way up to Montauk, 17 18 New York, or somewhere like that, because I just think there's an abundance of sharks out there. 19 And this is part of the science, but 20 21 also, maybe another 15 -- hopefully, another

five, six years, the science will catch up with 1 2 reality and I think it's a good thing. But just 3 a question on the hook and the bait. Thank you. MS. NATANSON: In terms of the hooks, 5 I can guarantee you, these do bend. We get a lot I don't know, they may be a of bent hooks. 6 different hook at this point, but they do bend. 7 We break and bend them quite a bit. 8 In terms of the bait, it's actually a 9 really interesting question, because this year, 10 11 even with the spiny dogfish, down off Florida, 12 there were so many isopods, we were not getting We either got blacktips or we got 13 baits back. 14 empty hooks, which was a concern of mine during 15 the survey. And until we got up north, that really didn't stop. 16 17 We have data from 1998 on, on bait. 18 We probably have the data from the mackerel, but I haven't looked at that yet, because the data 19 that we're analyzing for this 32 years is just 20 from 1996 on. As I said, the reason we switched 21

1	from mackerel was because of bait retention. And
2	keep in mind that those surveys, they only soaked
3	the gear for an hour.
4	So, I think Greg might remember,
5	because he was on the survey, sometimes we got
6	bait back, sometimes we didn't. It kind of
7	depended on where we were.
8	MR. BROOKS: Thanks. Jeff?
9	MR. ODEN: You partially answered my
10	question there, which was, I mean, how can you
11	rectify the difference between the CPUEs going
12	through the roof right now, which is exactly what
13	we as fishermen are seeing.
14	And the simple truth is, I mean, Dewey
15	mentioned the abundance of sharks. In our case,
16	in the PLL fleet, it's an overabundance. I'm
17	sure Greg will mirror that image, as a charter
18	captain, who cannot even fish for tuna now, that
19	they used to catch reliably.
20	Now, some days, they're lucky to get
21	one or two to the boat out of 20. And it's just

1 phenomenal what we have seen, our catch per unit 2 of effort, not only what we have seen, but what 3 we have heard through individuals who are in the shark research fishery in our area. 5 I mean, from when we were doing it, with overnight soaks, with a thousand hooks, 6 they're doing with 300 hooks and a two-hour soak. 7 8 It's through the roof. 9 And I know you mentioned that -- well, the last survey, 2015, was a 56 percent increase 10 11 over the previous all-time high, which was 2012. 12 And the previous all-time high before that was They're going through the roof. And we're 13 2009. 14 seeing it across the board. How do you rectify t.hat.? 15 16 I know you mentioned, yesterday, in speaking with you, that there was a predominance 17 18 of juveniles in your survey, but by the same token, I mean, it begs the question, which came 19 20 first, the chicken or the egg? I mean, where did 21 all those juveniles came from? So, I mean,

1	naturally, you're going to see them in the
2	spring.
3	So, I mean, as a fisherman, all of us,
4	up and down the coast, whether we're bottom
5	fishing, longlining, charter fishing, whatever,
6	we're all being overrun by them. And it's just
7	hard to fathom why we're being held at bay,
8	especially the sandbar fishery.
9	And essentially, those of us that are
10	permitted are excluded from the fishery, but we
11	predominantly, we're the longline vessels. And
12	now, it's all pretty much an instate, non-
13	permitted fishery.
14	So, I don't know. I'm just I'd
15	like to hear you explain to me the massive
16	increase in catch per unit of effort and what you
17	think's taking place.
18	MR. BROOKS: Lisa?
19	MS. NATANSON: Well, I've been on all
20	these surveys except 1991, so I've seen the
21	increase right along with you all. And I agree

3	When we tease it apart, we do see that
4	the juveniles are increasing more than the
5	adults. Obviously, if one female is having nine
6	pups, that's what's going to happen.
7	And in terms of their age at maturity,
8	it's going to take a while for those juveniles to
9	be adults. And clearly, you need a healthy adult
10	population.
11	As to where those adults are, I mean,
12	if we're surveying one area and depending on
13	the species, we either get mostly adults or
14	mostly juveniles, or sometimes, a mix.
15	So, can I tell you where the adults
16	are that we're not seeing? No. Can I theorize?
17	They're probably a little offshore and if we
18	could do an in-tandem pelagic survey, maybe we
19	would catch those at the same time and know where
20	everything is.
21	They do segregate, so we know they are

with you, they're definitely increasing, from

what I see and, obviously, my data.

1

1	in different areas, but I can't tell you what the
2	numbers are.
3	And in terms of a fishery or anything
4	like that, that goes to Karyl and Enric. I'm
5	just the biologist who goes out and counts
6	numbers.
7	MR. BROOKS: Thanks, Lisa.
8	MR. ODEN: Can I briefly follow up?
9	MR. BROOKS: Yes.
LO	MR. ODEN: They are definitely
11	offshore, okay? I mean, right after you came
L2	through this past year, guys were getting
13	decimated.
L 4	Six hundred hooks in the water, they
L 5	couldn't get 50 back. It was mind-boggling. It
L 6	didn't matter if they were inshore, 50 fathoms,
L 7	40 fathoms, mahi fishing, or offshore on the
L 8	edge.
L 9	And speaking to something Scott said
20	yesterday, if you want to catch a swordfish,
21	you've got to be in there on the rock. Well, we

1	can't get near that rock, we can't catch
2	swordfish for the simple fact that sharks are
3	taking over. And that's a major impact on this
4	fishery. And, anyway, thank you.
5	MR. BROOKS: Thanks. I know we've got
6	at least three cards here, but I want to get Enric
7	up here to present. And then, if we've got
8	are you running out the door or will you be here?
9	Okay, all right.
10	So, Lisa will be here. So, either,
11	if we have some time after Enric's presentation
12	to take a few more questions or at the break,
13	I'll let you connect with her. But I've got the
14	three of you noted down on my sheet here. So,
15	let's get Enric's presentation up, which will
16	focus more on dusky and sandbar stock
17	assessments.
18	DR. CORTES: Good morning, everybody.
19	So, a few weeks ago, I was asked to make a
20	presentation on the effect of the Sandbar Shark
21	Research Fishery on the indices of abundance that

have been used in dusky and sandbar shark stock 1 2 assessments and essentially, compare the trends, 3 before and after the implementation of the Shark Research Fishery in 2008. 5 So, I went about this by, essentially, just computing some simple correlations for the 6 two periods for all of these indices that are 7 used in the different assessments and examined 8 9 So, I want to put that in the big the trends. scheme of the assessments that we conducted. 10 11 So, for the dusky shark, and I must 12 say, so we use a number of indices, obviously, for these assessments, and I will come back to 13 14 this later. These indices go through a process of 15 16 vetting. When we have a benchmark assessment, many of you are familiar with, in which each of 17 18 these indices is subjected to а criteria and ranked as to their plausibility, 19 20 of area, temporal coverage, of 21 statistical issues, et cetera.

1	So, these were the five industries
2	that were vetted at the time for the dusky shark.
3	The dusky shark, I remind the audience, was a
4	catch-free model, in which we used relative
5	effort and indices of abundance for the
6	assessment.
7	So, all of these indices are either
8	standardized by people from the Agency, from
9	different laboratories, or in some cases, by
LO	external people.
L1	Such is the case with the Virginia
L2	VIMS Longline Survey, which is a fishery-
L3	independent survey off Chesapeake Bay. In this
L 4	particular case, for the dusky shark, we had a
L 5	total of 31 years for this index.
L 6	Then, we have the Pelagic Longline
L 7	Observer Program Index, which in this case,
L 8	covered 24 years. This covers essentially the
L 9	whole Eastern seaboard and Gulf of Mexico.
20	The Northeast Longline Index, which
71	Lisa just presented, in this case, had a total of

1	eight data points, right through the years.
2	And then, of course, the Bottom
3	Longline Observer Program. And so, in this
4	particular case, for the dusky assessment, we
5	actually split that index, the analysts split the
6	index before and after the Shark Research
7	Fishery. So, in that particular case, the index
8	is already split, so it's two separate series.
9	And finally, the Large Pelagics Survey
10	Index, which, as you know, is a recreational
11	index that looks at large pelagics that goes from
12	Virginia north to Maine. Okay.
13	So, that, I just want to give a quick
14	overview of all the indices. So, what I'm doing
15	here, simply, is splitting the series. It's not
16	a re-analysis of the series, it's just splitting
17	the series into before and after and just running
18	some quick and dirty correlations.
19	So, the parts in red are the before
20	the Shark Research Fishery, and starting in 2008,
21	the Shark Research Fishery. For the VIMS Index,

2 regression. We would see that the index went 3 down up to the early 2000s and then, was going But then we had this dip in 2007-2008, and 5 followed by this decrease. And again, I remind you that this is mostly a juvenile index. 6 The Pelagic Longline has a decrease 7 from the beginning to the mid-2000s. 8 stable, but decreasing trend since 2008, according to the data we had. You've seen the 10 11 index from Lisa, which shows, if we split it, two 12 very strong increases, which we can come back to trying to explain as well, later. And so, it's 13 14 almost a perfect linear increase. 15 The Bottom Longline, again, these were 16 two separate indices and it does show a clear increase since 2008. Although, note, the large 17 interannual fluctuation in the index, which are 18 And finally, the Large Pelagic 19 somewhat worse. Survey showed two decreasing trends. 20 So, this is just a composite view of 21

we actually looked at this and did some segmented

1 all the indices. And essentially, we see that 2 there was a decline since the 1970s, up to the we have some conflicting 3 2000s. And then, information with some indices, like the Northeast 5 Longline going clearly up, but some still going down. 6 In fact, if we do a summary of all 7 8 these trends, we see here, in orange, prior to the Research Fishery, we had four of the indices 9 that were negative, with being 10 statistically 11 and one positive, statistically significant, 12 significant. And after the Research Fishery, we have three that went down and two that went up. 13 14 how did that play into the Now, assessment itself? Well, the assessments still 15 16 show that the stock was overfished, because of the large declines occurring in the 1970s and 17 1980s. 18 But we still had overfishing. 19 20 this is due, in part, to the influence of some of these indices, but not only that, it's also 21

related to the other pieces of information we 1 2 One being the effort, in this case, that 3 was used for this specific assessment. So, it was -- the stock, according to this data that we 5 had, was still slightly in а state overfishing. 6 7 Okay, moving on to the sandbar shark. For the sandbar shark, there was an assessment 8 9 that was completed last year, if you recall. had a total of ten indices. The ones that I've 10 11 -- several, I've mentioned, the LPS, the Bottom 12 Longline, the VIMS. And the index that Bob and Lisa talked 13 14 about, the NMFS Longline Southeast Index, which has been in operation since 1995 annually. 15 16 goes from Texas to North Carolina, one So, we had 20 years of data from 17 approximately. that index. 18 then had a couple of COASTSPAN 19 Inshore Indices, one for the Northeast. 20 And Cami McCandless is very familiar with these indices, 21

1	she does the standardization.
2	And so, these are inshore surveys that
3	target mostly juveniles. And one in the
4	Northeast is in Delaware Bay, the one in the
5	Southeast now covers Florida, Georgia, and South
6	Carolina waters.
7	The so, another one that we used,
8	that was sort of a legacy from the previous
9	assessment, was the South Carolina Red Drum
10	Longline Index, which only covered one period,
11	before the Shark Research Fishery.
12	And then, we added the SEAMAP Longline
13	Southeast, or we added some new information that
14	became available. So, now, it included Florida
15	and Georgia SEAMAP and Georgia Red Drum, I
16	believe, if I'm not mistaken. But these indices
17	are mostly target, sample juveniles.
18	Again, taking a quick look at these
19	indices. The LPS here shows a decline pre-Shark
20	Research Fishery, and then, an increase
21	afterwards. The Bottom Longline Observer

Program shows an increase, but also look at the 1 2 interannual fluctuations, which I will come back 3 to a little later. The Virginia Longline still showed a 5 decreasing trend after the Research Fishery. Longline Southeast, the 6 The NMFS 7 survey from the Pascagoula Lab, showed also a significant increase after the Research Fishery. 8 The COASTSPAN Northeast, first negative, 10 positive. 11 The index from Lisa, that you've seen, 12 that's increasing even more, in а more accentuated way, after the Research Fishery, as 13 14 you were pointing out. And the Pelagic Longline, which essentially showed no trend after the, the 15 Pelagic Longline Observer Program, after 16 Research Fishery. 17 18 This is the COASTSPAN Southeast, which showed first an increase, then a decrease. 19 South Carolina Red Drum only covered the first 20 period. And the SEAMAP Longline Southeast only 21

1	had one point in 2007 and then, showed a decline
2	after the Research Fishery.
3	But, so, this is the composite picture
4	of all the indices used in the assessment. And
5	in here, you can see more clearly that well,
6	not clearly. You can see
7	(Laughter.)
8	DR. CORTES: Well, in somebody's mind.
9	That there is a decrease up to the 2000s, mid-
10	2000s, and then, generally the indices are going
11	up.
12	And this is picked up, too, by the
13	statistical analysis. Before the Research
14	Fishery, we had six indices that went down, four
15	of which were statistically significant. Only
16	three went up. After the Research Fishery, we
17	have five that go up and four that go down.
18	Now, in the assessment, the assessment
19	did pick up an improvement with respect to the
20	previous assessment. The stock is still
21	overfished, but the level of being overfished has

1	diminished, the stocks are in better condition.
2	And overfishing has really decreased.
3	So, in this case, it has picked up the
4	signal from the indices and also, related to the
5	fact, of course, that the catches have gone down
6	a lot since there's only a Research Fishery and
7	some bycatch, et cetera. So, the assessment did
8	pick up these trends, in this case.
9	Okay, so the \$64,000 question, right?,
10	is why are there different trends in the indices?
11	And so, I include in here some explanations,
12	there may be others.
13	Obviously, some of the indices, and
14	it's been pointed out, cover different areas. Ir
15	some cases, they may be sampling the actual core
16	of the population versus boundaries, extremes of
17	the population.
18	At different times of the year,
19	obviously, they have different temporal coverage,
20	so we have to look at the same year to see what
21	each index is doing.

1 as we have pointed out, 2 tracking different Ι mean, they track ___ 3 different segments of the population. Some track juveniles, some are even recruitment indices, 5 some track mostly adults, some cover more of the whole population. 6 And this, I must say, at least it's 7 covered in the assessments, the selectivities 8 that are estimated or imposed on each of the 9 indices. 10 11 But I want to re-emphasize that, I 12 all of these indices are statistically mean, So, there are generalized linear 13 standardized. 14 model techniques. All of these that you're 15 seeing. 16 However, despite all the effort that is put into it, because as I said, when we have 17 18 benchmark assessment, we go through vetting process, that takes a lot of time, and we 19 look at the different criteria. 20 There is an Index Working Group that is tasked with looking 21

1	at that.
2	So, we go through this process. But
3	what I'm saying is that, even with all this
4	effort, there are still some variables that may
5	be unaccounted for. So, issues of immigration
6	and emigration, maybe movement related to other
7	issues, like climate change.
8	And that's something that it's hard to
9	avoid. And I must say, in some cases, and I come
10	back to these interannual increases in the
11	relative abundance of some of these species, like
12	what we are seeing with our index, so there has
13	to be something else in there, because this is
14	incompatible with the biology of the species.
15	I mean, you would see that in
16	chickens, but not in sharks, given what we know
17	about their biology, right? So, there has to be
18	so, we are not doubting that these increases
19	that you see are real, but are they really
20	reflecting the population trend?
21	That's another issue. So, I think

it's important to point that out. 1 2 And just as a conclusion, so when we 3 do the assessment, again, as I said, we have to look at the composite picture of all the indices 4 5 that have been deemed acceptable. In the past few assessments, based on 6 reviews, we have been looking at, because of this 7 problem of having the indices going in different 8 directions, that create tensions in the model, 9 that make the model not fit the indices well, we 10 11 looking at different are states of nature, 12 considering negative and positive of sets indices, and trying to give an envelope 13 of 14 possibilities of uncertainty in the assessment. But again, the indices only provide 15 the trend in a population. We also look at two 16 other main pieces of information at least, which 17 are the catches, which provide more of a scale. 18 And then, of course, the life history, which 19 20 provides the vulnerability, intrinsic

vulnerability of the species.

1	So, I actually have a couple of, well,
2	additional slides, I mean, you're all familiar
3	probably with the coverage of all of these
4	indices. There's just the linear coverage of the
5	indices for the dusky shark.
6	But just to point out that there were
7	these rankings for the indices that are used, in
8	some cases, to weight the CPU indices. And
9	actually, the Northeast Longline Index received
10	and the Bottom Longline Index received the
11	highest ranking for the dusky shark.
12	And in the case of the sandbar shark,
13	the NMFS Longline Southeast Index was the one who
14	received the largest one, but also the Northeast
15	Longline received a high ranking.
16	And with this, I think I'll take
17	questions.
18	MR. BROOKS: Perfect. Thanks very
19	much, Enric. Let's go to Jason, then Dewey, then
20	Rusty.
21	MR. ADRIANCE: Thanks. And I may have

1	put my card up too early, in your additional
2	slide, I think you kind of answered my question.
3	I was going to ask, without getting
4	into the weeds of the assessment, when those
5	indices are ranked, does that translate into a
6	weighting in the assessment?
7	DR. CORTES: Yes. So, in some cases,
8	when we do a ranking, we have different
9	scenarios, when we do a rank-based weighting,
LO	sometimes we do the inverse cv or no ranking at
L1	all.
L2	MR. BROOKS: Thanks. Dewey?
L3	MR. HEMILRIGHT: Thank you for your
L 4	presentation. I think it's kind of, from my
L 5	perspective, just a little bit unfair to compare
L 6	the Research Fishery, which I named it the guinea
L 7	pig fishery.
L 8	Because the way the guinea pig fishery
L 9	operates and has operated, you have about four or
20	five vessels, six vessels, that operate in the
21	same area all the time. The one vessel in North

1	Carolina, operates in the same time.
2	And so, I don't see what the
3	difference before and after the Research Fishery
4	kind of has to do with this analysis. It would
5	be different if the Research Fishery was all up
6	and down the whole coast, the East Coast or the
7	West Coast. That's simply not the case.
8	The second thing is, when you look at
9	the dusky part of the Bottom Longline Observer
10	Program, which I believe to be the guinea pig
11	fishery that shows off North Carolina, the
12	Research, the guinea pig fishery has changed its
13	method of protocol, I might be wrong, but every
14	year, ever since it was implemented, maybe in
15	2008 or 2010.
16	Whether it be soak time, whether it be
17	if you cull a certain amount of duskies, you stop
18	fishing, whether it be how many hooks you've got
19	to set. So, there was a lot of variables all in
20	that right there.
21	And now, the way that fishery is

1	operated is, they're given a catch limit of, I
2	believe, 30,000 pounds of sandbar sharks and they
3	choose a certain time of the year when they want
4	to go fishing, versus throughout the year to get
5	a sampling protocol.
6	And so, I kind of tend to think mixing
7	in the Research Fishery without explaining the
8	location of where it takes place at, the amount
9	of fishers, the different protocol designs of the
10	Research Fishery, and comparing it with the other
11	things is not a very good, clear picture.
12	I do like looking at the other trends
13	of something that sit away, with not so much
14	parameters, as what the guinea pig fisheries had.
15	MR. BROOKS: Let's give
16	MR. HEMILRIGHT: Thank you.
17	MR. BROOKS: Enric an opportunity to
18	comment on that, or Karyl.
19	DR. CORTES: Well, let me see if so,
20	I mean, for the specific Research Fishery, there
21	are two periods, right? And I hear your

1	concerns. So, those were two separate series
2	that were used in the assessment.
3	Now, what I understood I was asked to
4	present was, look at the effect that the Shark
5	Research Fishery might have had in other indices,
6	as a result of not being able to catch more
7	sandbars, have they gone up?, et cetera.
8	So, that's what I was attempting to do
9	here. Just to show what the trends were before
10	and after. But in the particular case of the
11	Shark Research Fishery, as I said, we had two
12	separate indices that were treated as completely
13	different.
14	Now, is there issues with how they
15	were? That's another issue. But they are two
16	separate indices, two different entities. The
17	particular Bottom Longline example of the Shark
18	Research Fishery.
19	So, I don't know if that response
20	answers your question or not.
21	MS. BREWSTER-GEISZ: Thanks, Dewey.

1	So, we asked Enric to be here after we actually
2	got a specific request from Jeff to look at the
3	different indices before and after the Research
4	Fishery.
5	And I think this was mainly because,
6	in 2008, when the Research Fishery went into
7	place, we had huge changes in the fishery, as you
8	remember.
9	We went from the 4,000 pounds, down to
LO	33 sharks per trip. That was having a huge
L1	that's a huge difference. And the way the
L2	fishery was structured changed dramatically,
L3	people who were fishing changed dramatically.
L 4	So, we were asked to look, before and
L5	after the Research Fishery, of the indices, by an
L 6	AP member, just why we came here for asked
L7	Enric to come here and look at that.
L8	The other thing with the Research
L 9	Fishery, is you're saying it's changed over the
20	years.

And you are correct that, for the

1	first couple of years, how we did it, it was a
2	learning experience for us and for the people in
3	the Research Fishery, on what exactly we were
4	looking for, how to do it.
5	But for the last, I want to say since
6	2012, it's been the same process, the same
7	limits. So, it hasn't been changing a lot
8	recently.
9	We do have randomized people. There
L 0	are people, like the gentleman you were talking
L1	about, who applies every year and because he's
L2	the only one from that region who applies, he
L3	gets to fish in that area pretty much all the
L 4	time. If somebody else were to apply, it may not
L5	always be him.
L 6	In the other regions, we do have shift
L7	between the vessels in who's fishing. And so,
L8	we have a region in the Gulf, we have a region in
L 9	the Keys, we have the South Atlantic, and we have
20	off of North Carolina.

This year, for the first time, we also

1	had one up north of North Carolina. That didn't
2	work out so well, so we're not going to do that
3	anymore this year, though we'll look at it again
4	in the future, if somebody from that area
5	applies.
6	So, I don't think it's quite as bad as
7	you're describing, in terms of the changes. We
8	are at a pretty steady place with the Research
9	Fishery, and collecting a lot of good
L 0	information.
11	MR. BROOKS: Thanks, Karyl. Can you
L2	make it I want to get a couple people jumping
L3	in here.
L 4	MR. HEMILRIGHT: I was just
L 5	misinterpreting a little more, but one thing I
L 6	think you also should have put up there, maybe,
L7	was who was in charge of the Research Fisheries
L 8	since 1994?
L 9	Because some of them years, when we
20	participated, under certain person's leadership
21	who!e retired now it was not a good leadership

1	in the Observer Program.
2	So, maybe add also to your references
3	up there of who was in charge, where it started
4	out, with the Gulf, Atlantic, South Foundation,
5	George Burgess took it over and how it worked
6	then, because there was a lot during that time
7	where the person in charge also had a lot to do
8	with some of the outcomes on these boats. Thank
9	you.
10	MR. BROOKS: Thank you.
11	DR. CORTES: You mean, the Observer
12	Program, right? Yes.
13	MR. BROOKS: Thanks, Dewey. We're a
14	little overdue for a break, but I've got three
15	folks I want to get into the queue here. So,
16	I've got Rusty, then Greg, and then nope, okay.
17	Rusty, and then, over to Bob.
18	MR. HUDSON: Thank you, Enric, it's
19	been great working with you for the last quarter-
20	plus century also. That being said, on your last
21	slide, before your extra slides, you had the

catches for scale that you need, in addition to 1 2 all the survey stuff. 3 But our sandbar, like Dewey pointed out, has been basically restricted to, I believe, 5 five boats, roughly speaking. Six this year, and sometimes only a couple that fish. But they get 6 an equal distribution of the sandbar catch. 7 And further on the scale, with the 8 And since that's the 9 dusky, it's a no-take. case, the only real catches, besides the Research 10 11 Fishery, is what we're getting from the 12 independent surveys or what is a bycatch that is generally the release live or dead. 13 14 That said, then you've got the life history and the vulnerabilities. 15 The new study 16 just published on the website for NOAA, on the band pairs, the shark vertebrae, the fastest 17 18 growth is not years and stuff like that, it's the

fastest growth is of course from the juvenile,

right after its born, to the point where it

becomes an adult.

19

20

1	After that, the growth slows
2	dramatically. And so does the laying down of the
3	band pairs. I believe that's going to be a game
4	changer, a little bit, in our future assessments.
5	So, that way, when we get into what
6	went on with dusky, was an update, what we did
7	with the sandbar recently was a standard, we
8	really do beg for a full benchmark for both those
9	animals, because of the straddling stock
LO	scenario, and as I mentioned, the transient
L1	population of dusky and sandbar over wintering in
L2	Mexico.
L3	But with dusky, we know, genetically,
L 4	we're talking about one animal in the Atlantic
L5	Ocean. So, whatever we share with this animal
L 6	that's highly pelagic, compared to, like, the
L 7	sandbar, even though the sandbar gets pelagic
L 8	too, I've been out there in 1,000 and they'll be
L 9	up there in the upper water column.
20	The dusky, on the other hand, the
) 1	adulte are more predominant in our offshore

Τ	fisheries, where we're not getting.
2	Last statement is more or less a
3	question. Using SEAMAP Longline Southeast,
4	isn't that the stuff that, out of South Carolina,
5	where they're doing the 100-hook or the one mile
6	with the golden tile?
7	And generally, that's in the 500 to
8	900-foot of water? That's not our normal range
9	of fishing for sharks, since we're back inshore.
10	Anyway, just wanted to say that.
11	DR. CORTES: Yes, thanks for the
12	comments. I cannot answer the SEAMAP. This my
13	understanding, Cami's there, she may correct me,
14	that it covers Florida and Georgia. And then,
15	the Georgia Red Drum Index. Cami, you
16	MS. McCANDLESS: The SEAMAP, it covers
17	both South Carolina
18	MR. HUDSON: It does?
19	MS. McCANDLESS: and Georgia and
20	Florida.
21	MR. HUDSON: Okay.

1	MS. McCANDLESS: So, the South Carolina
2	Department of National Resources does the South
3	Carolina Survey and the Georgia Department of
4	Natural Resources does the Georgia and Northern
5	Florida.
6	MR. BROOKS: Thanks. Bob?
7	MR. HUETER: Thank you. Thanks,
8	Enric. Two things.
9	First is, the challenge that I have in
10	struggling with you to interpret the differences
11	in these various indices, between indices and
12	within an index year-to-year, is that, and it's
13	not I don't think it's addressed here, is that
14	we're more or less assuming that the environment
15	itself is static.
16	Or at the very least, we assume that
17	variability in the environment is sort of
18	dampened out and it's not an important factor.
19	But every fisherman in this room knows
20	that catches are affected by water temperature.
21	That's the first thing you look at when you go

1	fishing.
2	So, temperature is a numerical
3	quantity, it's something that can be modeled,
4	it's something that can be plotted.
5	Is there no way to get water
6	temperature data somehow incorporated into the
7	modeling, into the assessment, to look at what
8	role that may be playing in moving these indices
9	around from place-to-place and year-to-year?
10	And I have a follow-up, please.
11	DR. CORTES: So, you are right.
12	Typically, we have not explicitly incorporated
13	temperature as a variable.
14	It's only been, perhaps, indirectly
15	through area or depending I mean, all of these
16	standardizations don't use necessarily the same
17	variables. Typically, you have area, time,
18	season, hook, et cetera.
19	But to answer your question, yes. In
20	fact, as independent work that we did, actually
21	Patrick Lynch did. we published last year the

effect of temperature on these indices. 1 That's 2 a paper, I don't know if you saw it. Yes, it 3 just came out, like a few months ago, on the paper. effect 5 But we looked at the temperature and the differential in bottom to 6 7 surface temperature, as factors. And so, that explained more of the variability in the model 8 than the other models that did not include it. 9 10 So, yes, that's something that can be 11 But of course, you need to have included. 12 accurate data to put in the model. 13 MR. HUETER: But do you foresee having, 14 someday soon, a model that's, like, per hook hour 15 degree C or something that incorporates 16 temperature actually into the index directly? 17 that something that's out there now or on the horizon? 18 DR. CORTES: I'm not sure. 19 There may 20 be other people more familiar with that particular standardization process that may know. 21

1	But definitely, temperature is something that can
2	be incorporated in one way or another.
3	MR. HUETER: Okay. I'll move on, I
4	want to get to my second point.
5	MR. BROOKS: Okay, we're just really
6	tight on time, so if you could please
7	MR. HUETER: Right.
8	MR. BROOKS: be succinct.
9	MR. HUETER: So, yes, we've got to stop
10	acting like temperature isn't changing. And even
11	if it's not climate change, it's variations. You
12	have cold years and warm years and so on, and
13	that can explain a lot of this.
14	The other question is, when I look at
15	Lisa's index, which is much more pleasing to me,
16	because it's so simple for my simple brain and I
17	can see what's happening.
18	To me, this looks like an historical
19	plotting of the success of the FMP, in that it
20	starts at the bottom in the mid-1990s, there's a
21	quick jump after the EMP is in and then there's

1	this sort of ten-year period of working things
2	out. And then, all of a sudden, it's rising,
3	rising, rising to the current day.
4	So, I mean, I think this is reality.
5	My question is, can, Enric, you or Lisa, can you
6	put into perspective for us what this, the peak
7	of this curve means in relation to what it might
8	have looked at, say, in the mid-1970s, if the
9	same kind of index had been done?
10	Because this is, this curve is peaking
11	around three, three and a quarter, sharks per
12	hundred hook hours. And I my recollection is,
13	back in the 1970s, when we fished back then, that
14	that would have been not a super great haul.
15	So, can somebody put into perspective
16	for the group, where are we in terms of getting
17	back to the kind of biomass that really did at
18	one time exist, 40-some years?
19	MR. BROOKS: So, big picture sort of
20	take on how does this compare to the 1970s? And
21	Enric is looking at you?

1	MS. NATANSON: Yes, I excellent
2	question, and one that I had asked and why I like
3	to kind of at least compare it to our previous
4	1986 and 1989, which unfortunately, like you
5	said, it's not directly comparable.
6	But I think we'd have to go back maybe
7	to some records and try to get that data. And
8	that might be part of what we're doing when we
9	look at our data over time, that we're currently
L 0	modeling now. But I couldn't tell you right now.
L1	MR. BROOKS: I really need to get us to
12	a break. Pat, I'm going to let you get a very
13	quick last word. Marty, I see your card, but I'm
L 4	going to let you ask it offline during the break.
L5	Okay, yes.
L 6	MR. AUGUSTINE: Thank you, Lisa, and
L7	thank you, Enric. Both very interesting. My
L8	question is more simple, it's about the fishermen
L 9	around the room and when they're going to have
20	access to sandbar, more sandbar quota.

So, the question would be, when is the

21

1	next benchmark for sandbar and what's the
2	likelihood of expanding a quota and either
3	expanding the number of people in the
4	experimental fishery, so there would be more
5	participation by the commercial fleet?
6	DR. CORTES: We have a number of
7	assessments planned for the near future, which
8	are based on the stock prioritization exercise
9	that was done.
10	Your second point referred to bigger
11	participation, larger participation? Yes, I
12	mean, that's because during that oh, Rusty
13	left benchmark, we encourage all the parties
14	to provide information, obviously. And
15	definitely, I think we'll go in that direction.
16	I don't know how to put this. It's a
17	process, that we've been, believe it or not,
18	we've been approving our assessments a lot, with
19	more data and being more specific.
20	But still, things like this happened
21	are hard to explain and reconcile and we going to

1	be moving in probably more detailed assessments,
2	perhaps for sandbar, maybe something that's more
3	spatially explicit, that can capture these
4	trends, that we cannot explain now.
5	So, that's all that information,
6	again, has to be brought to the table and vetted
7	by the group. And the more information, the
8	better.
9	MR. BROOKS: Thanks.
LO	MR. AUGUSTINE: The question still
L1	remains, when?
L2	MR. BROOKS: All right. Let's
L3	MR. AUGUSTINE: The question still
L 4	remains, when? I don't mean to be abrupt on it,
L 5	but the fact is, we have series of exercises going
L 6	on for various other sharks. But at the end of
L 7	the day, one sector, the commercial fishery,
L 8	continues to get squeezed and squeezed and
L 9	squeezed.
20	And again, without some kind of a
21	benchmark out there or data out there, in the

1	future, that says, we're going to try to do this
2	on a particular species by, pick a number
3	MR. BROOKS: So, Pat, let me just put
4	that question to maybe either Karyl or Enric.
5	Just, again, I think the question is, do you have
6	any estimate of a target date?
7	MS. BREWSTER-GEISZ: We do not yet have
8	a target date for the next assessment of sandbar.
9	We just finished the sandbar assessment.
10	This year, later this year, in another
11	month, maybe two, but hopefully only a month,
12	we'll have the Gulf blacktip update done.
13	Starting late this year, going through
14	next year, will be the Atlantic blacktip. First
15	time that's been assessed in ages, like over 12
16	years.
17	And then, starting in 2020, we'll be
18	working on the hammerhead complex. So, we
19	it's going to be a while before we get another
20	sandbar benchmark in.
21	MR. BROOKS: Okay. Thanks, Karyl. So

1	
2	DR. CORTES: Let me just add very
3	quickly, and the reason for that, as Karyl was
4	mentioning, is that in the prioritization
5	process, it takes into account the number of
6	years for which an assessment hasn't been made,
7	and also, the status of the stock, if it was
8	overfished.
9	And actually, when we did this,
10	sandbar came up on top and we did it,
11	preliminarily. And then, when we finalized it,
12	we had these other species, like blacktip and
13	then, hammerhead that came up on top.
14	MR. BROOKS: Okay. Thanks. All
15	right. I want to get us into a break here. It
16	will be short though, we'll reconvene at ten
17	after 10:00. Thanks.
18	(Whereupon, the above-entitled matter
19	went off the record at 10:03 a.m. and resumed at
20	10:15 a.m.)
21	MR. BROOKS: All right. If we can get

1	everyone back to the table, we'll get going again
2	here. Thank you. All right. Again, if there's
3	anyone still in the back room, if we can get you
4	to the table, or folks who are standing up.
5	Okay.
6	So, our next presenter and our next
7	topic is All, revisiting the discussions around
8	shortfin mako sharks. There were we talked
9	about the emergency rule, back in the spring.
10	And now, we're taking another pass at this for
11	the draft Amendment 11. Guy, all yours.
12	MR. DuBECK: Thank you. So, we're
13	going to continue with the shark conversations
14	this morning and now, we're going to focus on
15	shortfin mako.
16	So, this is the draft Amendment 11.
17	So, we're working on the proposed rule. So,
18	first slide is just a kind of quick outline of
19	the presentation.
20	But the main purpose of Amendment 11
21	is to develop and implement management measures

2	rebuild the North Atlantic shortfin make stock.
3	So, we've been managing shortfin make
4	since '93. In the last ten years, there's been
5	three different ICCAT stock assessments, with
6	different results.
7	In 2008, the stock assessment was not
8	overfished, with overfishing occurring. And
9	then, from there, we developed Amendment 3, where
10	we promoted the live release and encouraged
11	fishermen to release shortfin mako sharks.
12	In 2012, there was another assessment
13	that came back as not overfished, no overfishing
14	occurring. However, there was a lot of
15	uncertainty with that assessment, where there was
16	not enough biological information used and
17	historical catch information there.
18	So, that leads us to the most recent
19	stock assessment, where stock is determined to be
20	overfished with overfishing occurring.
21	This stock assessment updated the

that would address overfishing and take steps to

1

1	modeling for the population and also included
2	more biological parameters, tagging information,
3	and some other items that helped improve the
4	stock assessment.
5	Based on that currently, right now,
6	all the nations combined are about 3,600 to 4,700
7	metric tons per year, the landings of shortfin
8	mako sharks.
9	Based on the assessment, to prevent
10	further decline, it was recommended that all
11	catches be below 1,000 metric tons. So, that's
12	a 72 to 79 percent reduction.
13	So, from there, the recommendation,
14	the objective of ICCAT Recommendation 17-08 was
15	to maximize live releases. But for retention,
16	allow for retention only if it was dead at
17	haulback and there was but the requirements
18	were that there's an observer onboard and/or
19	there's electronic monitoring.
20	The minimum sizes in the
21	recommendation were, for males, 180 centimeters,

1	which is 71 inches, and for females, it was 210
2	centimeters, so that's 83 inches.
3	So, the next steps are that this
4	coming ICCAT, they're going to look at the first
5	six months of data and make sure that see how
6	the data, all the countries are doing. And then,
7	see if there could be needs to be more changes.
8	But then, in 2019, there's going to be
9	another assessment for shortfin mako sharks.
10	But also, I just wanted to point out
11	that, even though it was recommendation, the U.S.
12	is obligated to implement any of the ICCAT
13	recommendations under the Atlantic Tunas
14	Conservation Act.
15	So, if you remember when we did
16	scoping the last AP meeting, from the comments
17	you all gave, and all the comments we received,
18	we developed different alternatives and divided
19	into certain categories.
20	So, the first one we're going to talk
21	about is the commercial alternatives. So, with

1	all our rulemakings we look at, we have a bookend
2	where we have no action. So, keep the non-
3	emergency rule regulations.
4	Alternatives A2, A3, and A5 are very
5	similar, so we kind of combined it here. So, all
6	of them would allow retention of shortfin mako
7	sharks under different requirements.
8	So, the preferred alternative, A2,
9	would allow retention of shortfin make sharks
10	dead at haulback only if there is a functioning
11	electronic monitoring system onboard. So,
12	that's for any vessel that has electronic
13	monitoring.
14	So, right now, currently, it only
15	applies to longline fishermen do, but if this one
16	prevents bottom longline or gillnet fisherman
17	from doing, as long as there's an electronic
18	monitoring system onboard.
19	Alternative A3 is, if the mako shark
20	comes back dead, it'll we looked at, only if
21	permit holders agree to allow the Agency to use

1	electronic monitoring to verify the landings of
2	shortfin mako sharks.
3	So, at the last AP meeting, there was
4	a lot of discussion about us expanding the use of
5	electronic monitoring system beyond what the
6	scope was originally discussed, with Amendment 7,
7	for just bluefin tuna.
8	So, under this alternative, is that if
9	it would only allow permit holders that would
10	allow the Agency to use the electronic monitoring
11	to verify the landings, then to be able to land
12	shortfin mako sharks.
13	Alternative A5 is that, once the make
14	shark is hauled back dead, if there's an observer
15	onboard to verify the landing, then they would be
16	able to retain it.
17	So, continuing with the commercial
18	alternatives. This one is kind of combining the
19	size limit in with this one.
20	So, in Alternative A4, allow retention
21	of any mako sharks, whether dead or alive, if

1	it's over 83 inches and there's a functioning
2	electronic monitoring system or an observer
3	onboard to verify the fork length. And what I
4	mean by fork length, we mean by straight-line
5	measurements.
6	And then, Alternative A6 is, prohibit
7	all commercial retention of shortfin make sharks.
8	So, those are the commercial ones, now
9	moving on to the recreational alternatives. So,
10	again, the first one is no action, so keep the
11	non-emergency rule regulations.
12	And then, the next ones are looking at
13	the different size limits. So, Alternative B2
14	through B5 look at different ones. So, it would
15	all be increasing the minimum size from the 54
16	inches, but under B2, it would be increasing it
17	to 71 inches for the males and 83 inches for the
18	females, which would be mirroring what was in the
19	recommendation.
20	Alternative B3, the preferred
21	alternative, is to increase the size limit to 83

1	inches for male or female.
2	Alternative B4 would be to increase
3	the minimum size for males to 71 inches and then,
4	also then increase the minimum size for females
5	to 108, which is the 50 percent maturity size for
6	female sharks.
7	And then, the last one is, B5 here,
8	would be to again increase males to 71 inches,
9	but then, females to 120.
LO	So, we got comments about maybe a
L1	male-only fishery. So, this alternative would
12	be essentially a male-only retention of shortfin
13	mako sharks, but it wouldn't prevent someone from
L 4	catching state world record fish that would be
L5	over 120 inches.
L 6	So, the next set of alternatives,
L7	again, is kind of an outgrowth of the public
L8	comment, looking at the seasonal retention of
L 9	shortfin mako sharks.
20	So, under these alternatives, it would
71	allow retention seasonally of shortfin make

1	sharks, under the different male and female size
2	limits, depending on the length. But then,
3	anything outside those times, it would be
4	restricted to the greater than 120 inches.
5	So, Alternative B6a, with a season for
6	shortfin mako sharks would be May through
7	October. And then, the size limit would be 71
8	inches for males and then, 83 inches for the
9	females.
LO	B6b would be June through August, 71
L1	inches for the males, 100 inches for the females.
L2	Next one would be from June to July,
L3	71 inches for the males, and the size limit would
L 4	be smaller for the females, down to 90 inches.
L5	And then, the other one we looked at
L 6	was just a season in June, with 71 and 83 inches.
L7	And the last one in this suite here is
L 8	looking at potentially establishing a seasonal
L 9	retention and minimum size, based on certain
20	criteria, more looking at landings and catch
21	rates where we could notentially change the size

1	limit and season to maximize that.
2	Continuing with the recreational
3	alternatives. The next one would be looking at
4	a slot limit. And a slot limit is looking at a
5	minimum and a maximum for the males and females.
6	There's a lot of confusion with that.
7	And also, where we'd have a minimum and a maximum
8	for both males and females, and then, also if
9	people properly identify them, so right now,
10	that's not a preferred alternative.
11	B8 is looking at a landing tag
12	program, similar to other fisheries and hunting.
13	You'd have to you can only land a make shark
14	greater than the minimum size if you had a tag to
15	do that.
16	Alternative B9, another preferred
17	alternative, would be to require the use of
18	circle hooks for recreational fishermen. So,
19	right now, we have the line at Chatham,
20	Massachusetts, where anything north of that line,
21	you don't have to use circle hooks. That was

1 establish	ed in A5b with dusky sharks.
2	This alternative would remove that
3 line and	it would be the entire HMS Management
4 Group wou	ald be required to use circle hooks to
5 recreation	nal shark fish.
6	And then, last one is to prohibit
7 landings.	So, make it a catch-and-release only.
8	So, moving on to the monitoring
9 options.	So, currently, right now, we prefer no
10 action.	So, do not do anything beyond, outside
11 the curre	ent recreational reporting systems.
12	However, right now, we plan to expand
13 the tourr	nament reporting. So, right now, only
14 swordfish	and billfish tournaments are required
15 to report	. Now, we're going to look to expand
16 that to	all the shark tournaments, to include
17 landings,	discards, and other information.
18	And Alternative C2 would be establish
19 mandatory	commercial reporting of make sharks on
20 the VMS.	Currently, right now, we're not
21 preferrin	g that alternative, because commercial

1	fishermen report a lot between, there's observers
2	on the boat, there's EM, there's logbooks, and
3	then, there's the electronic dealer reporting.
4	The other alternative is, C3 is
5	implement mandatory reporting of all recreational
6	landed and discarded shortfin mako sharks.
7	Again, we do not prefer this one at this time,
8	because of we have a good estimate of what the
9	recreational core landings are through the LPS
10	and they're really good estimates.
11	Continuing on to the rebuilding
12	alternatives. So, D1, again, is the do nothing,
13	don't establish one.
14	D2 is to establish a domestic
15	rebuilding plan without ICCAT.
16	The preferred alternative, however,
17	is to develop a foundation for an international
18	rebuilding program with ICCAT for shortfin mako
19	sharks.
20	The other alternatives here are, D4 is
21	to, if ICCAT establishes this, remove shortfin

1	mako shark from the pelagic shark management
2	group and implement a shark management quota.
3	And then, adjust the shortfin mako I mean, the
4	pelagic shark quota quarterly.
5	And then, the other one is, again, if
6	ICCAT established this, implement an area
7	management for shortfin mako sharks.
8	And then, the last one here, is to,
9	Alternative D6, establish a bycatch caps for all
10	fisheries that interact with shortfin make
11	sharks.
12	Currently, right now, 98-99 percent of
13	shortfin mako sharks occur in HMS fisheries,
14	whether it's commercial or recreational. So, we
15	don't feel it's warranted at this time for this
16	alternative.
17	So, here's kind of the timeline for
18	this rulemaking. We wrapped up the in-person
19	public hearings. We have the webinar next
20	Wednesday. And then, we still have the council
21	presentations in the South Atlantic and New

1	England.
2	The comment period ends on October 1.
3	And the target date to get this done and
4	implemented is the spring, which would be the
5	beginning of March, when the emergency rule
6	expires.
7	And also, I want to point out, like I
8	mentioned earlier, the ICCAT will be evaluating
9	the measures in November.
10	So, I wanted to give kind of the AP a
11	rundown of public comments we've heard to date.
12	So, we've received support for the preferred
13	alternatives, but then we also received support
14	for alternatives that mirror the ICCAT
15	recommendations.
16	There were some questions regarding
17	what would happen if ICCAT changes the
18	recommendation in November and then, if or
19	after the assessment in 2019.
20	And there's been a lot of comments
21	about, like, the U.S. shouldn't be the leader

1	here for shortfin mako conservation, because we
2	only count for ten percent of the overall
3	landings.
4	And then, there's comments about,
5	memos should have a sunset clause that allows for
6	regulations to be removed quickly if ICCAT
7	changes the recommendations based on the new
8	assessment results.
9	And then, there's been comments about,
10	well, bottom longline and gillnet fishermen
11	incidentally catch shortfin mako sharks and they
12	should be able to land them, whether dead or
13	alive, without electronic monitoring systems.
14	And then, comments about NMFS should
15	look at commercial fishermen to allow commercial
16	fishermen to land shortfin mako sharks at an
17	incidental level, dead or alive, especially
18	during the summer fishery.
19	So, that's all I have today. Again,
20	I want to mention the comment period is through
21	October 1. You can submit comments through

1	regulations.gov, email, or calls. And then,
2	we'll be taking your comments here today.
3	Thanks.
4	MR. BROOKS: Great. So, as we did
5	yesterday, I think, since we've got several
6	different sort of categories of alternatives to
7	consider, let's take them chunk by chunk.
8	So, let's just take them in the order
9	that Guy just worked through it and let's just
10	start with the commercial alternatives. And
11	we've got six put forward here, so let's have
12	some conversation and feedback on the
13	alternatives, again, commercial alternatives.
14	So, I've got let's just work our
15	way down on commercial. Rick? No. Rusty?
16	MR. HUDSON: Thank you, Guy. With
17	shortfin mako, on slide five, you have that last
18	line of zero metric ton would be necessary to
19	rebuild the stock by 2040.
20	Is that just the United States doing
21	that, with our ten percent of the total catch, or

1	are you anticipating enough work from the ICCAT
2	nations to accomplish that?
3	MR. DuBECK: That would be everyone.
4	MR. HUDSON: With that said, that's
5	about ten percent of 3,600 to 4,750 metric tons
6	in recent catches is 360 to 475 and it says it
7	should be below 1,000 metric tons. That's pretty
8	problematic.
9	Is that going to set you all up after
LO	a final rule in the Federal Register of
L1	potentially litigation for still overfishing
L2	occurring here, for all sectors? I mean, that's
L3	something that kind of worries me in the back of
L 4	the head.
L5	And I agree with the sunset clause.
L 6	I assume that would also take an HMS meeting to
L 7	sort of make decisions on how to rapidly upgrade
L8	the measures, in case the stock assessment is
L 9	different, because of the MRIP calibrations and
20	the Morocco landings and whatever else comes up.
) 1	MS RDFWSTFD_CFIS7. So won were

1	asking if we weren't reducing below 1,000 metric
2	tons, if that would lead us to litigation? Is
3	that what your question was?
4	MR. HUDSON: If overfishing is still
5	occurring, that opens you up to litigation.
6	MS. BREWSTER-GEISZ: Possibly. I
7	can't predict who's going to or what would be
8	their reasoning to litigate us on this. This
9	would be an international thing.
10	MR. BROOKS: And, Rusty, did you have
11	any comment on the alternatives?
12	MR. HUDSON: As far as the alternatives
13	for size, I'm still a male-oriented type guy on
14	this particular thing
15	MR. BROOKS: We're talking commercial
16	here.
17	MR. HUDSON: Yes, well, with the
18	commercial, that would be the same, if we're able
19	to allow other people besides pelagic longliners
20	to be able to take. For the pelagic longliners,
21	you've got dead, right now.

1	MR. BROOKS: Bob, you want in on the
2	commercial alternatives, here?
3	MR. HUETER: Yes, I do, a
4	clarification. I don't understand the
5	difference, Guy, between A2 and A3. Can you
6	explain what you're talking about there?
7	MR. DuBECK: Yes. So, A2, the
8	preferred alternative, is that only vessels that
9	have a functioning electronic monitoring system
LO	would be able to land dead make sharks.
L1	Under A3, it would be same thing, but
L2	it would allow fishermen to potentially not allow
13	the Agency to review it for make shark landings.
L 4	So, Amendment 7, as we talked about
L5	last AP meeting, was, the intent of the
L 6	electronic monitoring system was for bluefin
L7	tuna.
L 8	And this was above and beyond what was
L 9	originally intended for the electronic monitoring
20	system, so some fishermen felt that that wasn't
21	right and that this alternative would allow

2	MS. BREWSTER-GEISZ: So, you're still
3	looking confused.
4	MR. HUETER: Yes.
5	MS. BREWSTER-GEISZ: So, let me try.
6	If you remember, at the last AP meeting, and we
7	heard this throughout the scoping meetings, that
8	the pelagic longline fishermen were upset that we
9	were using electronic monitoring to monitor the
10	shortfin mako sharks.
11	So, Alternative A3 allows the
12	fishermen to opt-out. They would no longer be
13	allowed to land any shortfin mako shark, unless
14	they decide to allow the Agency to use EM their
15	shortfin mako landings.
16	MR. BROOKS: In A2, it assumes the
17	Agency is using EM, that's the default option.
18	A3, that only occurs if the fisherman says, yes,
19	you can do that.
20	MS. BREWSTER-GEISZ: Correct.
21	MR. HUETER: Okay. So. I think, so if

fishermen to opt-out of that.

1

1	I'm understanding you, then I would advocate A2
2	plus A3.
3	I mean, if a boat catches a mako, has
4	a functioning electronic monitoring system
5	onboard, but they don't give permission to the
6	Agency to review the data, and I don't understand
7	what the purpose of A2 is.
8	So, it seems to me that it's got to
9	be, combine those two. That there is a
10	functional EM system onboard and there's
11	allowable access to the data. Maybe I'm still
12	confused.
13	MR. McHALE: So, I'll take a run at it
14	and see if I can screw it up even further.
15	(Laughter.)
16	MR. McHALE: So, in essence, a part of
17	the negotiations at ICCAT, some of the original
18	proposals were solely based on if there was an
19	observer onboard the vessel that could confirm
20	the shark was dead at haulback, then that shark
21	could be retained.

1	And so, then, we as the United States,
2	saying, well, we have electronic monitoring
3	systems onboard our entire fleet, that also could
4	be used as a monitoring tool. And that factored
5	into some of those negotiations, hence the
6	recommendation.
7	Some members of the pelagic longline
8	fleet took offense to that, even though there was
9	a benefit of retaining, or potentially retaining,
10	more shortfin mako, is that that information was
11	being used differently from how we advertised it
12	in Amendment 7.
13	So, the differences between Amendment
14	2, excuse me, Alternative 2 and Alternative 3 is,
15	Alternative 2 is, you have the EM systems
16	onboard, you can retain dead shortfin mako at
17	haulback, across the board.
18	If somebody, on principle, continues
19	to take offense that the Agency is using that
20	footage beyond the scope of Amendment 7, that
21	they could then opt-out, but as a byproduct, not

1	retain shortfin mako.
2	So, it's really a principle versus
3	benefit of keeping those dead fish.
4	MR. HUETER: Okay. So, I vote for A3,
5	because just because they have a system onboard,
6	if they don't allow access, then they can get
7	away with whatever the hell they want.
8	MR. BROOKS: Next, running down the
9	line, Sonja, a comment on commercial?
10	MS. FORDHAM: I have one comment on
11	all.
12	MR. BROOKS: One comment on all, go.
13	MS. FORDHAM: Thank you. Sonja
14	Fordham, Shark Advocates. I have made more
15	extensive comments at the spring meeting and I've
16	submitted comments, so in interest of time, I
17	will do my best to be brief.
18	But unfortunately, I have to reiterate
19	some of the concerns I had about the
20	presentation, although I appreciate you giving
21	one and overall, it seems clear. But in terms

2	I think it's critical that the Agency
3	present the full and complete picture about the
4	severity of the situation that's been presented
5	by the scientists. So, I think it's a bit
6	clearer than in the spring, but I'm still I'm
7	concerned that it's still not all there.
8	So, you talk about 1,000 ton limit to
9	stop the decline. The SCRS document also points
L 0	to a 500 ton level that is necessary to start the
11	rebuilding.
12	And I do appreciate you adding the
13	mention of zero catches, but the slide says a TAC
L 4	of zero, and actually, SCRS talks about zero
L 5	catches to achieve rebuilding by 2040, and that's
L 6	just a 54 percent probability association.
L7	And I was at that SCRS meeting and I
L 8	asked this question and the scientist told me
L 9	that that zero catch includes discards. So, it's
20	quite a bit more serious.
21	Also, the ICCAT SCRS noted in their

of Slide 5, I continue to be really concerned.

2	survival for makos as a good reason to think that
3	a prohibition, which is what they have
4	recommended, would be effective and the best
5	course of action.
6	So, again, to be clear that the
7	scientists, I have never seen them be this clear,
8	that they recommended a prohibition, a complete
9	prohibition on retention.
10	And then, the last bit of information
11	I think that it would help to include the next
12	time we talk about this, if it happens again, is
13	the ecological risk assessment.
14	In your timeline, you go through the
15	stock assessments for ICCAT, but about a decade
16	ago, we started with the ecological risk
17	assessments for sharks and makos have
18	consistently been ranked near the top, in terms
19	of inherent vulnerability.
20	And so, again, as I said in the
21	spring, I recognize this is really unpleasant

1 advice the 70 percent post-release estimated

1	information and really difficult to deal with,
2	but it should not really be a total surprise,
3	given the biology of the animal.
4	So, with that, I appreciate that the
5	U.S. has taken prompt action, better than other
6	countries, but I continue to support the
7	scientific advice of complete prohibition for
8	both commercial and recreational fisheries.
9	I will reiterate that I appreciate and
L 0	recognize that this particular shark is one of
L1	the most valuable, if not the most valuable, to
L2	our fisheries.
L3	But also note that NOAA has adopted
L 4	prohibitions for sharks for 20-some other
L 5	species, and in most cases, those prohibitions
L 6	are based on much less information and less
L 7	compelling arguments.
L 8	And last, I will say that you work
L 9	pretty intensely on ICCAT. I work with
20	colleagues from the other main catching nations.
21	I definitely share the frustration of all the

1	other countries not taking action.
2	But the U.S. has ranked fourth for
3	mako catches in recent years, and the fact
4	remains that the U.S. failing to take action on
5	this very clear scientific advice, or adopting
6	measures that aren't fully in line with that
7	advice, really is only going to make what is a
8	very serious situation worse. Thank you.
9	MR. BROOKS: Thanks, Sonja. Rick, did
10	you want to weigh in on commercial? Okay.
11	Scott?
12	MR. TAYLOR: Well, I urge the Agency
13	not to create another regulatory dead discard.
14	Anybody in this room that doesn't think the
15	Agency is going to use the EM the way they see
16	the EM fit to be used is just naive.
17	This is a prime example of us being
18	shot in the foot for the level of competency and
19	reporting that we have here in the U.S. Did
20	anybody that when things are wrong, you've got
21	to call them wrong.

The distribution of these fish, and I 1 2 understand that we have treaties and obligations 3 within ICCAT, but the information that this assessments are being based on is just someplace 5 in outer space. There's a problem when -- that for 6 7 year after year, we hear that, when observation from the people that have been engaged in this 8 fishery consistently, from the very beginning, 9 are not seeing any change. 10 11 As a matter of fact, we're seeing more 12 makos right now than we've seen the rest of my I caught my first make with Charlie Kluck 13 life. 14 in 1975. That's how long I've been engaged in 15 the fishery. 16 There's more makes out there now than there's ever been. So, unless there just 17 18 absolute complete disconnect with what's going on with the fishery, the only other possibility is 19 that the numbers are wrong, because nobody else 20 is doing the reporting that we're doing. 21

1	So, I understand that there's
2	limitations, but by essentially having the fleet
3	take over and dump a fish that's dead already, I
4	don't know what more else that it is that we can
5	possibly do.
6	Nobody's out there we're honoring
7	and observing this emergency rule that was
8	placed. And I can't let the opportunity to pass
9	to reinforce what Glenn Delaney said yesterday.
10	2021, 2022 before we're going to do
11	anything? This is a shining example of how
12	quickly the Agency can move when it actually
13	needs to move on something. We can't wait four
14	and five years for there to be action.
15	You have the only alternative that
16	makes any kind of sense for the pelagic fishery
17	I'm not going to comment on what you can do
18	recreationally, because it doesn't have any
19	value, one way or another to in terms of what
20	I can quantify.
21	It does for the tournaments, it does

1 for the recreational sector, I can understand 2 And that's an issue that the Agency will 3 have to grapple with and it's outside of my wheelhouse. 5 The only thing that I can speak to is that, if we catch a make and the make is in fact 6 7 dead, let's not chastise us and penalize us even worse by simply turning the fish into a mud dart 8 and sending it over, so that the other people 9 that are out there are going to sit there and 10 11 say, look how wasteful the longline fleet is 12 again. It's absolutely ridiculous. 13 We're 14 going to do everything we can to turn these fish I've got boats that are seeing 20 15 loose live. 16 and 25 makos a day right now, that they're cutting loose live. 17 18 There's a complete disconnect between science is showing and what 19 what the seeing, again, and it's not because of the lack 20 of information coming from the U.S. We're ranked 21

1	fourth? Please. That's my
2	MR. BROOKS: Scott, sorry to just,
3	could you be more specific on which alternative
4	you prefer?
5	MR. TAYLOR: Leave the alternative that
6	you have in place, which is to allow us to retain
7	dead discards.
8	You're going to use the EM the way
9	you're going to use the EM anyway. Clearly, the
10	issue regarding the EM being used for enforcement
11	outside of the original intention under Amendment
12	7, anybody that took the position that eventually
13	we weren't going to get around to all the other
14	species was just naive anyway.
15	And that regardless of what we wish,
16	as long as you're getting sent the hard drives,
17	you're going to use them basically as you see
18	fit. It's equipment that you put that's there
19	on the boat.
20	So, you have enough other deterrents
21	and controls to make sure that a bad player, for

1	example, isn't going to be harvesting live makos.
2	I mean, that's just
3	MR. BROOKS: Thanks. Okay. Working
4	my way around. Hang on, Dave.
5	MR. AUGUSTINE: I'll pass.
6	MR. BROOKS: Passing? Okay.
7	MR. AUGUSTINE: No, no, you want me to
8	pass? I don't want to pass.
9	MR. BROOKS: I only want you to pass if
10	I want you to talk to commercial, otherwise,
11	pass.
12	MR. AUGUSTINE: Yes, commercial.
13	MR. BROOKS: Go.
14	MR. AUGUSTINE: I agree,
15	wholeheartedly, with what Scott said. Let's be
16	realistic, a dead fish is a dead fish.
17	They're not in the industry, in the
18	business to feed that dead animal to other
19	creatures in the ocean. It's dead. That's their
20	job. Their job is to bring it into market and
21	make it a viable product.

1	So, I agree with him wholeheartedly,
2	don't change it. If you've got a dead fish, it
3	stays in the vessel. If it's alive, you cut it
4	loose, mark it as such, and move on with your
5	life. Thank you.
6	MR. BROOKS: Okay. Thank you. Marty?
7	MR. SCANLON: I'm in agreement with
8	what Scott said right there. Yes, A2, A3, it
9	just creates a complexity that I don't think we
10	need to be dealing with.
11	I mean, the most important thing is we
12	don't want another discard to deal with and
13	that's why we preferred the A2.
14	But A5 should be included in that as
15	well, because, I mean, there are commercial
16	fisheries that don't have the electronic
17	monitoring systems onboard, but they do have
18	times that they carry human observers. So, I
19	think A5 and A2 should be both included in it
20	there.
21	And like I said, A3 would just create

1	you'd have to have a disclaimer at the
2	beginning of the year, it would be that much more
3	difficult for the Coast Guard to enforce, and
4	that type of issues would come up there, so.
5	MR. BROOKS: Thanks, that's helpful.
6	Mike, did you want to get in on this, or just
7	waiting on rec?
8	MR. PIERDINOCK: No, I have comments
9	concerning the stock assessment that applies for
10	commercial, as well as rec, but I'll save that -
11	_
12	MR. BROOKS: Go for it then. Oh, you
13	want to okay.
14	MR. PIERDINOCK: I'll leave it to when
15	I
16	MR. BROOKS: Okay.
17	MR. PIERDINOCK: just to clarify
18	that, after he's done commenting.
19	MR. BROOKS: Yes, go ahead, Scott.
20	MR. TAYLOR: I just wanted to say that,
21	understanding the dynamic with ICCAT, that if you

1	need to use the fact that you have EM on the boat
2	as a leverage to allow for the retention of the
3	dead discards, I mean, that's something that I
4	think we all understand.
5	But there's a difference between that
6	and and specifically for the purposes of
7	those negotiations. But there's a difference
8	between doing that and sort of asking the
9	industry to endorse the use of the EM for that
L 0	purpose.
L1	MR. BROOKS: It's not a full-throated
L2	endorsement, it's, yeah, it's there, I get it,
13	and if that's what allows us to avoid dead
L 4	discards, sure. Go ahead, Marty.
L5	MR. SCANLON: Yes, well, the industry
L 6	looks at it as a utilization of the EM, not an
L7	expansion of the EM. That's how we view it
L 8	there.
L 9	And the other thing is, I guess we
20	should mark this down as this is the beginning of
21	our revitalization plan, that we're going to be

1	allowed to keep dead-discards, in the A11? Is
2	this should we mark this day down on our
3	calendar, that this is the beginning of the
4	revitalization?
5	MR. BROOKS: All right. Before we turn
6	to rec, then what we're hearing there is, at least
7	one comment for a complete prohibition.
8	A couple for A2 or a combination of A2
9	and A5, to account for monitoring David, I'll
LO	get to you in one second. One person voicing
L1	interest in A3, though others suggesting that
L2	could be just too complicated to implement.
L3	And then, a recommendation that
L 4	regardless of what path you go, include a sunset
L5	clause, so that if the assessment changes at
L 6	ICCAT, there's a way to be nimble and respond to
L7	that.
L8	Obviously, a number of general
L 9	comments around the extent to which people see
20	the risk to makos right now and the accuracy of
21	the assessments that are out there

1	So, David, you did want to jump in on
2	this?
3	MR. SCHALIT: I want to admit that I
4	have limited knowledge of the mako situation. I
5	did read the executive summary from the SCRS and
6	I recall that they did not have what you would
7	characterize as a bulletproof sense that the data
8	they were collecting was accurate. And that's
9	important to keep in mind.
L 0	I think, I'm looking at it from the
L1	point of view of bigeye, I believe that any
L2	longliner that's targeting bigeye is also
L3	incurring mako catch as well.
L 4	And I mean, it's always possible that,
L5	for example, we have it with the swordfish stock
L 6	that the scientists are telling us is fully
L7	recovered, but it is not abundant in the U.S.
L 8	EEZ. Okay.
L 9	So, that could be a situation here.
20	But I don't think that's it. What we can see
21	from bigeye world is that there are approximately

1	800 distant water longliners, of many nations,
2	maybe ten or 12 nations, operating in the Central
3	Atlantic.
4	And I have serious doubts, extremely
5	serious, like totally extremely serious doubts,
6	that we are getting good data from all those
7	nations.
8	So, it seems that ICCAT has an IUU
9	issue, a reporting issue, an enforcement issue
10	that they have to look at. And I think we should
11	keep that in mind when we're discussing this.
12	Thanks.
13	MR. BROOKS: There's a card up in the
14	corner, is that on commercial? Okay. All right.
15	So, let's switch please, Bob.
16	MR. HUETER: I just want to I'd like
17	to clarify my position, which is, so, I have some
18	trepidations about the fact that this is all
19	based on one assessment as well.
20	And in that case, I think it's
21	draconian to jump immediately to zero retention

1	and throw away dead-discards. It seems like a
2	waste.
3	So, the question is, if we did that,
4	though, are we trying to incentivize the fishery
5	to move away from catching makos?
6	That's the only reason why you would
7	prohibit retention of dead discards, in my mind,
8	is to incentivize the fishermen, let's stay away
9	from these animals. And I haven't heard that as
LO	a goal.
L1	So, therefore, my position is, it's a
L2	combination of A2, A3, and A5, that if they have
L3	the right permits, let them keep dead animals,
L 4	which for makos, is pretty obvious, once they get
L5	to the boat. They're not they don't revive.
L 6	And they have to have either an EM
L7	system onboard to which the data can be accessed
L 8	to check on and verify what the fishermen are
L 9	saying, or they have an observer onboard that's
20	also a human observer that will also verify.
) 1	So that is my position and I'm sorry it doesn't

1	fit into one of your categories as easily.
2	MR. BROOKS: Scott, you got 20 seconds.
3	MR. TAYLOR: I got to respond to that.
4	The primary source of the makos are the
5	swordfish. That's why they're there. We're not
6	going to fish for swordfish if you're not
7	seeing the makos, you're not where the swordfish
8	are.
9	And the second comment is about the
10	EEZ. There's plenty of swordfish in the U.S.
11	EEZ, just not where we can catch them. So, don't
12	be fooled into believing that we don't have more
13	than ample stock within our EEZ to completely
14	fill our quota. Our hands are tied and we can't
15	fill our quota
16	MR. BROOKS: Thank you, Scott.
17	MR. TAYLOR: because we can't fish.
18	Thank you.
19	MR. BROOKS: Sonja, urgent need to
20	weigh in?
21	MS FORDHAM. Yes, urgent need Just

1	mentioning that the SCRS report does make a
2	special note of the improvement in the make catch
3	data over time and the scientists' marked
4	increased confidence in their results.
5	MR. BROOKS: Okay, thanks. Let's
6	shift to rec. And I've got Rick, Rick, Mike,
7	Anna, Rusty.
8	MR. WEBER: Rick Weber. You're
9	probably going to get bookend comments from both
LO	Mike and I.
L1	I'm going to start with commercial
L2	comments, because they're really all the same,
L3	which is, follow the ICCAT advice. It's an
L 4	internationally managed species.
15	What could we do for commercials? How
L 6	about we give up wire leaders? Oh, we've already
L7	done that. How about we give up J hooks? Oh,
L 8	we've already don't that.
L 9	I we need the rest of the world to
20	come along with us. Thinking we're going to
21	solve this with less than ten percent of the total

1	catch is insane.
2	And I know that the sizes were
3	discussed in the spring, and, Bob, I believe
4	you're right, they probably are not accurate.
5	And I would fully support going to ICCAT and
6	getting that fixed.
7	But leading with our chin yet again,
8	I can't support. Let's get it fixed. If they
9	pick the wrong number, let's get it fixed. But
10	follow the ICCAT advice. So, I'm at 71 and 83,
11	as I have been since last November.
12	The rest, I am very appreciative of
13	scoping. I really am, because we unless you
14	guys were scoping, we wouldn't you wouldn't be
15	able to properly advise the IAC and the
16	delegation of what we can bring home.
17	How can we tolerate? What ideas have
18	we heard? Maybe it should go to male-only.
19	Maybe some of these ideas should be pursued, but
20	they need to be pursued at the ICCAT level, not
21	getting ahead of the curve again.

1	We get no credit for it, ever. The
2	next time there's a cut, they just look at us and
3	say, what are you going to do now? And they
4	there's I don't know, I'm talking in circles.
5	MR. BROOKS: No, you're not talking in
6	circles. Rick Bellavance?
7	MR. BELLAVANCE: Thank you. Just a
8	quick question first and then, a recommendation.
9	So, my question is, what is compelling the
10	Service to prefer an option that's more
11	restrictive than the ICCAT recommendations?
12	MR. DuBECK: Well, as we stated, that
13	83 across the board, because of the
14	identification of male and female. We were
15	hearing some mixed reports, whether fishermen can
16	do that and can't do that. So, we decided to
17	prefer at this point 83 across the board for all
18	fishermen.
19	MR. BELLAVANCE: So, I personally
20	disagree with that logic. Just, I think that's
21	inaccurate. If you can't tell the difference

1	between a male shark and a female shark, then you
2	shouldn't be driving a boat. But that's just how
3	I feel.
4	So, I think that's I don't agree
5	with that logic. I think we should follow the
6	ICCAT recommendations. Personally, that's what
7	I believe is right. I agree with Rick 100
8	percent, he's at that table that has a lot more
9	to offer there than I do, but I agree with that.
LO	I will say that I have heard from
L1	other fishermen that a male-only fishery makes
L2	more sense if you're truly concerned with
13	conserving the resource and rebuilding it,
L 4	protecting those females is a good idea.
15	So, I wanted to pass that along. But
L 6	my personal beliefs are, stick with the ICCAT
L7	recommendations.
L 8	MR. BROOKS: Thanks, Rick. Mike?
L 9	MR. PIERDINOCK: Yes, thank you. I'm
20	not going to repeat what Rick and the two Ricks
21	have said, I agree with what they're saying. I'm

1	one of the ICCAT advisors that was in Morocco.
2	One thing I want to point out is, is
3	that we may have to call off the hounds. I'm
4	concerned that we're jumping the gun here. And
5	part of this has to do with the fact that the
6	international fleet does not report their
7	landings.
8	And that resulted in a lot of
9	uncertainty in the stock assessment. So, the
10	stock assessment may be flawed as a result of
11	that lack of data and information.
12	Our hope is, and my hope is, and I'm
13	trying to be positive about this, Sonja, is that
14	November, Morocco, Portugal, the rest of them
15	that are catching all the makos, report their
16	landings and it shows a different outcome of the
17	stock assessment. That's my hope.
18	We only represent ten percent of the
19	total landings for the United States, yet we
20	continue to do the conservation measures and
21	everything that's made our pelagic longline fleet

1	be reduced to the point it is today, as a result
2	of the fact they can't go after swordfish and
3	other species.
4	Yet, the rest of the world over in the
5	Gulf of Guinea and elsewhere, they continue to do
6	it and get all that bycatch and continue to catch
7	it and sell it back to us. It's just not right.
8	Japan, for example, is one of the
9	biggest bluefin landing nations of the world.
10	They're, I think, one, two percent of the total
11	landings of makos. It's ridiculous.
12	These nations are not reporting their
13	landings. They need to do that. So, I want to
14	proceed cautiously here, let's see what we come
15	up with in November and see whether that makes
16	any different conclusions to the stock
17	assessment.
18	Then, we can take appropriate
19	measures, which I think the 83-inch was
20	premature. It should have 83/71. We've seen
21	about a one-third decrease in tournaments,

1	there's been some tournaments, shark tournaments
2	that have been cancelled altogether.
3	I know, I can't attest, Rick, for what
4	you're seeing down your neck of the woods, but up
5	in New England, one-third less participation in
6	shark tournaments is a result of this change.
7	So, the proposal would be my
8	recommendation is to keep things consistent with
9	ICCAT. Thank you.
L 0	MR. BROOKS: And with some sort of
L1	sunset, if there are changes at ICCAT as well?
L2	Does that make sense?
L3	MR. PIERDINOCK: Yes.
L 4	MR. BROOKS: Okay. Anna?
L 5	MS. BECKWITH: Just a clarification on
L 6	the circle hooks for recreational shark fishing.
L7	Is that just going to be for natural baits or for
L 8	natural and artificial?
L 9	MR. DuBECK: It would be the same what
20	was in the regulations, it's just more removing
21	that line that we have right now.

1	MS. BECKWITH: So, I don't remember, so
2	that's why I'm asking for clarification.
3	MR. DuBECK: Natural bait natural
4	bait, except for artificial lures.
5	MS. BECKWITH: Okay. Natural bait,
6	except for artificial lures, so what about fly
7	fishermen with natural components on the fly?
8	MR. BROOKS: Okay. Rusty, and then,
9	over to David.
L 0	MR. HUDSON: Thank you. On the
11	recreational side, I have to agree that I believe
L2	that what we've done collectively is great. And
L3	I believe that they should stay with these
L 4	numbers that we have.
L 5	In particular, because of MRIP on one
L 6	level, a full dozen of nearly a third of all of
L7	the shortfin mako PSEs, percent standard error,
L 8	are above 50. Fifty is considered highly
L 9	unreliable.
20	So, until that operational assessment
21	is done for shortfin mako, I believe we're

1 jumping the gun, too. 2 Because in their one slide here, 11, 3 that we're setting а foundation for an international rebuilding plan, that should be a 5 collective effort and that means that those other 52 countries, 51 countries should be onboard and 6 7 on the same page as we are, instead of causing more economic and socioeconomic impacts for both 8 9 user groups. And the Morocco thing, we don't know 10 11 what that's going to do to a full benchmark 12 nor do we know what these assessment, MRIP revised numbers out of the U.S. is going to do to 13 14 a revised assessment. I kind of would like to wait, instead 15 16 of rushing off and doing more and more and more. When will these other countries have 17 their 18 foundation for an international rebuilding plan? Will it be by the spring? Will it be 19 a spinoff of the November stuff? Or will it have 20 to be after the full benchmark is completed a 21

1	year or two from now, or whenever? So, there's
2	a lot of questions out there. Thank you.
3	MR. BROOKS: Thanks, Rusty. David?
4	MR. SCHALIT: Actually, to what Rusty
5	was just saying, I have a comment to add. If we
6	if ICCAT is contemplating, has to contemplate
7	a stock rebuilding plan for shortfin mako, one
8	thing that the U.S. could do, which would tend to
9	maybe not level the playing field, but bring it
10	to a more level position, would be to propose
11	that all these vessels that are fishing, all
12	these longline vessels that are fishing in the
13	Central Atlantic carry VMS and then ICCAT take
14	direct possession of that data.
15	Which they're not doing. And they are
16	the only major RFMO that aren't not doing that at
17	present. WCPFC and IATTC both have programs
18	where VMS data is captured directly from the
19	vessels, not through the vessel owner or the
20	country that they their flag nation.
21	And we have electronic monitoring, we

1 have all these really terrific systems on our
2 boats. This is not the case with those vessels
3 out there in the Atlantic. So and I think
4 that this is critically important to any
5 rebuilding program. Thanks.
6 MR. BROOKS: Thanks. Grant, you want
7 to jump in on that?
8 MR. GALLAND: Yes, thank you. And just
9 to add to what David said, I totally agree and
10 would go a little bit further even in saying that,
11 those boats be required to have electronic
monitoring onboard, camera systems, to ensure
that they're we're getting accurate data from
the other fleets and also, that they're, even for
the compliance side, are implementing the things
that they're saying that they're implementing.
17 Really, I think the U.S. should be
disciples of electronic monitoring around the
world. We should be spreading that word and the
20 Agency should be out in front, insisting that
21 other fleets implement the same requirements to

1	fish that we do here, because we know that that
2	leads to better data, better stock assessments,
3	and better compliance.
4	MR. BROOKS: Thanks, Grant. We need
5	to get some feedback on monitoring and
6	rebuilding. Before then, Pat, and then, over to
7	Scott, and then, we'll shift topics.
8	MR. AUGUSTINE: Yes, thank you,
9	Bennett. On recreational, I would support, and
10	we supported in New York, we did support the
11	71/83, the recommendation from ICCAT.
12	To start with a question is, do other
13	ICCAT countries have minimum size for
14	recreational or not? And that's the first
15	question.
16	The second question is, when we why
17	did we have to go ahead and take the, I would
18	say, the and/or choice of coming up with a
19	suggested recommendation of reducing by 76
20	percent, as opposed to picking the 71/83?
21	Just some clarification, I read all

1	the documentation, it still didn't come out
2	clear. There was confusion when on what was
3	added in there about the difference between male
4	and female, that seemed to be fog and smoke to
5	me.
6	But it wasn't clear as to why we
7	locked in the 71/83, as opposed to I'm sorry,
8	the 76 percent reduction, as opposed to the
9	71/83?
10	MS. BREWSTER-GEISZ: So, I don't know
11	specifically if there are other countries with
12	recreational size limit. I believe the U.S. is
13	one of the only countries, if not the only
14	country, that admits to having a recreational
15	fishery.
16	(Laughter.)
17	MR. AUGUSTINE: Thank you for that,
18	Karyl. So, based on that, going back to what
19	Rick and some of the others have said, we in fact
20	are leading the pack.

We're leading the pack again, cutting

21

1	off our nose to spite our face. Why not take the
2	71/83 and go with it from there? Or, even, look
3	at one of the other options for male 71 and female
4	108?
5	If we're trying to protect the female
6	population, and I'm a recreational fisherman,
7	yes, I'd go for a nine-foot shark, which is going
8	to weigh probably 450 to 500 pounds.
9	And I have a picture in my briefcase
L 0	that shows an 886 pound make that was killed just
L1	a couple of weeks ago, and I looked at that and
12	I was going to show everybody the picture, is
13	this what you want? Or do you want to allow
L 4	fishermen to have something smaller than that?
L5	Remember, people pay \$1,500 to \$2,000
L 6	to go out and catch a shark. And now, the
L7	likelihood of catching that one over 81 inches is
L 8	further diminished.
L 9	And as Mike pointed out, I know in New
20	York, we've lost about 30 percent of our shark
71	tournaments already so far, others are going to

1	be announced shortly.
2	So, when your document says, would
3	have negligible impact, economic impact, I'm
4	saying, whoa, who had their head in the sand on
5	that statement? Because it will have a direct
6	affect.
7	Any help you can give on clarification
8	further on, why don't we just go back and be
9	honest with ourselves, look at 71/83, it's a
10	very, very sharp break in where we are right now,
11	we will protect the females and be done with it,
12	as opposed to being the leader of the pack again?
13	MR. BROOKS: Thanks, Pat. Andrew?
14	MR. COX: Andrew Cox. I just want some
15	clarification. If I remember correctly,
16	Amendment 5b already required the use of circle
17	hooks when targeting sharks. So, I'm wondering
18	why this Alternative B9 is even on the table.
19	MR. DuBECK: So, Amendment 5b is for
20	dusky sharks, and the migratory I mean, the
21	highest point of where dusky sharks are located

1	is around the Chatham, Massachusetts line.
2	So, that's why the line was put in
3	place there. So, since mako sharks are caught
4	above that line, proposing to remove that line
5	for circle hooks for all shark fishing.
6	MR. BROOKS: Thanks. I want to push
7	us on. Obviously, a lot of comments around the
8	table, for those who are weighing in, around
9	sticking with the ICCAT advice and not getting
10	ahead, no good is going to come from that. And
11	then, just proceed cautiously.
12	Some comments around capturing VMS
13	data, basically, the other fleets need to be
14	similarly tracked as our fleet is. And just
15	repeating again, Sonja's strong comment at the
16	outset here, around support for a complete
17	prohibition.
18	So, with that oh, Mark, I didn't
19	see you up there.
20	MR. SAMPSON: Yes, thank you. So, very
21	quickly, I would just like to concur with pretty

1	much what everybody else has said. It would seem
2	to make sense to go with the ICCAT
3	recommendation, 71/83.
4	I would also just say, be ready,
5	because unfortunately, and I think you heard the
6	kickback, when that was originally proposed, from
7	anglers who say, well, it's going to be
8	dangerous, it's going to be challenging, and so
9	forth and so on, to determine male from female.
10	I guess they'll just have to get over
11	it and do it. Perhaps it would be a good learning
12	experience for them.
13	And also, I know that all this came
14	about because you all were going to try to achieve
15	an 80 percent reduction in the landings of
16	shortfin makos, is that not correct? I mean,
17	these new regulations are
18	MR. DuBECK: Seventy-two to 79.
19	MR. SAMPSON: Excuse me?
20	MR. DuBECK: Seventy-two to 79 percent
21	reduction

1	MR. SAMPSON: Yes, and so, just from
2	what you've seen through almost one full season
3	now, do you know where you're at on that? I
4	mean, what is the reduction now? Have you hit -
5	_
6	MR. DuBECK: Well, we're still
7	determining that, because the numbers aren't
8	finalized yet. We're still working through
9	determining what that reduction is. And it's
L 0	going to be used and presented to the IAC and
L1	ICCAT this year.
L2	MS. BREWSTER-GEISZ: Actually, I don't
L3	know if the numbers will be presented at the IAC.
L 4	But the numbers are due to ICCAT of the first six
L5	months in October.
L 6	I do not remember what that date is
L 7	and I don't know if it'll presented at the IAC.
L 8	But they're due to ICCAT in October. So, we're
L 9	working toward that.
20	Preliminarily, it looks like we have
21	met that goal but I don't know if we've exceeded

1	it or just barely made it.
2	MR. SAMPSON: And just one more thing,
3	again, while I am in support of following the
4	ICCAT recommendation of 71/83, I just have to
5	throw out that unfortunately, an unfortunate
6	spinoff of this is, here we go with complicating
7	the shark regulations all the more.
8	The recreational shark angler now
9	really needs to just about have a lawyer in the
10	cockpit with him to follow the seasons, the size
11	limits for the different species, and now, also
12	have to determine male or female and all that.
13	So, it's I'm not saying we
14	shouldn't, but it's just kind of sort of one more
15	thing. I wish it wasn't so, I wish we could just
16	go with one size limit, but here we are. Thank
17	you.
18	MR. BROOKS: All right. Our next
19	speakers are here. They're able to sit tight for
20	a little bit here, but I do want to pivot here
21	and get some comments on the alternatives for the

1	monitoring and the rebuild.
2	So, invite any comments that folks
3	have on that. Scott, your card's up, do you have
4	any comments on that?
5	MR. TAYLOR: I just wanted to reiterate
6	again one more time, and again, I think that the
7	monitoring and the implementation that we have in
8	the temporary rule is more than adequate to deal,
9	at least with the commercial sector.
10	But I want to take the opportunity,
11	again, to make it abundantly clear, in the issue,
12	again, that David raised, that these fleets that
13	are operating in the Atlantic, are operating IUU
14	in a substantial way. I've seen it first-hand.
15	Their numbers are not small. They're
16	millions and millions of pounds. And they exist
17	to not report. The majority of this stuff gets
18	landed down in a lot of the Caribbean nations,
19	where it's easy to avoid a full accountability
20	and they operate specifically for that reason.
21	They don't want ICCAT to know what's

1	being landed. They don't want ICCAT to know
2	about the numbers that are being done. And that
3	is the U.S.'s real role.
4	This is going to be an issue again for
5	us, with the bigeye issue that's coming up, and
6	that we can't be the ones that ultimately, and
7	what I mean by we, the pelagic longline fleet and
8	the U.S. collectively, when we see the
9	information not being fairly disseminated for us,
10	we can't just be the only ones to have the burden.
11	Because at the end of the day, it's
12	not an example that we're setting, it's that
13	we're leaving them the opportunity to access our
14	market through the product that they're landing.
15	MR. BROOKS: Okay.
16	MR. TAYLOR: And so, this is a real and
17	substantial issue and I have a fundamental
18	problem with these actions that are based upon
19	information that, at least I personally know is
20	severely skewed, at best.
21	MR. BROOKS: Thanks, Scott. Bob?

1	MR. HUETER: Yes, I just wanted to ask
2	Guy about Rebuilding Alternative D3, on Slide 14.
3	Establish the foundation for developing a
4	program.
5	There's a lot of hedging language in
6	there. What does that translate into, in terms
7	of actual time frame to get to where we're seeing
8	real action?
9	MR. DuBECK: So, this is similar
10	language we have for bluefin tuna, swordfish that
11	we would pretty much just be working with ICCAT
12	to determine a rebuilding program.
13	Depending on what comes out this
14	November, the next assessment in 2019, but work
15	with them to develop a rebuilding program. So,
16	it's kind of working with ICCAT for that.
17	MR. HUETER: So, something in the next
18	year? Or are we talking five years away?
19	MR. DuBECK: TBD? It depends on what
20	is done at ICCAT.
21	MR. BROOKS: All right. I am Scott,

1	is your card left over? Okay. So, I'm not
2	seeing anyone else wanting to weigh in on the
3	monitoring/rebuild.
4	So, you've got plenty of feedback on
5	the rec and commercial pieces, do you need any
6	other conversation on this or are you good?
7	Okay. Thanks, everyone, very much, appreciate
8	it.
9	And at this point, let's shift here to
10	the MRIP folks, who are going to come up and give
11	us an update on their Fishing Effort Survey
12	Transition Plan.
13	So, John Foster and Dave Van Voorhees,
14	with the Office of Science and Technology. Okay.
15	So, we're not going to have Dave with us today,
16	but John is here and we'll cover it all. Thanks,
17	John.
18	MR. FOSTER: Okay. Thanks very much,
19	everyone, for having us today, giving us the time
20	to talk about a lot of big improvements and
21	transitions we've made within MRIP, Marine

1	Recreational Information Program.
2	Dave Van Voorhees couldn't be here
3	today, he had a family emergency over the
4	weekend. So, I'll just be covering the full
5	presentation. So, let's get started.
6	So, just as kind of a refresher we
7	like to do at the beginning of any of these
8	presentations, just to give folks, again, a quick
9	reminder of how we calculate total catch. And
10	total catch here just means any type of catch,
11	landings, releases, combined, total catch.
12	And essentially, we break it up in two
13	components. We have separate surveys, which we
14	use to estimate effort, in terms of total numbers
15	of angler trips, and then, we have other surveys
16	that we use to estimate catch rate.
17	The effort surveys are generally
18	offsite surveys, telephone surveys, mail surveys,
19	things like that. And the catch rate, the
20	surveys we use to estimate catch rate or catch
21	per trip, are onsite, dockside, shoreside,

1	intercept surveys of anglers as they complete
2	their fishing trips.
3	You take the information from both
4	surveys, essentially multiply them together, and
5	that then produces the total catch estimates.
6	And I'll point out today that this
7	talk is focused on our more general surveys, a
8	new mail survey called the Fishing Effort Survey,
9	as well as our Access Point Angler Intercept
LO	Survey.
L1	Again, these are the general surveys.
L2	They're not the highly specialized, large pelagic
13	survey. That set of surveys is undergoing its
L 4	own sort of redesign and improvement process
L5	right now.
L 6	I believe you had a presentation on
L7	that at the last meeting from Yong-Woo Lee from
L8	our office. But again, and I'll try to remind
L 9	that, as we get to some results today, that these
20	are, again, just estimates from the general
71	SURVEYS

Τ	MR. BROOKS: And, John, I think he's on
2	the phone, by the way.
3	MR. FOSTER: Oh, Yong-Woo's on the
4	phone?
5	MR. BROOKS: Yes.
6	MR. FOSTER: Okay, great. Okay. So,
7	over the past since MRIP was created in 2007,
8	we've been working on improving the designs of
9	the surveys. And today, I'll be focusing on what
10	we now call the Fishing Effort Survey.
11	This is a new mail survey, that will
12	replace sort of our legacy telephone survey, a
13	random-digit dial Coastal Household Telephone
14	Survey, that was used to estimate shore and
15	private boat trips along the Gulf Coast and
16	Atlantic Coast.
17	And the new mail survey has a number
18	of key features that are improvements over the
19	old telephone survey, I'll get to those in a later
20	slide.
21	But essentially, it uses a full list

of residential households from the United States 1 2 Postal Service, as well as state angler 3 registries or license lists, as the sampling frame. Which has a number of key benefits that 5 I'll mention in a moment. Now, the results of this change, which 6 I'm sure many of you have heard about, is that, 7 overall, the results we get from the new survey 8 -- again, this is for private boat and shore modes 9 -- are higher effort estimates compared to the 10 11 old survey. And there are some reasons for that 12 that I'll speak to, and happy to take questions on that as well. 13 14 But the estimates are more accurate that we're getting now. For private boats, the 15 16 increase is on the order of two to three times increase in effort estimates. And for shore 17 mode, it's higher, at about five to six times. 18 And I will go through some results 19 showing sort of before and after estimates for 20 both effort, as well as catch for a select number 21

1	of species later on in the talk.
2	The second survey that I'll talk about
3	today is our Access Point Angler Intercept
4	Survey. Again, this is the dockside/shoreside
5	intercept survey, where we are intercepting,
6	interviewing anglers as they're completing their
7	fishing trips.
8	This went through a similar redesign
9	project. It was implemented in 2013 and
10	addressed a number of criticisms from the old
11	MRFSS Intercept that had been reviewed by the
12	National Research Council in 2006.
13	Specifically, one of the main
14	criticisms was the MRFSS Intercept focused on
15	sort of the most productive times of the day.
16	This new survey expands to full coverage and
17	eliminates many potentials for bias that existed
18	in the old survey, where it focused, again, on
19	the most productive times of day.
20	And then, there were a number of other
21	improvements to sort of the estimation

methodology that make the new survey far more 1 2 statistically sound than the previous one. 3 Okav, some bullet points for the Fishing Effort Survey. So, one of the key 5 problems with the Coastal Household Survey was that it was a random-digit dial of residential 6 7 telephone numbers, landline residential telephone numbers. 8 9 That meant that right off the bat, it was highly inefficient for contacting anglers. 10 11 So, we had to make many, many calls to intercept 12 just a small number of anglers, to get their fishing information. 13 14 Because the new Fishing Effort Survey 15 uses angler license lists in part as its frame, 16 again, it's far more efficient for contacting 17 anglers. The next point is that, because it's 18 a mail survey, it's going to a household, it has 19 the ability for the questionnaire to get to the 20 most knowledgeable person in the household about 21

1	the household's fishing activity.
2	With a telephone survey, it was a cold
3	call to whomever picked up the phone and they
4	were allowed to report fishing for the whole
5	household.
6	So, they may or may not have been the
7	most knowledgeable person. They may or may not
8	have been willing to go bother the person that
9	did know about fishing in the household.
10	And we called that the gatekeeper
11	effect. So, that tended to reduce the number of
12	households that would report fishing through the
13	telephone survey.
14	We're also seeing about a three times
15	higher response rate for the mail survey,
16	compared to the telephone survey. Telephone
17	survey response rates had been falling over time.
18	That's true of most, if not all
19	random-digit dial telephone surveys done in the
20	U.S., it's not limited to the survey we were
21	conducting. And again, with much higher response

rate, you get much higher quality information. 1 2 The two last points, the questionnaire 3 for the Fishing Effort Survey is designed to increase response rates, it's designed to not 5 only increase response rates for anglers, but We need the non-anglers also for non-anglers. 6 7 to respond to the survey as well. It also is designed to minimize burden 8 on the respondent, so that they're more likely to 9 complete the questionnaire and send it back to 10 11 us. 12 the telephone survey, we would frequently get people just dropping off of the 13 14 call after a few minutes, because they didn't feel like going through all their fishing trips 15 or they felt the call had become burdensome. 16 we would get incomplete responses because of 17 18 that. finally, 19 And then, we get more 20 complete and more accurate answers to the Fishing Effort Survey, because people have time to think 21

fishing trips 1 about the numbers of thev're 2 taking, consult with any logs they might keep or 3 journals, look at calendars, things like that. Again, with the telephone survey, it 4 5 a cold call and people were expected to their information during that 6 provide time to think about or consult any 7 information they might have on their fishing. 8 9 Both the Fishing Effort Survey and the designs extensively peer 10 APAIS survey were 11 reviewed, with a report coming out from the National Academy of Sciences in 2017 that was 12 very favorable for both surveys. 13 14 The Fishing Effort Survey, thev 15 described as having major improvements over the Telephone Survey, 16 Coastal Household the old random-digit dial telephone survey. 17 18 well, the new methods for 19 Access Point Angler Intercept Survey, 20 describe as being state of the art. So, again, 21 a significant improvement over the old design

1	that it had replaced.
2	Now, recognizing that there were going
3	to be big impacts to the estimates coming from
4	the transition from the telephone survey to the
5	mail survey, a Transition Team was put together
6	within MRIP that had representatives not only
7	from the Agency, but also regional management
8	councils, interstate commissions, as well as
9	individual states.
10	And they came up with essentially a
11	three-step process for transitioning us from the
12	old estimates produced through the old surveys to
13	the new surveys and new estimates.
14	Essentially, that first consisted of
15	a benchmarking period. So, for three years, we
16	conducted both the new mail survey, the Fishing
17	Effort Survey, as well as the old telephone
18	survey, the Coastal Household Telephone Survey,
19	side-by-side. And that was 2015 through 2017.
20	And then, at the completion of that
21	benchmarking period, we developed a calibration

1 method.

Essentially, a modeling approach that would use the estimates produced from both surveys during the three-year benchmark period, as well as the historical telephone-based estimates and auxiliary information that would help explain the differences between the two sets of estimates and go back through time, all the way back to the beginning of the MRIP time series in 1981.

Once that calibration method was developed, it would then be applied to the estimates and allow us to essentially convert the old estimates at the old scale, or currency, into the new scale, or the new currency, and be comparable with the estimates that we would have in 2018 and moving forward.

And then, once that conversion or calibration had been done and the estimates were available that were now comparable across the entire time series, those would be available for

1	use in stock assessments and then forwarded into
2	management decisions.
3	So, a question that comes up
4	frequently is, what's going to be done or how
5	will annual catch limits, ACLs, for 2018 be
6	evaluated, given that they were calculated or
7	established based on the old estimates, before
8	any calibration had been done?
9	And fortunately, the calibration
10	model that was developed allows for calibrating
11	in either direction. So, historic estimates that
12	were based on the telephone survey can be
13	calibrated to be comparable with estimates based
14	on the mail survey.
15	But it can also work the other way.
16	So, 2018 estimates that are based on the mail
17	survey, the new survey, can be sort of back-
18	calibrated to be comparable with the old
19	estimates, the old time series.
20	And so, for ACLs that were set for
21	this year based on the old estimates that haven't

1 been through a new stock assessment, 2 produce estimates that are essentially scaled 3 down to be comparable with the older time series and the ACL based on the older time series. 5 So, that -- again, the estimates that in the ACL will -- the estimates 6 essentially be comparable, until a new assessment 7 can be done and new ACLs can be produced using 8 estimate series, the new calibrated 9 the new series. 10 11 Okay. So, now I'm going to run 12 through some sort of comparison result slides. We'll start with effort, fishing effort, 13 14 then, we'll go through several HMS and pelagic species. 15 16 And again, all of these slides -- or I'll say it this way, none of these slides include 17 18 results from the Large Pelagics Survey. are all limited to the more general 19 20 either the Fishing Effort Survey or the combination of the Fishing Effort Survey and the 21

1	Access Point Angler Intercept Survey.
2	Okay. So, we'll start with private
3	boat fishing effort and, again, this is Atlantic
4	and Gulf Coast wide.
5	And just to orient you to the slide,
6	the blue series is the new calibrated effort and
7	the based on the Fishing Effort Survey. The
8	orange series there is the sort of original
9	effort series, based on the old telephone survey.
10	And these estimates are at the annual
11	level. Again, full Atlantic and Gulf Coast wide.
12	And they represent total numbers of angler
13	fishing trips. So, not vessel trips, these are
14	angler, individual angler trips.
15	And for I need to put a few labels
16	here on the slide. So, the difference between
17	the two series is, roughly 1.9 or approximately
18	two. So, the new series, the blue series, is two
19	times larger than the orange series, for the
20	years 1981 through roughly 2000.
21	And that is due to sort of the way

that the calibration model is structured. 1 2 are a set of terms or affects in the model that 3 are essentially just trying to account for the difference between the two overall surveys, 5 between the telephone survey and the mail survey. Sort of a gross difference between the 6 two, accounting for everything. 7 The difference 8 in the contact mode, mail versus phone. self-administered interviewer an versus а questionnaire. 10 11 The length of one questionnaire versus 12 the length of the other. The types of questions that are asked. Sort of, all of that together, 13 14 that all contributes to the difference between 15 we see in the mail and the telephone 16 estimates. So, that's one set of effects that go 17 18 through the entire time series. But starting in 2000 and moving forward, through 2017, there was 19 another important effect for wireless telephone 20 21 use.

1	So, essentially, starting in 2000, the
2	percentage or proportion of households that only
3	had a wireless phone or primarily used their
4	wireless phone, whether they had a landline or
5	not, has been growing, fairly significantly.
6	And that effect is in this model, to
7	account for it. And it was one of the main
8	drivers for what we saw as the sort of declining
9	quality of the telephone survey. Again, the
10	telephone survey was based just on a landline
11	telephone frame, had no wireless coverage at all.
12	So, the proportion of U.S. households
13	with a landline phone and that were reliably
14	answer that landline phone, after things like
15	caller ID were in place, was declining. Not just
16	for our telephone survey, but across all national
17	telephone surveys that are based on landline
18	phones.
19	So, the size of that effect in the
20	model grows, again, from 2000 moving forward.
21	And it accounts for the increasing difference in

1	the estimates.
2	So that, by the time you get to the
3	last three years, sort of the benchmark years of
4	2015 through 2017, that difference is closer to
5	three times, again, for the full Atlantic and
6	Gulf Coast.
7	Now, we see a similar I'll shift
8	now to shore effort. And we see a similar result
9	that we saw for private boat, except that the
10	differences, again, are larger. And I'll put the
11	same labels up on the slide.
12	So, again, from 1981 until about 2000,
13	the difference here, I apologize, let me get to
14	the value, the difference here is a little below
15	four. It's about 3.8 times. So, the blue line
16	is about 3.8 times, the estimates there are about
17	3.8 times larger than the orange series.
18	But that, again, starts to increase
19	with the addition of the wireless telephone
20	effect into the calibration model. And by the
21	time we reach the last three years, 2015 through

1	2017, it's up to just over five times. So,
2	again, the new estimates are a little more than
3	five times larger than the original estimates.
4	And everything else here is the same,
5	these are still total number of angler fishing
6	trips at the annual level.
7	Okay. So, now, I'll switch gears to
8	catch. I'll go through several species. We'll
9	start with harvest, total harvest. And then,
10	I'll show a second slide, which is total catch,
11	so it'll be harvest plus releases.
12	Again, this is Atlantic plus it
13	includes the Atlantic Coast and the Gulf of
14	Mexico. And it is in numbers of fish, so these
15	are not pounds or harvest or total catch in
16	weight, these are in individual numbers of fish.
17	Annual estimates, again, for the full Atlantic
18	and Gulf Coasts.
19	And we see a similar although the
20	pattern is much different, the overall changes we
21	see are very similar to what we saw for effort.

1	As the effort change is the biggest driver for
2	the changes in the catch estimates as well.
3	So, overall, over the entire time
4	series, there was an increase of about 1.44
5	times. That's about a 44 percent increase in the
6	yellowfin tuna harvest, or landings. Again, for
7	the entire time series, 1981 through 2014.
8	But you see, that does vary, if we
9	look at the individual year ranges. And these,
L 0	again, are based on whether that wireless effect
11	is in the model or not.
L2	So, it's less than that, it's about a
L3	30 percent increase, when there was no wireless
L 4	effect. So, 1981 through 1999. Then, it
L 5	increases to, during the benchmark period, 2015
L 6	to 2017, it's over a doubling, about 2.3 times
L7	larger.
L 8	And again, that is right in line with
L 9	what we expected to see, based on the differences
20	we saw in the effort estimates, between the new
21	mail survey and the legacy telephone survey.

Very similar story when we look at 1 2 total catch. So, again, it's just the harvest 3 plus releases. Overall, there's a, over the entire time series, again, about a 50 percent 5 increase. Less in the earlier part of the time 6 7 series. which increases as we move forward 8 through time, until we get to the last, most recent three years, the total catch is about two 9 and a half times larger for yellowfin tuna after 10 11 the calibration is applied. 12 Okay. Now, Atlantic sharpnose shark. Again, starting with harvest. And this is once 13 14 again Atlantic and Gulf Coast. Similar to the results for yellowfin, although a little bit 15 16 larger. 17 So, overall, here, we have about a doubling for the entire time series. 18 19 less than that for the earlier part, but it increases to about 3.4 times in the most recent 20 21 three years.

1 For total catch, again, for Atlantic 2 sharpnose. Now, the increases are a little bit 3 larger here, for total catch. And again, there is certainly more --4 5 or there is a shore component for a sharpnose catch, which would explain why we would expect to 6 see somewhat larger differences for sharpnose 7 than for a species that's primarily or entirely 8 a boat-based catch. So, here, the overall is a little less 10 11 than three times increase. And that, again, 12 increases over time, until for the last three years, it was more like three and a half times 13 14 increase after the calibration. Again, that's 15 for total catch for sharpnose, in numbers of 16 fish. For -- now, moving to blacktip shark. 17 18 Again, this is harvest. Similar results that we saw for sharpnose. Again, overall, it's about a 19 in line for most of the 20 doubling, which is blacktip catch, or much of it, coming from boat 21

1 mode versus shore. 2 And again, a general increase over 3 time, with the most recent three years being more like a tripling of the catch. Although, you can 4 5 see the general trend is a decline landings. 6 For total catch, differences are a 7 8 little bit larger. And again, these estimates just from the general surveys, they do 9 not include any of the LPS estimates. 10 11 A similar trend, you will of course 12 there is one large estimate there. I'11 calibrations 13 just for а second. The stop 14 themselves are not data-smoothing exercises. There are aspects of them that we have 15 16 in place to help smooth the estimates after the calibration, but essentially, the calibrations 17 18 themselves are iust trying to explain differences between the surveys. Either for the 19 effort survey or also for the design changes that 20 21 were part of the intercept survey.

1	We calibrated well over half a million
2	catch estimates across all of the species, all of
3	the states, all of the fishing modes, all of the
4	years.
5	And with that many estimates being
6	calibrated, there will be individual ones that
7	will have sort of an outlier result. And this
8	is one of them.
9	We are working, we have a rare event
10	species project going on now that is looking into
11	how best we can address these, sort of at our
12	level, at the estimation level, before they have
13	to be addressed at a subsequent step, like at a
14	stock assessment level or at the management
15	level.
16	But that work is ongoing, so for now,
17	these estimates will still need to be adjusted
18	how they have been previously, which is left up
19	to the assessment folks at the assessment process
20	and then, folks downstream of that.
21	And I'll finish with dolphin. Again,

1	a similar result that we've seen for some of the
2	other species, where the catch is essentially all
3	from boat modes.
4	Overall, for harvest of dolphin, about
5	a 50 percent increase for the entire time series,
6	which increases over time. For the last three
7	recent years, it's between two to three times
8	increase, again, for harvest.
9	And I'm sorry, I'm rushing through
10	these quickly, I want to make sure that there's
11	time left at the end for questions.
12	Again, for total catch, a similar
13	picture. A little more than a 50 percent
14	increase over the entire time series. It again
15	increases over time, the differences increase
16	over time. And for the last three years, about
17	a 2.8 times increase after the calibration is
18	applied.
19	Okay. So, just a few slides, sort of
20	shifting gears back to management and assessment
21	impacts.

1	What happens now, what are the impacts
2	of these calibrated estimates? And of course, I
3	can't give you specifics on that, but I'll try to
4	lay out just some sort of general points.
5	So, right now, the fully calibrated
6	estimates are available for use in stock
7	assessments. And I have a slide coming up that
8	sort of gives the schedule of assessments for
9	some priority species, but it's by no means
10	complete.
11	Once the results are available from
12	the assessment, then that filters into things
13	like stock status determination, is overfishing
14	occurring, and is the stock overfished?
15	Also, feeding into setting new annual
16	catch limits, based on the assessments using the
17	updated calibrated estimates.
18	And then, finally, the full time
19	series has been calibrated, so the information is
20	also available for allocation decisions, at the
21	councils or commissions or folks, management

1	folks that need to use that information.
2	So, here is, sort of the assessment
3	schedule for the rest of this year into 2019 and
4	2020, for some key species. This is mostly just
5	for your general awareness.
6	It is by no means complete, but you
7	can see that striped bass, summer flounder,
8	blacktip shark, red snapper, are all scheduled
9	for assessments this year, in what remains of
10	this year. And then, a larger number of species
11	next year. And then, a few into 2020.
12	So, some key takeaways. The big
13	driver here, the big result is that there's a
14	large increase in effort, as we changed from the
15	old telephone survey to the new mail survey. And
16	again, this is only effecting private boat mode
17	and shore fishing modes.
18	The biggest change of the two is in
19	the shore mode. And so, those stocks, those
20	species where there is an appreciable amount of
21	catch coming from the shore are going to have

1	larger increases, relative to species that are
2	almost entirely or entirely from boat modes.
3	Again, we see an overall increase in
4	the differences across time. That's being driven
5	by that wireless effect, or the model taking into
6	account the increased use of wireless phones in
7	households, and really, the declining use of
8	landline phones, even in the households that
9	still have one.
L 0	For the 2018 ACLs, we are able to
L1	back-calculate because the old telephone
L2	surveys stop at the end of 2017. So, for 2018,
L3	all we have in place now for private boat and
L 4	shore modes is the new Fishing Effort Survey.
L 5	So, calibration model that was
L 6	developed, again, allows us to take the new
L7	estimates for 2018 and back-calibrate them to be
L 8	comparable with the old estimates and to be
L 9	comparable with ACLs for 2018 that were set using
20	the old estimates.
21	And then, finally, the information is

1	available for use, and I showed a schedule of
2	some assessments, to start incorporating the new
3	estimates into the process.
4	Okay. So, just a couple more slides.
5	So, again, what's our status now and what is it
6	moving forward?
7	So, revised estimates are available
8	for use as assessments come up. Again, we will
9	be back-calculating the 2018 estimates to be
10	comparable with ACLs, existing ACLs, so that they
11	are in the same currency, or essentially, scaled
12	the same, so that you don't have a big disconnect
13	there. That's for this year.
14	For 2019, we'll start to see, we may
15	see this sort of preliminary management changes
16	coming out for species that were assessed at the
17	end of this year. And we will continue to see
18	more and more assessments incorporating the new
19	calibrated estimates.
20	And then, finally, in 2020, we'll
21	start to see, again, more of the effects of the

1	calibration coming out in management, as well as
2	additional assessments.
3	We have a number of upcoming
4	presentations similar to this one, that we'll be
5	giving through the rest of this month at various
6	councils, council SSCs, individual state agencies
7	and commissions.
8	So, we have three for the rest of this
9	month, and then, several more being scheduled for
10	October. And I suspect we will continue making
11	these kinds of presentations well through the end
12	of the year.
13	So, I apologize, I had to go through
14	that very quickly. But thank you for your time
15	and I'm happy to take any questions.
16	MR. BROOKS: That was great, John,
17	thanks very much. We do have a few folks in the
18	queue and I suspect we'll get a few more. I've
19	got Rusty, Rick, Pat, and then, I think I see
20	Katie and David, as well. So, Rusty?
21	MR HUDSON. Thank you. John Rusty

1	Hudson from Directed Sustainable Fisheries.
2	have a couple of things. I've been having to
3	keep up with this MRIP calibration thing for a
4	while.
5	And the big thing that bothers me is
6	percent standard error, especially when it busts
7	the 50 mark. Even some people speculate, 30 to
8	50. But 50 is highly unreliable.
9	As an outlier, a red flag to me, in
10	that blacktip, slide number Page 15, with this
11	huge spike for 2009, in the Gulf of Mexico, you
12	should separate this out.
13	Because you don't have like a real
14	cross-fertilization going on, except a little bit
15	maybe in the Keys for blacktip. Same with the
16	sharpnose. And we individually assess them.
17	And so, that's what we're going to start doing
18	with the Gulf blacktip.
19	But this 2.6 million animals for 2009,
20	when you look at the actual Atlantic, is
21	2,469,467 animals, huge peak, biggest period.

1	For the same year, in the Gulf of Mexico, it's
2	only 165,906 animals, grand total. I mean,
3	harvested, dead discards, and live releases. And
4	they had a very low PSE over there, 23.6.
5	Only 155 percent change from the base,
6	whereas this calibration on the Atlantic side for
7	this blacktip is 726 percent above the base.
8	That's just incredible.
9	I see a lot of two, three, four
10	hundred stuff in some of the stuff, even 500,
11	whatever I look at. So, that should be
12	separated.
13	The second thing is, is that you're
14	breaking it up 1981 through 1999. Our shark FMP
15	started in 1993. The State of Florida basically
16	closed off our waters and highly regulated what
17	was left of the recreational and commercial in
18	1992, so that both West and East Coasts.
19	So, there's a dramatic drop in effects
20	over on both coasts from the commercial, but for
21	the recreational also. And so, I personally

1	think that that is an error and I don't know where
2	you'll get to the bottom of that before we do the
3	stock assessment for the Gulf of Mexico blacktip.
4	But shortfin mako, out of the 38
5	different annual landing years, you have 12 with
6	PSEs above 50. So, those one-third is
7	unreliable. And yet, we have to ICCAT and also
8	whatever we do here to get to the bottom of that.
9	And of course, Texas is not on your
LO	radar, because they don't do MRFSS, APAIS, MRIP,
L1	et cetera. They're a world unto their own.
L2	And so, John, I look forward to seeing
L3	how all this shakes out, because we have Gulf
L 4	blacktips finishing right now, but I'm not sure
L5	exactly on the update if he's managed to make a
L 6	correction for this. But I don't think so,
L7	because they still have to put these recalibrated
L 8	MRIP numbers in. So, that's said.
L 9	But our Atlantic blacktip, I can't see
20	having this spike in our Atlantic blacktip full
21	benchmark. When it comes to be finished here in

1	two years.
2	So, that's just what I wanted to say.
3	And so, thank you very much for your
4	presentation, I'll see you in Charleston.
5	MR. BROOKS: Thanks, Rusty. Rick
6	Weber?
7	MR. WEBER: Yes. John, you mentioned
8	a couple of times that this does not do LPS.
9	Yet, the majority of our interest is in LPS. How
10	does what you've just talked about touch LPS?
11	Will we see comparable expansions?
12	Is the effort going to change, but the catch
13	profile going to be different? What thank
14	you. I have a follow-up as well.
15	MR. FOSTER: Sure, thanks, Rick. So,
16	for LPS, the redesign project is still ongoing,
17	and really, just in the very early phases.
18	It was sort of on hold for a while,
19	as we had a number of staff turnovers in a fairly
20	short amount of time, but it is now re-engaged
21	and going again and I think and Yong-Woo sort

1	of laid out the schedule for that.
2	So, a lot of design decisions really
3	haven't been made at this point. But I can
4	speculate a bit on likely changes. The effort
5	survey for the LPS is, again, in my opinion, it's
6	in very good shape.
7	There weren't really criticisms of
8	that methodology. It is based on a permit list
9	that has very good information, is generally very
10	complete.
11	And so, I would not personally expect
12	to see large changes to the effort survey design.
13	And I would not anticipate seeing large changes
14	to the LPS effort estimates, at the outcome of
15	the redesign for that.
16	It will, however, still likely need to
17	have a calibration, similar to what was done
18	here. But again, I would not expect the effort
19	to be changing to this degree.
20	Really, the only contribution to the
21	effort I might expect to lead to some changes

1	would be from the Large Pelagic Intercept Survey,
2	which is where the bulk of the redesign work
3	really will be taking place.
4	There is a component of the effort
5	that comes from the Large Pelagic Intercept
6	Survey, to account for vessels that are either
7	fishing out of state or are fishing, for whatever
8	reason, without a permit, or are not on our frame.
9	They may have bought their permit so
10	recently to their trip they were intercepted for
11	that it didn't have time to get through the
12	process for us to have them on our effort survey
13	frame.
14	But that is generally a, sort of a
15	more minor component compared to the effort
16	estimate directly from the effort survey.
17	However, there will likely be changes
18	to catch rates with the redesign of the intercept
19	survey, the Large Pelagic Intercept Survey. So,
20	we would expect to see differences in the catch,
21	but again, I would not expect to see such large

1	systematic differences at the end of the LPS
2	redesign and calibration.
3	MR. BROOKS: Rick, you had another
4	question?
5	MR. WEBER: And yet, there's yellowfin
6	tuna being right in the slide, so we say we don't
7	have LPS, but we're expanding yellowfin. So, I
8	guess, Brad, this is really more of a question
9	for you.
10	How does that make it into SAFE and
11	through you, how does it make it to Craig, and
12	how is this going to affect our ICCAT reporting,
13	and are we going to go back and revise numbers?
14	Where does this go? Because I'm
15	looking for a commitment from you guys that
16	you're going to be correcting the record, as we
17	move to a more aggressive model.
18	And I know that's not always
19	comfortable to do over there, but we can't just,
20	again, take the hit of, oh, we've got better
21	numbers now. If we need to correct the record,

1 we need to correct the record.

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MR. McHALE: So, I think a lot of those details have yet to be seen, exactly how these numbers ripple through the entire process, not only as far as the catch statistics, task one data that we're reporting through ICCAT, but ultimately, how they then work through the stock assessment process.

Ι think, John Because as had mentioned, even with the MRIP, and if folks have been privy to other council presentations on the same matter, that even though these results have been recalibrated and they're being recalibrated back in time, that until they kind of make it through the full cycle of the stock assessment, you still this disjointed continue to have system, even though you mentioned they can be back-calculated to that more historical format.

And there are going to be some challenges for us, you're absolutely right, Rick, where we are so heavily dependent upon our Large

1	Pelagic Survey information.
2	But when you're capturing, say,
3	whether it be yellowfin or shortfin make or some
4	of our other pelagic species south of the Large
5	Pelagic Survey range, we are going to have to
6	devise a way to fold those in, and those
7	discussions are still ongoing.
8	MR. WEBER: Fair, it's a big deal, but
9	fair to not know yet. Thank you.
10	MR. BROOKS: Thanks, Rick. Pat, and
11	then, Katie.
12	MR. AUGUSTINE: Thank you. John, very
13	good explanation and presentation. A couple of
14	basic questions. And again, it relates now to
15	the councils, primarily, and not to HMS So much.
16	Now that this recalibration has been
17	done on all these pieces of fish, when is it
18	possible for the SSC to go back and recalibrate
19	based each of the stock.
20	I'll take black sea bass, porgies, or
21	even summer flounder, to go back and recalibrate

1	their quotas based on your new recalibration of
2	what the harvest actually was?
3	Or do we, the public, have to wait
4	until a new stock assessment is completed of the
5	existing value of the stock in each of those
6	species? In other words, when do we marry those
7	two together?
8	And as I've asked Gordon Colvin every
9	time I talk to him, which is ten times a week,
10	it's a great program and recalibration is great.
11	The fishermen are now saying, you have told us we
12	caught more fish and by the way, party boat,
13	recreational shore boat, all of them caught more
14	fish.
15	And that means there must be more fish
16	in the ocean in that species. Does that mean our
17	quota's going to go up? So, when is the SSC
18	expected to take an action on this? Do you have
19	any idea on that, John?
20	MR. FOSTER: The short answer,
21	unfortunately, is no, I don't know the specific

1	SSC schedules.
2	The information I do have, though, is
3	that the point where they will be married, I
4	think, to answer your question, would be when the
5	new assessments are done. And the information
6	then flows downstream of that into the management
7	process.
8	In terms of, at this point, when we
9	have ACLs already in place that were based on the
10	old series of estimates, the bridge for that
11	situation, again, is to take the new 2018
12	estimates and back-calculate them to be
13	comparable with the old series.
14	As far as I know, there's been no
15	discussion to try to get at that from the other
16	direction, which is to take the 2018 ACL and do
17	some form of calibration to it to get it in line
18	with the new 2018 estimates. I'm not sure I
19	answered your question, but
20	MR. AUGUSTINE: Just a quick follow-
21	up. If that's the case and then, let's see,

1	GARFO looks at what the actual harvest was, say
2	for 2018, and it's being measured against the ACI
3	that's been projected to 2018-2019, we're
4	overfishing every stock.
5	So, there's going to be a full
6	disconnect, unless the world is made aware of
7	this recalibration, really is not going to be of
8	any effective value until the stock assessment is
9	completed on the stocks that we are presently,
LO	quote, overfishing. You following what I'm
L1	saying?
L2	I mean, there's no question in my mind
L3	that this recalibration is probably the best
L 4	thing that's happened since MRFSS was MRFSS and
L 5	now we've gone through this.
L 6	The acceptance level of the public is
L 7	really questionable, because it's like, okay, old
L 8	garbage out, new garbage in, new garbage out,
L 9	whatever.
20	But at the end of it, when the numbers
) 1	hit the road out for the nublic black sea bass

1	is overfished, summer flounder's overfished,
2	porgy's overfished, cod fish is overfished, all
3	these species are overfished based on your new
4	calibration, which is now the new standard.
5	What happens with the Magnuson-
6	Stevens Act, which says, if overfishing is
7	occurring, you have to set in a management plan
8	to correct it? And that could be a monster
9	looking at us in the near future. And I'm just
10	wondering when that was going to happen. But
11	thank you for the information.
12	MR. BROOKS: Thanks, Pat.
13	MR. FOSTER: I'm sorry, can I follow up
14	to that real quick? So, again, the estimates
15	that we would be using to monitor an ACL in 2018
16	would not be the new estimates. It would be the
17	back-calibrated. So, they should be coming down.
18	So, we shouldn't see you're right,
19	if we just used the new estimates against the
20	ACLs set with the old numbers, then, yes, I think
21	we would see species after species being

1	considered overfished or exceeding ACLs.
2	But we're not doing that. So, again,
3	the back-calibrated 2018 estimates are designed
4	to be comparable with the 2018 ACLs.
5	MR. BROOKS: Thanks, that's helpful.
6	Katie, and then, David, if you still have a
7	comment.
8	MS. WESTFALL: Thank you, John, for the
9	presentation and for the really important work to
10	improve the accuracy of rec estimates. I'm
11	curious which species, out of the HMS species,
12	you're seeing the greatest effects for?
13	You gave us a couple of example and
14	I'm just wondering, you mentioned shore-based
15	fishing, there's a five times effect, was that
16	correct? Which species would you say you'd see
17	the greatest effects for?
18	MR. FOSTER: Well, so, I'll apologize,
19	I don't have sort of summarized information for
20	all of the species. But you're absolutely right,
21	it would be those species that have the largest

1	components of their catch coming from shore.
2	Whether it's releases or harvest.
3	So, any of the more near-shore species
4	that have more shore interaction are going to be
5	the ones that would be more impacted, relative to
6	those that are either entirely offshore catch
7	coming from boat modes, or primarily.
8	And then, there's a spectrum in-
9	between, as more or less of it is coming from
10	shore or the boat modes. And I'm sorry for that
11	general answer, but that's the best I can do at
12	this point.
13	MS. WESTFALL: Will you all be
14	presenting, I mean, maybe HMS, presenting kind of
15	which species you're seeing these effects for
16	more? Is that it seems to me that this
17	obviously has important management and science
18	considerations.
19	And those species that have a greater
20	the rec estimates are going to be
21	significantly higher and species that are

1	experiencing overfishing and overfished might be
2	species that you'd want to prioritize in getting
3	the stock assessments completed and updates in
4	management completed.
5	I'm just curious, Brad, how I know
6	you guys are still working this out, but if you
7	could speak to that a little bit.
8	MR. McHALE: Yes, I guess my response
9	would be similar to the one I just provided Rick.
10	So, we do have staff already kind of going through
11	those numbers, you know, honing in on the highly
12	migratory species that are captured in the
13	survey.
14	And we're looking at those numbers a
15	number of different ways. One is, just as you
16	had mentioned, those that are either overfished
17	or overfishing is occurring. Obviously, those
18	that are internationally managed.
19	And as Rick had mentioned, the
20	complicating factors are then revising numbers at
21	that ICCAT level. And then, potentially, what

Τ	does that then look like?
2	If you're going to say, revise the
3	U.S. catch number at ICCAT prior to it having
4	gone through a stock assessment, does that
5	retroactively put the United States in a
6	noncompliance situation?
7	So, there's multiple layers to this
8	onion that we're continuing to peel back and
9	trying not to cry the whole way through.
10	MR. BROOKS: Nice analogy.
11	MR. McHALE: But I think, as we get a
12	stronger hold of the numbers and do those
13	comparisons, they'll be shared back.
14	Whether that will be something in the
15	form of the SAFE report or if we do something
16	more specific, just to the recreational catch
17	statistics, or if a byproduct has re-evolved
18	through the Large Pelagic Survey, reevaluation.
19	But we'll make that information
20	available, we're just not quite there yet,
21	because we haven't gotten our own hands around

Τ	those dynamics.
2	MR. BROOKS: I'm sorely tempted to keep
3	that onion analogy going and talk about
4	caramelized onions and go ahead.
5	MR. FOSTER: Just very quickly. I did
6	want to mention, for anyone that has a
7	familiarity with using our web queries, we have
8	new web queries up now that will allow you to
9	compare sort of the before and after sets of
10	estimates.
11	There's actually three sets of
12	estimates that you can compare. There's the
13	original estimates. There's a set of estimates
14	that just show the effects of the APAIS
15	calibration, the intercept survey calibration.
16	And then, there's a third series that
17	shows the combined effect of both set of
18	calibrations, the APAIS calibration as well as
19	the Fishing Effort Survey calibration. And you
20	can see those either in tabular data output or
21	graphs, similar to the ones that I've shown

Τ	today.
2	MR. BROOKS: Great, thanks.
3	MR. McHALE: And we can make that link,
4	for those that don't already have that available.
5	We can make sure that that gets circulated
6	around.
7	MR. BROOKS: David?
8	MR. SCHALIT: Yes, definitely, the
9	link. To, let's see, Rusty's point, I absolutely
10	agree, we should be looking, for many of these
11	species, at the Gulf and the Atlantic separately.
12	And I want to make a comment regarding
13	yellowfin. This is a very long time series that
14	you have, going back to 1980. I am very familiar
15	with recreational landings going back to 1995.
16	And if you drill down in that data,
17	you'll see that the general trend is downward,
18	but there are these occasional spikes, every
19	couple of years. A spike could be no more than
20	three weeks in length, in which you have
21	landings.

1	But what's occurring here, I can see
2	from the calibrated harvest, is that those
3	spikes, which I'm saying are very brief, are
4	being amplified.
5	And it's so, if I wanted to really
6	understand what's going on here in this
7	particular graph, I would say, I need to zero in
8	on that, let's say, to where we have the level of
9	granularity of a month, month-by-month.
L 0	This would give you a much better
L1	sense of what's going on. But as it stands right
L2	now, it's all being smoothed over, by the line.
L3	And so, it gives a false impression of, I believe,
L 4	not false, an amplified impression of what's
L5	going on.
L 6	Then, I want to just mention that,
L7	it's interesting, you had done some work on mahi
L8	already well, before I get to mahi, can I
L 9	I have a special request. Can we have a report
20	on the status on recreational landings of bigeye,
21	like within the next 30 days?

1	Because we have a big problem coming
2	up at ICCAT in November and we need to know where
3	we stand on bigeye. This is a bigeye year at
4	ICCAT. It's going to take up all the psychic
5	space for that ten-day meeting.
6	And to not have accurate recreational
7	landing information is going to disadvantage us,
8	particularly because there is, it seems to me, a
9	foregone conclusion that we will be renegotiating
10	the allocation key, for all fishing countries,
11	all bigeye fishing countries.
12	So, that would be a special request
13	from me to you guys.
14	Then, just to mention, mahi, which is
15	a very important species, both for recreational
16	and for commercial fishermen, it is kind of the
17	cucaracha of the Atlantic.
18	And I think that, to Pat's point, the
19	way it seems to make the most sense is that we
20	take this data and we incorporate it in the next
21	stock assessment and see what comes out the other

1	end, right?
2	Okay, well, it just so happens that
3	mahi is not listed on the stock assessment
4	schedule and I can confirm to you that there has
5	never been a peer reviewed stock assessment on
6	mahi and the South Atlantic Fishery Management
7	Council refuses to have one.
8	So, this is going to be a problem for
9	it. This is an epipelagic species that is
10	important to all the pelagic longliners here,
11	myself, and the recreational fishermen. And yet,
12	we have no peer reviewed stock assessment, ever.
13	So, thanks very much.
14	MR. BROOKS: Thanks, David. Thanks.
15	Yes, John?
16	MR. FOSTER: So, thanks very much, just
17	a quick reply on the level of presentation for
18	the estimates.
19	When the link is distributed for the
20	web queries, the estimates, you can drill down
21	to, within year and region, you can drill down to

mode, private boat, well, not usually 1 state, 2 relevant here, but private boat, charter boat, as 3 well as two-month wave, within the queries. So, you can drill down quite a bit. 4 5 We don't have it within the *queries* themselves, we can't drill down below the two-6 month wave, that's our sort of standard time 7 period for estimation. 8 9 But we also make the survey data available, so that it can be teased down further 10 11 than that. Although, when you start teasing down 12 very far, you can run into sample size issues, where the data really are too sparse trying to 13 14 support an estimate at a very fine scale. But, yes, this level of aggregation 15 16 really just to summarize for this was presentation, but you can get much more detailed 17 18 through the queries at the website. MR. BROOKS: Thank you, John. 19 about ten minutes into your lunch, but I want to 20 get Rick and Mike into the conversation. 21

1	Rick, go ahead.
2	MR. BELLAVANCE: Thanks. A couple of
3	quick questions. One is a clarifying question
4	for something that Pat said.
5	I just want to make sure I understand
6	completely that the estimates that are being
7	created in the new Fishing Effort Survey are
8	strictly for private and rental and shore
9	fishermen, nothing to do with charter boat or
10	party boats, those estimates are going to stay
11	the same, no increase there?
12	MR. FOSTER: That's correct. There's
13	no change to the effort surveys for the for-hire
14	modes.
15	There are some changes, generally
16	much, much smaller in magnitude, but they're
17	coming from the Access Point Angler Intercept
18	Survey calibration, which was the second one that
19	we described here.
20	So, that change, because that
21	intercept survey covers all of the modes, there

1	will be some changes for the charter modes
2	related to that calibration.
3	But as far as the large changes that
4	you're seeing coming from the Fishing Effort
5	Survey, you're absolutely right, those will not
6	impact the for-hire modes, they are just private
7	and rental boat mode and shore mode.
8	MR. BELLAVANCE: Thank you. I also had
9	a question on the validation. How is it that the
10	program validates the results or the data they
11	receive from the FES or the APAIS survey? How
12	do they go about validating that data?
13	MR. FOSTER: So, I'll start with the
14	APAIS. For new interviewers, there is a we
15	have a procedure in place where the sort of
16	supervisor level folks within the states, that
17	supervise the individual field samplers, they
18	will contact a percentage of the interviewed
19	anglers for each interviewer.
20	And I believe they're for new
21	interviewers, it's a much higher percentage, but

1	for sort of long-term interviewers, I believe
2	it's a ten percent validation sample.
3	So, at the end of every interview in
4	the field, we collect, we ask for a name and a
5	telephone number, solely for this purpose. And
6	so, we call that the validation sampling for the
7	intercept survey.
8	So, those anglers are re-contacted and
9	they're asked a standard set of questions about
10	whether they were interviewed, was the
11	interviewer courteous and prepared, and just a
12	standard set of sort of quality assurance
13	questions to validate that that sampler is indeed
14	collecting information, or doing their job
15	appropriately.
16	In terms of the effort surveys, we are
17	we do a number of quality control checks or
18	the data, but we are reliant on the anglers
19	providing quality information.
20	And again, we do a number of sort of
21	logic checks to identify cases that are highly

1	suspect. If an angler is reporting an outlier
2	number of trips through the Fishing Effort
3	Survey, we do a number of different comparisons.
4	How close do they live relative to the
5	coastline? Does it make sense that someone that
6	lives 100 miles from the shore would report 60 or
7	100 trips for a two-month period? Numbers that
8	are just simply illogical. And then, those data
9	points are edited or excluded.
L 0	But if the so, we have a number of
L1	those types of checks. But if the data get
L2	through all of those checks, then we use it. We
L3	don't have any method to try to re-contact the
L 4	mail sample to confirm their data with them.
L5	But again, the data they provide are
L 6	screened through a number of quality control
L7	procedures. And if they fail those procedures,
L 8	then they're removed from the sample.
L 9	MR. BROOKS: Thanks.
20	MR. BELLAVANCE: Thank you. And my
2.1	last question is, when I look at your query,

1	recreational statistics query page there, if I
2	look at 2018 data, is that going to be in the new
3	FES numbers or is it going to be calibrated back
4	to the dumbed down version, I guess?
5	MR. FOSTER: All of the 2018 estimates
6	that are available from the website will be the
7	new, in the new they'll be based on the new
8	surveys and reflect they'll be in line with
9	the calibrated estimates.
LO	They won't be there will not be any
L1	that would be in the old currency or base
L2	scaled to the old estimates.
13	MR. BROOKS: Mike, you are in the
L 4	unenviable position of being between lunch and
L5	everybody.
L 6	MR. PIERDINOCK: I'll make it quick.
L7	John and Brad, you've had quite a lot of questions
L8	here from people around the table and your
L 9	responses are, you're not sure. That's
20	consistant with we're not sure how this is
21	going to end up.

1 I know we haven't had the opportunity 2 to review species-by-species the results of the 3 MRIP data for each species. At that point in which we do that is 5 when you're going to integrate into the stock the public will be provided 6 assessment and appropriate time to then review and comment on 7 the outcome of that. 8 And the question is posed then, how do 9 we use this in the interim, for bigeye or other 10 11 stocks that may be necessary at ICCAT? As far as ICCAT goes, I look at it as a positive, United 12 States is always at the forefront. 13 14 We're trying to help with MRIP, we're trying to fix the system to make better data, we 15 16 went through this process to hopefully come out with better data. So, I look at it that way. 17 We -- this may actually not be bad 18 news, somewhat with what Pat was saying. 19 20 it's an effort change, but the stocks may be actually more robust that what's been estimated. 21

Ι this provides 1 think us an 2 opportunity that there's many instances, black 3 sea bass, for instance, we've been saying years, there's loads of black sea bass. This shows that 5 there is. So, I hope that that would provide the 6 Marine Fisheries 7 National Service or federal or state entities an opportunity to 8 listen to what our observations are and see that and that there's some examples here where it 10 11 reflects the fact that our observations were 12 inconsistent with the stock results and the stock 13 was sound. 14 So, once again, I caution, this data is yet to be adequately reviewed, subject to 15 16 public comment, and until we see how this is integrated into risk assessments and the outcome, 17 18 I can't conclude one way or another the good, the bad, and the ugly about this, other than my 19 20 opinion is, is that the stocks may be more robust than what's estimated, which is the good news. 21

1	Thank you.
2	MR. BROOKS: Thanks, Mike. And,
3	Wallace, I see your card up and
4	MR. JENKINS: Yes, I just
5	MR. BROOKS: want to give you a
6	chance
7	MR. JENKINS: have one comment on
8	slide eight. Randy and I are sitting here,
9	looking at this, for the private boat effort
L 0	being the highest in 2007, which in our
L1	recollection was, like, the worst year ever to go
12	fishing, because diesel prices were \$4 a gallon,
13	we had the lowest participation in HMS
L 4	tournaments, and now, ten years later, the trend
L5	has been down since then.
L 6	It's just counterintuitive to what
L7	we've actually experienced on the ground. I'm
L8	not saying it's right or wrong, it's just an
L 9	anomaly from the way our experience has been.
20	So, just for your information.

MR. BROOKS: Thanks.

21

John, thank you

1	very much, appreciate it. And I'll let everyone
2	get to lunch and we will reconvene at 1:30 sharp
3	to talk about Amendment 14. Thanks.
4	(Whereupon, the above-entitled matter
5	went off the record at 12:20 p.m. and resumed at
6	1:37 p.m.)
7	MR. BROOKS: All right, so we wanted
8	to jump into our last topic for this meeting which
9	is Amendment 14, the Domestic Shark Management.
LO	And I think, Karyl, you're taking the lead on
L1	this?
L2	MS. BREWSTER-GEISZ: Yes.
L3	MR. BROOKS: Charge on.
L 4	MS. BREWSTER-GEISZ: I am taking the
L5	lead. All right, thank you everybody who came
L 6	back after lunch. I now know that you guys are
L7	the hardcore shark group so let's move forward.
L8	You know you're in trouble when the
L 9	third slide I show you is full of acronyms. So
20	I will do my best to remember not to use the
71	acronyms through the presentation, but if T

1	forget, remember the third slide has them all
2	listed. And Pat is telling me, no, don't do
3	that.
4	So, this presentation has to do with
5	what we have decided to call Amendment 14. It
6	is going back and looking at pretty much how we
7	do shark quotas for all of our shark species.
8	And it's not just commercial, it could also be
9	recreational or discards. So, we're looking at
LO	it, it's a full picture.
L1	And so why are we doing this? Part
L2	of it is because of the new National Standard 1
13	guidelines. So, I think we're all familiar at
L 4	this point with the National Standard 1, prevent
L5	overfishing, achieve optimum yield with the
L 6	guidelines providing guidance on how to do that.
L7	In 2016, the Agency released revised guidelines
L 8	that have a lot more flexibility in them than
L 9	we've considered before for sharks.
20	Generally, throughout the guidelines
21	you're looking at the overfishing limit being

greater than the acceptable biological catch, 1 2 which is but greater than the annual catch limits 3 or total allowable catch. You can have them equal as well if you have the justification for 5 that. So I don't know if you remember when 6 Deb Lambert and others were here from Office of 7 Sustainable Fisheries presenting the 8 quidelines to the AP. This slide should look fairly familiar. 10 11 They did round up all the council meetings too. 12 This basically goes over that. That the OFL, or overfishing limit, which is the 13 14 maximum amount of catch without overfishing, is greater than the acceptable biological catch, 15 16 which generally is greater than the annual catch 17 limit. 18 And then you have your annual catch that's 19 target, and to address management 20 uncertainty. There are some exceptions. If you have international stocks or stocks with annual 21

Τ	life cycles. For most of our snark species we
2	do not have that.
3	Within HMS, we first did our stock
4	status determination criteria, or SDC, back in
5	the 99 FMP. And I'm looking around the room,
6	there's a lot of you who are around when we did
7	those, all that stock status determination
8	criteria based on the '96 Magnuson Act.
9	In 2006, when we consolidated the
10	billfish with all the other HMS species in the
11	FMP, we just incorporated that without change.
12	In Amendment 3, back in 2010, 2011 when they were
13	revising the National Standard guidelines back
14	then, we established our annual catch limit
15	mechanism for sharks.
16	In Amendment 5b, just recently, we
17	clarified that the annual catch limit for
18	prohibited shark species is equal to zero.
19	All of you who look at our SAFE report
20	every year should be fairly familiar with this
21	chart so I am not going to spend a lot of time on

I just want to point out, this is a summary 1 of our stock status determination criteria's and 2 3 how we determine whether or not a species is overfished or overfishing is occurring. If you remember, Rick and Sarah talked 5 a little bit about that yesterday with Amendment 6 12 and whether or not we want to have to similar 7 criteria for our international species and some 8 of the RFMOs. All of you, as I already said, you're 10 11 hardcore shark people so you might remember this 12 diagram here about how our annual catch limits are set for our non-prohibited shark species. 13 14 Summary of this is that our OFL is equal to our ABC which is equal to our ACL. 15 All of them are 16 equal. I know that's all alphabet, so that's 17 over fishing limit is equal to the acceptable 18 biological catch, which is equal to the total 19 liable catch, which is what we get from the stock 20 21 assessment.

We take that total allowable catch and 1 2 we split it into three sectors, our discards, our 3 commercial landings and our recreational landings. 5 We then take the commercial landing sector, and that is our annual quota, commercial 6 quota, which is then split into our annual catch 7 target, which is when we close the fishery when 8 9 we reach 80 percent. That was the rule. You might remember Lauren presenting last year on our 10 11 85 or our 84 percent rule. 12 And then we have the accountability and that's where 13 we take measures anv over 14 harvests off the next year. So, when we were looking at this and 15 looking at how we're doing over time, which I 16 think Katie Westfall you asked at the last AP 17 meeting, we went through all of our different 18 management groups and we're like, you know, some 19 of the time we're really good, some of the time 20 21 we're not, we need to do something. And so

1	that's how we came up with the idea of Amendment
2	14 and pretty much where we started and why we're
3	doing this.
4	This is just a quick example of what
5	I mean by some of the times we're good, sometimes
6	we're not. If you look at 2015 and the non-
7	blacknose small coastal sharks in the Atlantic,
8	we only reached 69 percent of the harvest. Or
9	69 percent of the TAC of the total harvest.
10	And that total harvest is commercial
11	landings, recreational harvest and discards. So
12	obviously we can land a few more small coastals
13	or discard a few more, whatever, to get to that
14	total allowable catch.
15	If you look at blacktips in the Gulf
16	of Mexico, we're actually at 92 percent. I
17	consider that pretty good. It's not at a hundred
18	percent, but it's not over and it's not all that
19	far under the total TAC.
20	Blacknose sharks in the Atlantic, yes,
21	we were way over, 229 percent of the TAC. We

1	have addressed that. That was the rule where we
2	had limited retention limit of blacknose sharks.
3	So we are working towards that in other ways.
4	But overall, we're looking at this
5	going, now with the new National Standard 1
6	guidelines, we should be able to take a look at
7	this and see if there are other ways of addressing
8	things.
9	So, preliminarily, this is what our
10	purpose and need are for this amendment. I say
11	preliminarily because we are in the beginning
12	stages of this amendment. This is pre-scoping.
13	Anything you say today can definitely
14	change were we end up with this. So we've
15	noticed that the shark harvest has been variable
16	and that we need to review the process for setting
17	our total allowable catches, acceptable
18	biological catches and annual catch limits to
19	determine if changes are needed.
20	And also consider some of the new
21	things in the National Standard 1 guidelines

1	regarding phase-ins of ABCs, carry-overs,
2	overfishing determinations and just see how we
3	incorporate all of that into our HMS process.
4	So we have four potential draft
5	objectives for Amendment 14 focusing on the ABC
6	control rule, the process for establishing the
7	TACs and the ACLs, the process for addressing
8	under and over utilized sector ACLs and for
9	considering the increased management flexibility
10	that's now allowed in the National Standard 1
11	guidelines.
12	So, these are the topics we are going
13	to be focusing on in the presentation. If there
14	are other things at the end that we're going
15	through them and you're thinking, we really need
16	to focus in on those or you're looking at this
17	list going, why do we even need to consider that,
18	it's not relevant, definitely want to hear all of
19	your thoughts on that.
20	So, hang on, this does get kind of
21	into the weeds but we do try to keep it high-

1	level. So the first thing we're looking at is
2	the ABC control rule.
3	So we decide what and ABC, or
4	acceptable biological catch is there, up on the
5	slide. I don't want to read it for you. And
6	then the control rule is the rule or policy to
7	make sure we don't exceed the ABC.
8	So we are looking at potentially three
9	options for an ABC control rule. Our current
LO	process is the ABC acceptable biological catch is
L1	equal to the total level catch.
L2	And that's what we get from the stock
L3	assessment. And that is what we then split into
L 4	those sector ACLs, commercial landings, discards
L5	and recreational harvests. All of that is equal,
L 6	so that's the first thing we're looking at.
L7	The second thing would be to look at
L8	whether or not we want a standard ABC control
L 9	rule across all of the sharks. In short, an ABC
20	control rule really looks at how confident we are
21	with the assessment process, how certain are we

1	that that total allowable catch, that ABC that
2	comes from the stock assessment, is really
3	accurate.
4	So, if we were to create a standard
5	one, for example, we could say the ABC is going
6	to be 95 percent, 80 percent, 50 percent of the
7	overfishing limit that's established in the
8	assessment. Pick one of those numbers, we use
9	it for all shark species regardless.
10	Option 2 would be create a tiered ABC
11	control rule. So in this case we're looking at
12	each individual assessment and, or maybe a lack
13	of assessment in determining, all right, because
14	we don't have an assessment, we're not all that
15	sure of the OFL, we're going to have maybe a wider
16	buffer between the OFL and the ABC.
17	Or maybe this is a really good shark
18	stock assessment, we can have a much smaller
19	buffer. So those are the three options we're
20	looking at for an ABC control rule. Definitely
21	looking to hear experience around the table on

like, don't like, 1 what people what other 2 councils, states have done these, this situation. 3 Moving on. ABC phase-in provisions. So this would allow us, if we get the really bad 5 result, bad result meaning something is really overfished or overfishing a lot more than we were 6 7 expecting, a lot more than we've accounted for in 8 the past, we could phase-in any changes over a maximum of three years. 9 So this is a graph that sustainable 10 11 fisheries was sharing when they did the National 12 Standard 1 rollout. So that top red line is the overfishing limit, the blue line is the ABC. 13 14 This is all hypothetical example, none of these 15 numbers are real, none of this is real. 16 hypothetical. If you can see, in 2014 to 2015 the 17 OFL dropped down dramatically. And so if you 18 were to follow just a standard ABC control rule, 19 you would drop that ABC down dramatically to 20 Under a phase-in, approach you can 21 match it.

1	phase in that change over three years. And
2	that's what that black line does. So it's not a
3	complete immediate drop.
4	So we are looking at four potential
5	options under the ABC phase-in control rule. So
6	we don't use it, that's where we are right now.
7	That's Option 1. Option 2 would be to use this
8	approach for any increase or decrease. So this
9	could go either way.
10	It could be that decrease or it could
11	be stock assessment is much cheerier than what we
12	thought possible. Suddenly we could increase the
13	quota tremendously and maybe we want to phase
14	that in over three years.
15	Option 3 would be to only use the ABC
16	control rule, unless the stock is in an
17	overfished or overfishing status. So if the
18	stock assessment shows that it's overfished, we
19	wouldn't use a phase-in.
20	Option 4 would be to use the phase-in
21	control rule at any point, unless the stock is

1	both overfished and overfishing. So, if we have
2	a stock assessment that says both overfished and
3	overfishing we would not use the phase-in control
4	rule.
5	And so these are potential options.
6	As I said, we're pre-scoping on this, nothing is
7	written down, no determinations have been made.
8	Moving on to the next topic. Establishing shark
9	total allowable catches and annual catch limits.
10	So this is what we did in Amendment 3.
11	There's that diagram again right now. We split
12	everything up into those three sectors. And the
13	annual quota for the commercial fishery is our
14	commercial ACL.
15	So we have several options under here.
16	One is, of course, no change to what we currently
17	do. The second one would be to create and
18	actively manage all of our sector ACLs. So this
19	is where I said it could be a recreational quota
20	as well, it doesn't have to be. We do have that
21	sector ACL but we don't not actively manage it,

1 we look at it.

In the future, once we have those estimates from MRIP or LPS once the stock assessment is done and we make adjustments as we need to. But we're not opening or closing the recreational shark fishery throughout the year to try and manage and make sure we don't exceed that. So that's Option 2.

option 3 would be create sort of a reserve quota. Just like what we have with swordfish, bluefin tuna. And that would be a buffer to make sure that that ABC is never exceeded. Because right now, if all of the sectors, the commercial discards, the commercial landings and the recreational, if all of them go over, we are over our ABC because we don't have that buffer. So that's what this would do is it would create a buffer.

We could use that reserve similarly to how we use it for swordfish and bluefin. As we are meeting one of the quotas, we transfer quota

1	out of the reserve into that sector. Option 4
2	and Option 5 are kind of sub-alternatives under
3	both two and there where we could create specific
4	ACLs for only complexes without the species.
5	Right now we are getting more and more
6	species specific. We have a sandbar quota, we
7	have a Gulf blacktip quota. But they're also all
8	linked to one another. Do we like that approach,
9	do we want to change that approach?
10	Option 5 would be to get moved more
11	and more toward species specific ACLs. So,
12	picture not just a sandbar quota but a lemon shark
13	quota. A great hammerhead quota not just a
14	hammerhead complex quota.
15	Moving on, fourth topic, carry-over
16	provisions. This is, you don't catch all of the
17	quota in year one, year two, how much can you add
18	on to carryover.
19	Right now in our regulations we allow
20	up to 50 percent if the stock is healthy. So
21	it's not overfished, overfishing is not

1 occurring, we don't have an unknown status, we 2 allow 50 percent to be carried over. 3 Option 2 would be to allow for carryover of any unused portion as long as we do 4 5 not exceed the ABC. Option 3 is to distribute the underharvest to the sector in which the underharvest occurred. So if the commercial went under, we would give it to the commercial. 8 the recreational went under, we would give it to 9 the recreational. 10 11 Option 4 would be to distribute any 12 underharvest according to the proportions. So if the commercial went under but nobody else did, 13 14 then that commercial underharvest would aet 15 proportioned out between commercial wreck and 16 discards. So I do have some tables explaining 17 18 that in number format for those of you who like to look at numbers and tables. In both of these 19 examples, the acceptable biological catch is 700. 20 And then we give examples of what the annual catch 21

1	limits would be for the different sectors. And
2	the total allowable catch is 500.
3	So under Option 1, which is the status
4	quo, we allow up to 50 percent of the
5	underharvest. The underharvest for the
6	commercial landings was 50 so we would add that
7	underharvest on.
8	And Options 2 and 3 come out to the
9	same amount. This was, I forget at the moment,
10	allowing for the carryover of any unused portion
11	and distributing it to the sector where the
12	underharvest happened. And then Option 4 is the
13	one where we proportion it out. Of course this
14	is the overfished stock, so we wouldn't allow it
15	in some cases.
16	We're at not overfished stock, so this
17	is the next table. We would allow it, and that's
18	why some of these numbers have changed. So I will
19	let all of you, if when you get home, if you're
20	interested, go back, work through the math.
21	On to multi-year overfishing status

1 determinations. This is the last major topic i
2 this presentation. Right now, the Agenc
determine stocks status annually. I'm sure yo
4 all look out for the stock status report that th
5 Agency releases. How many stocks are overfished
6 how many are overfishing.
7 And when you look at the last year o
8 data for determining the sets, always the mos
9 uncertain. So in the National Standard
guidelines it actual allows for you to look a
11 three years when determining overfishing status
So we have a couple of options fo
this. The no action is, we don't do that, w
don't allow for multi-year overfishing, we jus
have our straight, when fishing mortality i
greater equal to fishing mortality, and that'
why.
You could compare the three year tota
19 harvest to determine the overfishing status o
you could use some sort of meta-analysis lookin
21 at the certainty to account for variance an

1	compare that to a three year average to determine
2	overfishing status. I want to make sure you note
3	that this could be used to declare a species
4	either has overfishing occurring or has no
5	overfishing occurring.
6	So I have another table with numbers.
7	This goes through the three years. The
8	overfishing limit is 500, the total harvest in
9	each of the three years, in years one and two, is
10	less than 500. It's a little bit over in year
11	three but that average is under 500.
12	So, in this example we would say, at
13	the end of three years the species is no longer
14	experiencing overfishing. Whereas in years one,
15	two and three we would have said, overfishing is
16	occurring based on that stock assessment.
17	So, many of our shark species, we
18	don't have stock assessments all that frequently.
19	So this would allow us to change that status in
20	between stock assessments. If we are below the
21	OFL and our total harvest.

1	So we have a number of questions for
2	all of you to consider. What do you think the
3	ABC control rule structure should be? Should we
4	change the mechanism for establishing total
5	allowable catches and annual catch limits?
6	Should we implement days in and carryover
7	provisions? Should we allow for multi-year
8	overfishing designations?
9	I think I mentioned a few times this
L O	is pre-scoping. This is pretty early on. We're
L1	still working through all of these issues.
L2	We are hoping to scope later this year
L3	with a potential for pre-draft at our next AP
L 4	meeting. And if we are trying to be really,
L 5	really optimistic, maybe a proposed rule a year
L 6	from now with a final amendment in 2020.
L 7	Ian, myself and Guy DuBeck are all
L8	working on this, so when you go home and you're
L 9	sitting there thinking about this and you're
20	looking at these tables going, I don't understand
71	these numbers. I don't understand this concept

Τ	anymore, feel free to give any of us a call or an
2	email. Be happy to walk you through it.
3	So with that, I think we're ready for
4	the discussion.
5	MR. BROOKS: So, would it make sense,
6	Karyl, I'm assuming, to take it topic-by-topic?
7	MS. BREWSTER-GEISZ: Sure. I'm
8	always inclined to do that so we don't bounce
9	around. So why don't we start with the ABC
10	control rule options, and if you wouldn't mind
11	flipping back to the options there.
12	So, thoughts, comments or questions on
13	the options, there we go, for the ABC control
14	rule. Rusty. And again, just keep comments
15	right now on the ABC control rule.
16	MR. HUDSON: On the council level
17	where we've been dealing with this for the last
18	eight years, we have to phase stuff in 2010, 2011,
19	et cetera, et cetera. We don't use TAC.
20	We don't use total allowable catch at
21	all It goes ARC could be equal to a greater ACT.

1	and then sub-divided into sector ACLs.
2	ACT comes in for the uncertainties and
3	in particular with the recreational. And you got
4	the carryover scenario. You would have
5	uncertainty with the recreational until you get
6	the final numbers.
7	A half a year or after the year
8	already ended. And normally you set your head
9	or your three years of head, depending on how you
10	want to try to do it, the fall before you open up
11	the season.
12	Also, you know, the idea of OFI
13	equaling ABC, generally we have an SSC that
14	handles all of this ABC control rule stuff. And
15	we have silly things like a PSTAR analysis that's
16	a further penalty of ten percent and stuff like
17	that, on top of when you don't have overfish and
18	overfishing not occurring.
19	Our carryovers, I don't know about a
20	50 percent carryover of unused stuff but
21	generally it's only good for the following year.

1	So all of this stuff is fleshed out on a SSC
2	level, but we don't have an SSC at the HMS AP.
3	And so there's a lot of things that
4	I'm going to have to construct as a written
5	comment, I know that is due by October 1st, but
6	back to buffers. I hate buffers.
7	We already got scientific buffers and
8	now you're throwing a whole bunch more management
9	buffers, which you already create behind closed
L 0	doors without our vote. And at a council level,
11	at least all of that is fleshed out after the SSC
L2	then reports what they've developed.
L3	But we don't, again, we're in a
L 4	different situation with the secretarial plan.
L5	So I have to depend on the scientists behind the
L 6	closed doors, deal with the managers behind the
L7	close doors, come up with the numbers that we're
L 8	going to fish with.
L 9	And unless the status is known, and
20	some of that can change with all these
71	operational assessments that are going to be

1	tying in, in this MRIP numbers. But sandbar
2	won't change because it's not really part of
3	that. And so, I could just keep carrying on
4	about it but I'm not. I just think that you can
5	get rid of TAC and just create your sector ACLs.
6	If you feel like you've got too much
7	uncertainty with something or if you have
8	overfishing occurring, and you have to stop the
9	overfishing, then you're going to buffer down
10	anyway before you give us the quota. And the
11	allocations for the different sectors.
12	If I think of something else I'll
13	raise my card back.
14	MR. BROOKS: Thanks. Jason.
15	MR. ADRIANCE: Thanks, Bennett. So,
16	kind of along the same lines I have several
17	questions/comments.
18	The biggest one being, who's going to
19	determine your ABC control rule because like
20	Rusty said, most councils have an SSC that does
21	that, and those SSCs can actually go away from

1	their ABC control rule if within the discussions
2	of a particular assessment there is evidence to
3	allow them to do that and they have a
4	scientifically valid reason to do so.
5	To while there may be one ABC control
6	rule that's a tiered approach they can divert
7	from that. And I'll just tell you from personal
8	experience, it consumes a lot of discussion at
9	the Gulf SSC, the control rule. And it's as cut
LO	and dry. So I think this needs a lot of work.
L1	MR. BROOKS: And I guess the question
L2	I heard in there is, so, is there an analog to
L3	the SSC in this process or how do you think about
L 4	that?
L5	MS. BREWSTER-GEISZ: So that would be
L 6	HMS in consultation with the science centers.
L7	Which is what we've been doing all along anyway.
L8	But this is why we wanted to have the
L 9	discussion to see what people think about ABC
20	control rules and how the SSCs work. We don't
) 1	have one we've never worked in that structure

1	so it's always good to get feedback.
2	MR. BROOKS: Anna.
3	MS. BECKWITH: Yes, I forwarded to you
4	a link to our working comprehensive ABC rule
5	amendment. We had these exact discussions at the
6	council level in June.
7	We're going to have another hack at it
8	in December, but our current state of affairs and
9	background and some thoughts that we have are all
LO	sort of contained in this. And primarily a
L1	phase-in and carryover provisions and how the
L2	South Atlantic is considering them.
13	So, I've sent that to Karyl. And if
L 4	you guys have any questions I'll be happy to, not
L5	take up the time here, but work with you guys on
L 6	that.
L7	MR. BROOKS: Thanks, Anna. Katie.
L8	MS. WESTFALL: Yes, my question is
L 9	along the lines of what Jason and what Rusty
20	mentioned. So, Karyl, you mentioned that your,
71	vou'll work in conjunction with the Southeast

Τ	Fisheries Science Center.
2	So, will they present kind of a
3	recommendation, is that something that we can
4	also take into consideration as we comment?
5	MS. BREWSTER-GEISZ: Do you mean
6	present a recommendation on the presentation or
7	do you mean
8	MS. WESTFALL: Just on the option, on
9	the different options that are presented here.
LO	MS. BREWSTER-GEISZ: So they, we're
L1	actually working directly with the science center
12	on these options. At this point, no, they're not
13	providing recommendations, they're actually
L 4	helping us write it.
L5	MS. WESTFALL: Got it. And then on
L 6	Slide 10, where you give a few examples of where
L 7	there might be exceedances of the TAC, it would
L 8	be great to see this for all species managed by
L 9	TACs, all the species and species groups, and
20	then to see it for a multiple, over a series of
21	time.

MR. HUDSON: On Slide 10, again, those 1 2 examples from 2015, of course the blacknose, 3 we've remedied that situation already. furthermore, for the And Atlantic 4 5 blacknose area south of 34 degrees north, we would like to see an update because these animals 6 are as big as they grow, they're as thick as we've 7 ever seen them in history. And that's something 8 that needs to be took in. 9 The only difference is, is that we're 10 11 on a biannual thing. Everything else is the same 12 with the Gulf. The Gulfs on an annual recruitment, or pupping. And so something is not 13 right. 14 Maybe they had a lot of pressure over 15 16 there from the shrimp boats, but I know that we don't have to worry about blacknose in the Gulf 17 it's only the Gulf, I mean the Atlantic side south 18 of Wilmington that we're allowed to harvest them. 19 20 But it's good now because we're actually getting more efficient at catching the 21

1	small coastals. Maybe more people will do that
2	and go from there.
3	But I just wanted to throw that in
4	there. If you could update this, the next
5	iteration with 2016 or 2017 numbers, it would be
6	useful to, like Kate said, just look at all of
7	what we're looking at.
8	Because some of that stuff is going to
9	be overfished. Maybe overfishing occurring or
10	maybe it's a healthy stock and that's where we
11	can do the things like 25 percent carryover we're
12	doing currently with blacktip in the Gulf of
13	Mexico.
14	But then again, you have that
15	coexisting issue with the large coastal and the
16	hammerhead linkage and that's causing problems.
17	So no matter how big the blacktip quota can get,
18	the other stuff is constraining the whole
19	utilization.
20	MR. BROOKS: So, other than Rusty's
21	suggestion of getting rid of the TAC and going

1	straight to ACLs, I think the general comments
2	here are, this is a lot to digest, a lot of
3	questions about process.
4	You know, what's the analogue of an
5	SSC and how does that work and what's the
6	transparency and what's the dialogue and how do
7	people plug in with that. And then a specific
8	data request around, it's a really helpful table
9	that's comparing the TACs total harvest and if
10	you could replicate that for us and others that
11	would be good.
12	MS. BREWSTER-GEISZ: Yes, we have
13	that, it's just a lot of information. And we've
14	been struggling on how just to share it amongst
15	ourselves because it's kind of overwhelming to
16	look at it for all the different species and all
17	the different harvest levels and all the
18	different TACs and ACLs. It's kind of mind-
19	boggling. So that's why we tried to put it just
20	short and sweet here.
21	MS. WESTFALL: Appreciate that Karyl.

1	And other more kind of general question, on the
2	previous slide, on Slide 9, I'm really curious.
3	So, this diagram interprets catch as
4	landings and discards and doesn't really take
5	into account catch and release and mortality that
6	can occur from that. So I'm curious where that's
7	incorporated.
8	And for some species that's important
9	in the sense where there's substantial catch and
10	release fisheries and where mortality can occur
11	during catch and release. So where is that
12	mortality accounted for?
13	MS. BREWSTER-GEISZ: So that would be
14	in the, like, are you talking about the
15	recreational catch and release? That would be
16	what we mean by landings and discards, so it's
17	both live and dead discards.
18	MS. WESTFALL: But, that doesn't
19	include any mortality from species that are
20	released alive and later die as a result of post-
21	release mortality.

1	MS. BREWSTER-GEISZ: Yes, we include
2	that. That's what I meant by the mortality from
3	the live discards.
4	MS. WESTFALL: Got it. Thank you.
5	MR. BROOKS: Thanks. Rusty.
6	MR. HUDSON: Discards. We don't need
7	to make decisions about discards at this level,
8	that's done on you all's level with the stock
9	assessment and stuff like that. That's some more
L 0	of that scientific buffering that could be put in
L1	there just so that we don't have to think about
L2	it. I mean, we're not the SSC, we just want to
L3	be seamless and know what we're going to be able
L 4	to fish.
L 5	MR. BROOKS: All right, let's push to
L 6	the second, oh, sorry, Mike.
L7	MR. PIERDINOCK: Just a quick one with
L 8	the discards. I'd be concerned that the
L 9	experience with other species that there's lack
20	of good data to then determine that a certain,
21	let's say ten percent of what's discarded dies

1	and as a result then they put it up to 50 or 100
2	percent or so on.
3	We've seen that with cod and other
4	species so I'd be concerned if that was done due
5	to a lack of good stock assessments, stock
6	details and then how that could be done to the
7	detriment of us. So something just to keep in
8	mind. Thanks.
9	MR. BROOKS: Katie, do you want to
10	jump back in okay. All right, so let's switch
11	to the second topic which was the phase-in, ABC
12	control options. Again, we've got different
13	options there including no action. There we go.
14	Any comments or thoughts on that that
15	you'd like Agency to hear here? Again, you get
16	to noodle on this till October 1st, right?
17	MS. BREWSTER-GEISZ: We don't
18	actually have a deadline for this.
19	(Off-microphone comment.)
20	MS. BREWSTER-GEISZ: Yes, October 1st
21	is Amendment 11. We don't have a deadline for

1	this. We are hoping to scope later this fall.
2	So obviously, the earlier the comments the
3	better, but we'll take them whenever.
4	MR. BROOKS: Rick's going to field
5	this out. Let's hear it.
6	MR. WEBER: I'd say I like the idea
7	of both phase-in and probably phase-out. I mean,
8	I don't think species suddenly go bad in a year
9	or get better in a year, so probably phasing
10	things in and out make sense.
11	MR. HUDSON: You know, sitting three
12	to five years out in the rejections and stuff
13	like that saves us a lot of issues. The phasing
14	in stuff, that's again, back behind the doors you
15	know.
16	Normally, when I'm at an SSC meeting,
17	I'm able to comment on each thing and then bring
18	a written comment in and the close out and follow-
19	up, but at this point we're going to have to
20	depend on you all because we're not like the
21	council here at all.

And so, what we just need to know is 1 2 that you feel good about the quotas you're giving 3 everybody to fish on or the ACLs people are going to have the fish on in the future. 4 5 But setting it three to five years kind of gives you a sense of stability about 6 7 stuff. But then you also need to have stock assessments that are either updated because the 8 full benchmarks are good enough, and that should 9 be done in a timely way. 10 11 Some species, because of the length of 12 time, five, ten years. But generally, I'd like to see five. I don't like waiting ten and 20 13 14 years for an assessment. Thank you. 15 MR. BROOKS: Thanks, Rusty. Okay, 16 I'm not seeing anyone else wanting to jump in on Next one is TAC, establishing shark 17 this one. 18 TACs and ACLs. We've got five options up here to consider. Anyone want to weigh in on these 19 20 thoughts, questions? Note to self, not for after lunch. 21

1	(Laughter.)
2	MR. BROOKS: Not before or after lunch
3	either, that's true. Okay. Everyone is still
4	sort of digesting this.
5	Next one was carryover. So, four
6	provisions here. That's what I get for how do
7	you handle unused portions of TAC.
8	And Rusty is out of the room so you
9	can completely go.
10	MR. WEBER: For Rich Ruais.
11	(Laughter.)
12	MR. WEBER: I will speak per rollover.
13	Probably even if it is experiencing overfishing
14	there needs to be some consideration. I think
15	it makes it easier on you guys and it softens the
16	bad news because if you don't release from the
17	reserve quick enough or something like that,
18	sometimes the quota is not fully taken because of
19	your actions.
20	You know, one of the questions you're
21	going for is should we have a reserve. Well

that's going to put more of it on you to whether 1 2 or not the quota is fully taken. 3 And to say, well, sorry, we didn't release from the reserve fast enough and we're 4 5 not going to get it back to you next year, is going to put you in a perpetual hot seat where if 6 you, because I'll just speak in favor of the idea 7 8 reserve, you guys have shown through two species that you can be trusted with a reserve so 9 I'll speak pro reserve now. 10 11 But it seems to me that if you are 12 going to risk not fully allocating, you need to give yourself some ability to rollover. 13 So, in 14 general, rollover because there Ι am pro anything magical 15 shouldn't be about December 16 31st. I mean, just because it didn't, it 17 18 wasn't caught in the fourth week of December but it was caught. Rollover works to some level, 19 even in an overfished species, give yourself that 20 latitude, in my opinion. 21

1	MR. BROOKS: Thanks. Bob and then
2	down to Pat.
3	MR. HUETER: Okay. So, I like the
4	idea of splitting this between the overfished and
5	not overfished categories. And I would say for
6	the overfished, keep status quo. And for not
7	overfished I think we can loosen up a little bit
8	and go to Options 2 and 3.
9	MR. BROOKS: Pat.
10	MR. AUGUSTINE: Thank you. I'm
11	hearing a lot from
12	(Telephonic interference)
13	MR. AUGUSTINE: I would combine 1 and
14	3. Primarily because if a particular sector is
15	not overfished for whatever the condition is,
16	whether its weather, gear, whatever it happens to
17	be, it seems as though they should have the first
18	shot and go from there.
19	And again, the reason for the
20	allowable carryover, it depends upon what your
21	harvest is that year. If you're able to get out

1	to the animals to get them, fine, if not,
2	recreation is the same way. So I would go with
3	1 and 3 as being the two that I would recommend.
4	MR. BROOKS: Thanks, Pat. David and
5	then up to Mike. Sorry.
6	MR. CARR: So, I'm going to agree with
7	both Bob and Pat. My only concern here is the
8	under reporting in the recreational fishery and
9	concern about that we're not properly accounting
10	for what is actually being landed or dead discard
11	in the recreational fishery.
12	I think the commercial fishery is
13	doing a really great job of reporting what
14	they're catching, what they're not catching.
15	I'm for rollover. I agree December
16	31st is not meaningful to a fish, but I'd be wary
17	of large carryover over, close to that 50 percent
18	in the recreational fishery.
19	MR. BROOKS: Thanks. Mike.
20	MR. PIERDINOCK: I have more of a
21	question with Number 1. I mean, you're allowed

1	to carryover 50 percent.
2	Do they, to some extent right now, may
3	do some portion at each one of these options with
4	the carryover the 50 percent or is it just split,
5	goes directly, if there is no ACL it just goes to
6	one pot or pie or it goes to commercial, it goes
7	to rec, and maybe it's 20 percent, maybe it's not
8	the full 50 percent?
9	And I'm assuming right now they make
10	that decision based upon the health of the stock
11	and the way things look or whether they would
12	take the whole 50 or is it automatic at the whole
13	50?
14	So, I guess I have a few questions how
15	it works now because with what all of them are
16	saying I would agree with different versions of
17	that, but I'm already curious if we're already
18	doing that to some extent. Thanks.
19	MS. BREWSTER-GEISZ: Questions are
20	good. So, you are correct, we are doing
21	basically 1 and 3.

1	So, if the commercial has an
2	underharvest we give them up to 50 percent of
3	their commercial quota back. But we're generally
4	not looking beyond there until we have all those
5	rec numbers, which could be years later.
6	MR. PIERDINOCK: Instead that always
7	provide the difficulties we've said because we've
8	had this happen all the time. We can't go out
9	and tell our clientele what our bag limits and
10	seasons are or so one because we don't know likely
11	till May with a lot of our species at what it's
12	going to be for the upcoming year because there's
13	always a lag time with the rec data.
14	So, I don't know if there's anything
15	also that could expedite that and change that.
16	I don't think it's possible, but not under the
17	present scheme of things. But that 50 percent
18	may, how do you deal with that 50 percent may
19	then take into consideration that lag time.
20	MR. BROOKS: Anyone else want to jump
21	in on this? Clearly a lot of support for

1	carryover and a couple of different variants of
2	what that might look like.
3	All right, then the last topic on this
4	one is the multi-year, multi-year overfishing
5	options, which there are three. Anyone care to
6	weigh in on that one?
7	MS. WESTFALL: Just a question,
8	Karyl. And just to make sure I'm understanding
9	this correctly.
10	On Slide 29, with the multi-year
11	overfishing example. So you're saying that if
12	there is underharvest over multiple years, just
13	that alone could change the stock status without
14	a stock assessment?
15	MS. BREWSTER-GEISZ: Yes. I'm not
16	sure I would call 490 compared to 500
17	underharvest so much, but it is under the OFL.
18	Maybe it stayed under the ABC as well. And yes,
19	that could change it.
20	So, as an example, the only one I can
21	think of, and Meghan is not going to be happy

1	with me, is dusky sharks. We remain low. We
2	could declare no more overfishing in three years
3	under this example.
4	MS. WESTFALL: I would certainly
5	caution against changing stock status without a
6	stock assessment.
7	And then just more generally,
8	appreciate all your all's work on this, and a lot
9	to chew on. And certainly we'll be looking at
10	all the various options and looking, thinking
11	about providing comments later on. Thank you.
12	MR. AUGUSTINE: Yes, quick question.
13	A dumb question, I should know the answer, and I
14	probably do.
15	Aren't we under the umbrella of
16	Magnuson-Stevens, relative to overfishing?
17	MS. BREWSTER-GEISZ: Yes.
18	MR. AUGUSTINE: Okay, so if we had
19	multi-year overfishing, could we go back to your
20	previous slide please? Well, we probably could
21	use a method such as PSE, but at the end of the

1	day, any action we take we do not allow for a
2	multi-year overfishing when overfishing is
3	occurring.
4	Anyhow, overfishing is occurring
5	where under that control. So, I have to ask the
6	question, why aren't we taking any action? I
7	mean, hopefully you can answer, I don't know.
8	MS. BREWSTER-GEISZ: So, let me try to go
9	through this a little bit. If you look at this
10	graph
11	MR. AUGUSTINE: Yes.
12	MS. BREWSTER-GEISZ: you have the
13	stock experiencing overfishing for a number of
14	years then it starts dipping into no overfishing
15	and then overfishing again and then overfishing,
16	and then the last year it has overfishing.
17	Under this approach you could use a
18	three year approach to determine, is that last
19	year of overfishing really overfishing. So if
20	you only have, at the end of the stock assessment
21	only one year with overfishing, maybe on average

1	it's still no overfishing.
2	Alternatively, the other way.
3	Alternatively, if you set the overfishing limit,
4	such as in that table to be a certain amount and
5	you're always below that, then you could also
6	declare no overfishing without a stock
7	assessment.
8	MR. AUGUSTINE: Thank you. Thank you
9	for that, Karyl, it was very helpful. So why
10	don't we go to a five year average as opposed to
11	a three year average because of the extreme
12	length of time between stock assessments?
13	Would that not give us a more
14	smoothing out over the years? I mean, you would
15	have a better idea of that then I do.
16	MS. BREWSTER-GEISZ: I was just
17	confirming. Magnuson requires three years. No
18	more than three years.
19	MR. AUGUSTINE: I thought Magnuson
20	was ten years.
21	MS. BREWSTER-GEISZ: For the over,

1	multi-year overfishing.
2	MR. AUGUSTINE: Thanks for that
3	clarification.
4	MR. BROOKS: Bob.
5	MR. HUETER: Yes, just briefly. This
6	one I agree with Katie on. Don't change this.
7	This make me very nervous to start smoothing out
8	and taking averages and then declaring
9	overfishing is not happening. It takes the
L 0	Agency off the hook and I think we need to be
L1	more risk adverse in this particular case so I
L2	would say no action in this measure.
L3	MR. BROOKS: Thanks, Bob. Mike.
L 4	MR. PIERDINOCK: Can you go back down
L5	a slide with the, can you go back to the slide
L 6	that has all the different ones listed?
L7	The three year, number three. My
L8	understanding is that's there as a result of the
L 9	variability we get with MRIP data every year and
20	how that pulls our hair out and then works to our
21	detriment.

1	So, it is an acceptable methodology
2	now to be used to look at an average over three
3	years so I would hope you could do the same with
4	these species, thanks.
5	MR. BROOKS: Sonja.
6	MS. FORDHAM: I agree with Bob and
7	Katie, thank you.
8	MR. BROOKS: Could you take more time
9	to say that please?
10	(Laughter.)
11	MR. BROOKS: Sorry. Ben.
12	MR. CARR: So, I would almost argue,
13	we use no action for in the case of overfishing
14	and smoothing for labeling things as no
15	overfishing. I'm concerned of things being
16	listed as no overfishing when it's not actually
17	the case.
18	Kind of like the phase-in approach
19	where it would be phased, we phase out of an
20	overfishing situation over three years, but if
21	there is a catastrophe, we drop right into an

1	overfishing based on stock assessment. Or not
2	stock assessment, reporting.
3	MS. BREWSTER-GEISZ: So just to
4	clarify, you want to have it smoothed out if we
5	are going to declare no overfishing, but if we're
6	declaring overfishing, just one year? Thank you.
7	MR. BROOKS: Thanks. Pat, your card
8	back up?
9	MR. AUGUSTINE: I'm good. I'm just
10	going to say I agree with Mike on Number 3.
11	MR. BROOKS: Okay. All right, so,
12	several cautions around smoothing for under,
13	using that for underharvest, but then a, I guess
14	several, most weighing in on, several weighing on
15	a no action than a couple of other bits there.
16	A couple of other opinions, so.
17	Karyl, did you need any other
18	conversation on this?
19	MS. BREWSTER-GEISZ: No.
20	MR. BROOKS: Mike does.
21	MR. PIERDINOCK: Just want an overall

It was stated right at the beginning 1 comment. 2 that the reason for trying to do, or to having 3 this discussion and the changes, how confident we are with the stock assessments. 5 And when I hear that right off the bat it me because the sharks 6 concerns are the 7 forgotten sons of the fishery and the stock assessments for some of them are good and many of 8 them are not. So, I just worry for those there 9 don't 10 have good data and good we 11 assessments if we're going to make changes, it's 12 only going to make things worse. 13 So I just want once again would want 14 us to proceed with caution on how we go with this 15 ultimately. 16 MS. BREWSTER-GEISZ: Thanks for that. I do want to clarify, when I said uncertainty 17 18 about the stock assessments and then in terms of the ABC control rule, that is what that's trying 19 to control for is how certain we are with the 20 21 stock assessments, not that we are uncertain

1	about all of our shark stock assessments. Does
2	that help clarify?
3	MR. PIERDINOCK: Yes, that clarifies
4	it. But then just simply with that, that for
5	many of our species the stock assessments are
6	very suspect and anytime I see any kind of change
7	to hopefully help things it seems as though
8	things get worse.
9	If we do change it, when we start at
10	the beginning and bad data in is bad data out, so
11	I'd just like to point that out. Thanks.
12	MR. BROOKS: Pat, is your card back
13	up?
14	MR. AUGUSTINE: Well, just an overall
15	comment would be, and I just wrote it because I
16	was going to ask to speak at the end of it. I
17	just think the overall changes that we're talking
18	about making is going to make the whole process
19	more complicated, more convoluted, more difficult
20	for the public to understand, and is it just going
21	to create work or will it truly effect the ability

of the Advisory Panel to offer up comments on a 1 2 whole new process. 3 And the final comment is, how many years is it going to do this and get it converted 4 5 from where you are now to where you're going to qo? 6 I mean, Karyl, I look at the timeline 7 8 it and quite frankly, it looks pretty 9 ambitious, because from what we've looked at right now, goodness gracious, I don't know how 10 11 many staff folks you're going to have work on 12 this, because the parts that we've talked about so far, it appears to me it's going to take quite 13 14 a lot of staff effort. 15 Not that you're not capable of doing it, that's not the issue. The point is, the end 16 product, is it going to end up in a positive, 17 18 more positive approaches to what we're trying to accomplish or are we going to convolute the 19 20 issue. 21 It just seems to me that old KISS

statement, you know, keep it simple stupid, it 1 2 just seems to apply. And here we're attacking 3 every single part of what you've done since you set this whole process in motion. 4 5 I mean, you asked a question on Number 1, no action. And the point that came to my mind 6 7 right away is, do we need any action, is that 8 piece broken. I'm not sure right now. 9 mean, the options that you have Ι presented for each one of these elements, very, 10 11 very comprehensive. And each one of them in 12 itself can create a volume of work. And I'm not sure how much statistical 13 14 analvsis goes into it, what the comparative analysis is, what you have to do in terms of 15 16 research and digging out historical stuff, what you have to do to convert, if you will. And at 17 the end of the day, what have we gained. 18 there's so many things on your plate right now 19 and I really need to bring that forward because 20

this looks like it's very ambitious.

1	Although in the very end it may be
2	very, very valuable, but is it the right thing
3	now? I don't know, Karyl, you'll have to
4	MR. BROOKS: And I think that's part
5	of why the Agency is putting this forward is to
6	share some very, very early thinking and get a
7	sense from the panel on whether this makes sense
8	or whether there are parts of it that makes sense
9	or none of it makes sense.
10	MS. BREWSTER-GEISZ: Yes, I
11	definitely appreciate your comment, Pat.
12	Personally, I am really excited about this
13	amendment. I think this could be a really good
14	thing and could help simplify and clarify for
15	everybody around the room, and those of us in
16	HMS, on where we are and what our quotas are and
17	what our limits are.
18	When we first started that, we've
19	been, I've been working, many of us in this room
20	have been working on this over the years. This
21	shark TAC. okay, now we have an assessment on

1	this, how do we adjust it, what is this TAC.
2	It took us a couple of years to pull
3	together the table that we now have in the SAFE
4	report on what all the various TACs for all of
5	our species management groups. It shouldn't be
6	like that. It should be simple.
7	And it should be fairly easy once we
8	get a stock assessment for all of you to look at
9	it and go, okay, this is what HMS is likely to do
10	as a result. And we don't have that right now.
11	Right now, I get panicked calls from
12	some of you, from the fisherman going, what are
13	you going to do? What is this going to mean for
14	me? And so that's why we're doing this.
15	I am actually really excited. You are
16	correct, it's going to be a lot of work. I have
17	Ian in charge of this, along with Guy and I know
18	it's going to be great. So, hold on, sit tight
19	
20	MR. BROOKS: That's really helpful to
21	hear, Karyl, and provide some helpful

1	perspective. Anna, you were wanting to jump in?
2	MS. BECKWITH: Yes. I mean, I
3	haven't tried to have individual opinions on the
4	things because I come from everything from a
5	South Atlantic perspective, but these things have
6	been discussed at the different councils.
7	And a lot of this additional
8	flexibility has been begged for by the councils
9	through our council process. And some of these
10	things are things that we have been asking for,
11	to add flexibility because of the unknowns of our
12	data and because of the high PSEs and all of the
13	uncertainties that we have to deal with.
14	So, there's cost and benefits to each
15	of these things. There is cost and benefits to
16	phasing in and phasing up.
17	The Pacific Council has a quick, I
18	think it's slow up, fast down. The South
19	Atlantic is considering a different version.
20	I mean, the councils are having these
21	discussions and analyzing the benefits and the

1	determents to each of these things for the
2	specific needs for each region. But there's a
3	lot of information, a lot of thought.
4	And some of these things are going to
5	help make sure that the industry doesn't take a
6	huge hit. And that they might be able to ride
7	out a couple of bad years through a phase-in
8	process so that you don't lose your economic base
9	for some of these fisheries, which is instances
10	that we've had at the South Atlantic and the Gulf.
11	So, I think there's a lot of intellect
12	and thought that has gone through for some of the
13	council discussions that you guys would be able
14	to pull from, but I think as councilmembers, I
15	don't want to say, well, I think this is the best
16	because, what you guys do is different from what
17	we do. But I think from the discussions that we
18	have at the councils, I think there is a lot of
19	insight to the positives and negatives that you
20	guys can take from this.
21	MR. BROOKS: Thanks, Anna. We are

1	due to go to public comment. I'll take one last
2	comment here from the AP.
3	MR. FRAZER: So, just, I mean, from
4	the Gulf Council's perspective, one of the things
5	I noticed is that you don't have an analogue to
6	an SSC, and that point was brought up by a number
7	of folks. But you should probably strive to
8	describe to this AP what that analogue might look
9	like. Because that group of individuals, whoever
10	they are, are going to essentially develop your
11	ABCs, right?
12	And the AP, I would think, then would
13	weigh in on what the ACLs are. With advice from
14	that kind of body, right, because they would tell
15	you what the consequences are being more or less
16	conservative, any particular instance would be.
17	So, you kind of need that
18	transparency. You need to build that in to your
19	document or your process so people have faith in
20	what you're trying to do.
21	MR. BROOKS: Great, thank you very

1	much. Do you want to shift to public comment,
2	unless, Karyl, you've got anything left? Nope,
3	okay. All right, thanks everybody.
4	Glen, you're here as our public.
5	Anyone else in the room who will be wanting to
6	make public comment? Okay, Glen.
7	MR. DELANEY: Thanks for the
8	opportunity. You can't imagine how difficult it
9	is for someone like me to sit here all day and
10	speak once.
11	(Off-microphone comment.)
12	MR. DELANEY: Yes. I am going to
13	address Amendment 11, Mako. As you guys
14	hopefully know we submitted extensive comments on
15	the scoping in May and kind of addressed three
16	different overall issues.
17	One was an outline to, sort of a step-
18	wise analysis of the process in the context of
19	both the Magnuson-Stevens Act and the ICCAT
20	process itself, including that my view of
21	Amendment 11 is premature and should have waited

Ţ	until after the ICCAT meeting in November.
2	Obviously, that input was not
3	accepted, but I reiterate that and hope that it
4	goes well. We also addressed each option, of
5	course, in the scoping document.
6	I don't expect much change in our
7	comments on the proposed rule. I just want to
8	re-emphasize what Marty and Scott and probably
9	others have said, which is, you know, we support
10	the option that is consistent with ICCAT
11	Recommendation 17-08, i.e., live release with
12	electronic monitoring.
13	But I want to preach a little on the
14	issue the U.S. should not unilaterally get ahead
15	of or go beyond what our ICCAT obligations are.
16	If we do it undermines the very premise and point
17	of the need for multilateral management of highly
18	migratory species.
19	That's why we have tuna RFMOs,
20	including ICCAT. We cannot rebuild northern make
21	unilaterally even if we terminated our fisheries

Τ	and took half down to zero.
2	And then the bottom line, no matter
3	what the agency must not allow this to become a
4	choke stock by virtue of a domestic hard TAC.
5	That would be the end of our fishery.
6	A third part of our comments address
7	some of the scientific issues, shortfalls, we had
8	identified, several of which are being addressed.
9	The conversion factor on dressed whole weight, a
10	couple other items just basically reporting data.
11	I think our SAFE report and our ICCAT
12	report we had different numbers. I think you
13	guys have reconciled that, appreciate it. But
14	since I think David and others brought it up and
15	Sonja was defending the data and the confidence
16	the SCRS has in this particular stock assessment
17	I just want to highlight a little bit of
18	information which is according to the data
19	submitted to ICCAT in the 2017 SCRS stock
20	assessment.
21	In 2016 the U.S. had actually risen to

nations in its north 1 third among all ICCAT 2 shortfin mako landings, only behind Spain and 3 Morocco. And if you just kind of take -- And 4 5 this is something I brought up at the ICCAT IAC meeting this spring and in our comments here, 6 when considered in the context of the number and 7 the size of the vessels in the U.S. pelagic 8 longline fleet with the level of pelagic longline 9 fishing effort in our fishery as compared to the 10 11 number and size of the vessels and quantity of fishing effort in the industrial scale pelagic 12 longline fleets of other ICCAT nations it's hard 13 14 to take that data, landings data reported to

In 2006 while the U.S. reported northern shortfin make landings at 296 metric tens, industrial scale pelagic longline nations such as Japan reported landing 75 metric tens, Taiwan, seven metric tens, China, four metric tens, South Korea, one metric ten, Philippines,

ICCAT seriously.

15

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1 zero metric tons. 2 To think that, you know, industrial 3 scale pelagic longline nations, like Taiwan, might be landing less than 100 fish, China less 4 5 than 50 fish, it's beyond implausible, absurd. 6 So to say that, you know -- I know 7 8 SCRS feels better about the 2017 9 compared to the 2015. assessment as Thev emphasize that they felt like the data had 10 11 improved and some of their analyses had improved, 12 but we also need to keep in mind that, you know, the difference between the conclusions of the 13 14 2015 stock assessment and the 2017 stock assessment were 180, profound. 15 16 I mean in 2015 we thought we had a success on our hands, shortfin make was close to 17 fully rebuilt, if you will, without a rebuilding 18 plan, but it wasn't far from -- it wasn't a stock 19 20 of enormous concern, we were feeling good about

it.

1	Of course, everything has turned
2	upside down two short years later. So I think
3	we have to be a little bit, you know, have a
4	healthy skepticism of the stock assessments when
5	the go 180 like that, and hopefully in 2019 things
6	will even be better.
7	I would note that even in the SCRS
8	recommendations in their inter-sessional meeting
9	they held this summer, which I believe Sonja
L 0	attended, in their recommendations of the report
11	of that meeting they definitely recognized the
L2	need to improve the reporting of Task I data by
L3	nations, and that was also noted in the text of
L 4	the document as well. Just as an aside
L 5	MR. BROOKS: All right, Glenn, just a
L 6	quick, two things, one, we do need to push to
L7	close and also just in your comments if you could
L 8	not call out, single people out I'd appreciate
L 9	that.
20	MR. DELANEY: Okay, sorry. Weren't
) 1	you at the meeting? You said you were at the

1	meeting. Okay. Sorry, about that, I apologize
2	if I violated protocol.
3	But the SCRS I just noted also
4	recommended the study of circle versus J hooks in
5	terms of catch retention and mortality, so I
6	would just call that attention.
7	I know you guys had some discussion of
8	that earlier today, so you might look at that
9	inter-sessional report. It's posted on the ICCAT
10	website now.
11	And then the final thing I just want
12	to say is that your reference to the last six
13	months, first six months of data for this fiscal
14	year, or fishing year, to be submitted to ICCAT
15	in October, and there is really two things I just
16	want to mention.
17	As I discussed with Brad there really
18	are two conceivable timeframes for reporting that
19	data. We did not have the Emergency Interim Rule
20	in place in January.
21	In fact, we didn't have it in place

1	until March, and I suspect most nations probably
2	didn't have those measures in place immediately
3	in January since the meeting was in November
4	prior.
5	So, you know, we might have two sets
6	of data to be reported, and I'm not sure how you
7	are going to reconcile that, January through June
8	or March through August, but I just wanted to
9	call that to the attention of the group that that
10	is something that we need to pay attention to.
11	And then the second thing is that, you
12	know, this performance data of our fleet is
13	fundamental to developing the U.S. position and
14	posture at the ICCAT meeting in November.
15	And I think there was a suggestion
16	earlier that it might not be available to the
17	ICCAT advisory committee at its meeting in
18	October, early October.
19	And, you know, I think, you know,
20	again, this is going to really drive what the
21	posture of the U.S. is going into to that meeting

1	so I sure hope that even if the data is somewhat
2	preliminary that the ICCAT Advisory Committee
3	should have an opportunity to consider that and
4	make recommendations for what U.S. positions and
5	posture should be going into the meeting.
6	That's our function and that's, you
7	know, one of the pivotal issues for make at ICCAT
8	this year and mako is one of two pivotal issues
9	facing ICCAT this year, the other being tropical
10	tunas.
11	So, again, I just stress that I hope
12	you can get that to us even if it's in preliminary
13	form. And that's it. And, again, I apologize,
14	I didn't mean to call anybody out.
15	MR. BROOKS: No worries. Thank you.
16	MR. DELANEY: Thank you.
17	MR. BROOKS: Appreciate your comment.
18	Any other public comment? Yes, please. Just,
19	again, introduce yourself, please.
20	MS. PFLEGER: Hi. I am Mariah
21	Pfleger with Oceana. I heard a lot of back and

1	forth about the science for shortfin mako. I
2	think Enrique helped with that.
3	Maybe next time we talk about this,
4	and I'm sure we will talk about it, maybe he can
5	do a little presentation on the data and the
6	conclusions that they came to. Thanks.
7	MR. BROOKS: Thanks. Any other
8	public comments? Any public on teleconference
9	who want to make a comment? If not
L 0	OPERATOR: If those of you on the
L1	telephone conference would like to have a
L2	question
L3	MR. BROOKS: Okay, with that then,
L 4	Brad, I think we head to your wrap up.
L5	MR. MCHALE: All right. Well I
L 6	appreciate for all of you sticking out to the
L7	final end here. Hopefully we don't have too much
L8	of a comical ending to the meeting.
L 9	I think as Margot prefaced pretty much
20	at this stage, I haven't seen these slides, I
21	remind staff that their annual reviews are taking

1 place over the next week or two, so hopefully 2 they considered that while they were developing 3 this. I am not necessarily going to read 5 everything, but I figured, you know, we'll stay course and just make sure we touch on some of the 6 highlights. 7 So we spoke a fair amount about wind 8 energy and various communications the agencies 9 have on the phone as well as from fisherman to 10 11 fisherman and how to kind of maximize the impact of our voice, our data, and how do we get that 12 into that BOEM environment so that 13 it can 14 actually be considered. clarification on the hammerhead 15 16 listing and an update on the oceanic whitetip listing, so I think that we'll follow up with you 17 18 there on that, Sonja. A clarification or a lack of data for 19 issued to Cape Cod groundfish permit 20 the EFP I think we really kind of touched on 21 holders.

1 that. 2 They just haven't really operated 3 underneath that EFP, but yet we'll continue to see whether or not that's a worthwhile effort 4 5 next year. Then ultimately how best to saturate 6 our permanent universe with information instead 7 of having it be more of an opt in to get the HMS 8 listserv, perhaps finding methodologies 9 news, where we are sending that out to all permit 10 11 holders and maybe have more of an opt out type of 12 an option. clarification timelines 13 on the 14 associated with the cost earnings survey for the General category there, pretty much how long the 15 16 participants have to get those reports back to us, so if we can get that clarified that's a 17 18 known. consider 19 Request to allowing headboats to fillet. I know that we touched on 20 21 that. You know, again, we'll always be open to

consideration, but, you know, the last time we ran at this in between the spring meeting and this fall meeting it didn't necessarily fare well for the cost benefit analysis, but, again, we're always kind of open to see what new information might present itself that would change that.

And with regards to EBFM road map, you know, how the science center work is tied to the HMS and regional plans, how it crosses into prioritization with the S-K and other requests for funding proposals, ensuring that we include state and territory regions such as Florida, Puerto Rico, that have unique EFH and nursing ground issues that should be addressed, that EBFM is important and the forage fish ties as it relates to target fish and then the interplay there.

That's kind of been an ongoing theme and comment driving the, or a big component of EBFM. And also the need to consider interactions of other species, whether it be marine mammals,

1 know, dogfish, as those vou et cetera, 2 populations either grow or decline and what some 3 of the implications are as it ripples through the ecosystem. coordination with 5 And then PR factor in the endangered species take in the HMS 6 fisheries, such as the smalltooth sawfish. 7 then ultimately how does EBFM, does it implement 8 in parallel with MSE protocols, some of the data, the timing, or lack thereof. 10 11 think the phytoplankton And Ι in 12 regards to herring I think was the example I think Mike had maybe mentioned at one point. And then 13 14 sequeing into a little bit more of a reporting plan to include some economic information in the 15 SEFHIER and using that as a community health 16 tracker. 17 18 then ultimately the need to 19 consider fisherman HMS and the impact of 20 additional regulations as part of that overall 21 ecosystem, not to exclude the end users.

1 Bluefin tuna management to date, so 2 appreciate the improvements from, I'm assuming 3 from last year to this year based upon the diligence of keeping tabs on things and then 5 adjusting accordingly. We had some inquiries regarding the 17 6 7 dead discards by area. Which ultimately provided, but what we did not necessarily provide 8 were those associated with the handgear fishery, so we will take that away as a tasker to get that 10 11 back out. And then some inquiries regarding the 12 2018 LPS catch data and our conference in that, 13 14 and just as an FYI I believe the July information was released yesterday, so now we have June and 15 16 July available and I think the historical patterns are essentially playing out. 17 18 It's like where we'll normally see one spike either in June or July the other month tends 19 to be less, so it kind of has a balancing out 20 21 effect, and I think we are seeing that trend once

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There was also some interest of where
that catch is occurring, so that state-level data
is available as well. I did a quick spot check
of it last night and it looked like Maryland and
Delaware combined was a big contributor to where
a lot of the school fish landings were being
reported from.

then there number of And was а questions plans enforcina about for commercial Fishing Vessel Safety Act and how they apply to General category vessels, charter headboat vessels, and there we kind of mentioned, well, we'll continue to collaborate with the United States Coast Guard and we actually already have a few additional phone calls set up to figure out how we can get our databases to communicate more efficiently.

So a theme that we have heard for a couple of meetings, looking at report and compliance rates when providing additional

1	fishing opportunities or quota as it relates to
2	transfers from the reserve category, show the
3	General category compliance rates with the
4	commercial Fishing Vessel Safety Act.
5	I think that's something we might be
6	able to produce for the spring after those
7	dialogues with the Coast Guard solidify a little
8	bit more.
9	The request to have the inspection
10	decal numbers requirement as part of the
11	application process, I know that we have touched
12	on that around the table a few times and there
13	are some logistical issues with that, but it
14	doesn't mean that we won't continue to kind of
15	look at that as a potential option to verify that
16	those vessels are compliant.
17	We touched on the discards, and then
18	end category trophy opportunities, folks would
19	like to see those increased. Some of the
20	feedback regarding the weak hook and the area-
21	based management was to really look at what

Amendment 7 has accomplished given the individual 1 2 accountability and then remove redundant measures 3 or fleet-wide restrictions. if we know, are unable to 4 5 accomplish that, the trend, the vessels moving likely it all 6 overseas, would continue. 7 Obviously concerns about external forces, driving decisions, that aren't necessarily 8 expressed around the table are based on science 9 and, you know, that it's not all about the 10 11 biology, but we as managers also need to factor 12 in some of the social and economic dynamics that are coming into play regarding our fisheries and 13 14 then, in turn, the management thereof. And then I believe David had kind of 15 16 just bluntly come out and said it is, you know, are there folks that would like to see pelagic 17 18 longline fisheries here in the United States go away, if so, step up and have your voice heard. 19 If not then we should all be kind of 20 collaboratively trying to figure out how to make 21

1	that fishery work for the benefit of all U.S.
2	fishermen in the United States quota attainment,
3	et cetera, et cetera.
4	And I think that kind of plays into
5	this next bullet here is that not only NMFS but
6	other groups need to help the pelagic longline
7	fleet before it's too late, you know.
8	And I think that it was mentioned that
9	if all of a sudden we don't have that voice at
10	the international table there are implications
11	that will ripple through this entire room if we
12	are unable to have that voice there.
13	And then requesting for some
14	additional representation whether from DOC to
15	join us so they can actually hear the discussions
16	that we have as it pertains to these issues versus
17	having I think something abstract.
18	More on the weak hook and area-based,
19	so feedback to remove weak hooks altogether and
20	anticipated benefits that swordfish lands would
21	go up, some requests to maintain them but more on

1 a temporal basis or a seasonable basis or perhaps 2 more in the established gear-restricted areas. 3 When it came to the spatial management areas we had requests to keep those that were in 5 the Gulf of Mexico. Marty had expressed that communication protocols and the take reduction 6 team is a vital tool to avoid interactions and 7 then ultimately that time and area-based 8 9 is outdated given management what has been brought forward in Amendment 7. 10 11 When it comes to the 3-year review 12 suggestions re-analyze some on how to economic data to kind of tease out things that 13 might be masked there. 14 15 We are averaging across the fleets 16 maybe hiding let's say some less than desirable information there but it may be more accurate and 17 18 reflective of what is transpiring in the fishery, whether you do that on a daily basis as well as 19 make note of how costs can increase over time on 20 21 various aspects, whether it be fuel, bait, or

1 what have you. 2 Other kind of general comments, don't 3 undo the success that stem from Amendment 7, desires to have more flexibility regarding the 5 designations, Atlantic versus ability to and the kind of 6 7 flexibility to go from one area to the next versus the current construct, and then this ongoing 8 9 theme of ensuring that the quota allocations are going to those vessels that are on the water and 10 11 getting lines wet. 12 There seemed to be a pretty unanimous kind of voice around not a not allowing permanent 13 14 sale of IBQ and we'll be looking to other IFQ 15 programs as well as to help inform this. 16 believe the southeast might starting to back away from some of how they 17 18 implemented their IFQ programs and to stay true to kind of some of the overall objections of 19 Amendment 7 and carry it forward into 13 is to 20

not allow sinks to exist or stockpiling to exist,

1 that the quota needs to get to those that are 2 actually using it real-time. There was a lot of discussion about 3 sunsetting the Purse Seine category fishery and 4 5 then stemming from that how does quota get, if does 6 that were to occur where quota get 7 redistributed to and the acknowledgment that at 25 percent of that current purse seine 8 9 is really just dedicated to the quota IBO 10 program. 11 And so if, keep that in mind during 12 any sort of future discussions regarding what to do with that quota if that is the way the agency 13 14 And then obviously providing were to go. reasonable opportunities to harvest our quotas as 15 mandated by ATCA. 16 17 And then we had also heard to extend the January fishery so the closure date I believe 18 is extending out to the end of the April and I 19 you 20 think there is, know, just discussion regarding the time period, subquotas in general, 21

look at the Angling category trophy categories 1 2 given that they are so small, if there is any 3 sort of reallocation that could take place there. And then keep our mind open to, 4 5 dependent on how things shake out for bigeye, potentially a retention limit required there as 6 well. 7 Regarding charter/headboat 8 and electronic logbook reporting, so make sure 9 don't lose sight of the impact that outreach can 10 11 have as far as bringing folks along and learn 12 from some mistakes that took place in some of the other efforts the agency has undertaken, whether 13 14 or not to start off with pilot programs and whether or not there are pre-existing systems to 15 16 kind of build on versus creating a new additional stovepipe, and then, you know, taking a look at 17 18 those folks that may make the most sense to start a program off with. 19 And I believe as Marcos had mentioned 20 maybe honing in on the for-hire captains in the 21

1 Caribbean as an example of a good fit to start a pilot program. 2 3 Who should be required to report? Non-for-hire/for-hire trips, captains doing for-5 hire trips currently. You know, so essentially what sort of information should we be getting 6 and, again, what trips should it be associated 7 8 with. 9 How to get buy-in, you know, that ties into outreach. Obviously, funding is a key 10 11 component and trying to identify that very early 12 so you don't necessarily develop this grandiose program and then all of a sudden you realize that 13 you really don't have any functional way to get 14 15 that into play. 16 Be very clear about our goals, what is that we are trying to do, what are the minimum 17 18 data elements that we need to see, and then ultimately, you know, other than just, you know, 19 counting fish for the sake of it, is it being 20 used for stock assessment, is it being used for 21

1 validation, being very clear what that 2 information is intended to be used for 3 obviously, the need for either validation or enforcement to groundtruth that information. 4 5 And then, obviously, needing to seek little bit more clarity on how we define 6

stringent. We want to know whether it's timing, whether it's data elements, especially for those constituents that have overlapping reporting

requirements to clarify some of the systems that

they would actually have to report to when they

12 have multiple options.

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it 12 When comes to Amendment regarding the objectives, in Objective Number 1 ending overfishing, taking precautionary approach, you know, taking the opportunity to recognize international trend towards management procedures and harvest control roles, and it's also helpful to show changes in kind of redline strikeouts so folks can, you know, literally line-by-line see where our changes in any sort if 1 the objective language would exist.

2	Regarding stock status determination
3	there was some support for one set of thresholds
4	to align the international with those that are
5	being used here on the domestic side, you know,
6	to be able to consider what are the operational
7	implications, obviously with bigeye being
8	assessed and being here on the forefront at his
9	year's ICCAT annual meeting and ongoing concerns
10	about unilateral action, you know, if ICCAT does
11	not take action what does that then mean here on
12	the domestic front, and we've touched on that
13	kind of theme a few different times, whether it
14	be shortfin related or, you know, at a grander
15	scale here, just national policy, and then
16	implications for bluefin tuna which currently has
17	an unknown status here domestically. You know,
18	so what are the ripple effects of some of this.
19	When it comes to SBRM, although it
20	doesn't look like we have the bullet here that we
21	should spend a considerable amount of time

1	developing SBRM for spearfish based tunas. Okay.
2	You know, considering species level
3	and fishery level, trying to look at it both ways,
4	trying to figure out what makes the most sense,
5	standardization is important for when looking at
6	SBRM for all the various shark species.
7	And then when it comes down to
8	allocation criteria, you know, trying to
9	determine what a 10-year, when you look at the
10	time horizons questions about whether the 10-year
11	maximum would force regulatory changes,
12	essentially what are the ripple effects of when
13	some of those triggers are hit.
14	As it relates to public comment on
15	bluefin tuna area-based management weak hooks,
16	given the individual accountability, you know,
17	these other requirements are either inefficient,
18	redundant, and play a significant role in the
19	declines of the target catch landings as well as
20	the number of active participants.
21	You know, to really consider the

1	executive order in eliminating redundant
2	regulations, and I will take that one step
3	further in regards to the current administrative
4	procedures that we execute our FMP amendments or
5	regulatory amendments through.
6	Concerning that our quotas will be
7	reallocated to other countries, that is
8	definitely apparent in the swordfish fishery.
9	That has been an ongoing concern.
10	And then, again, concerns regarding
11	time horizons of when actions might be able to be
12	finalized and the need to have some sort of
13	relief, the here and the now regarding some of
14	these potential duplicative or redundant
15	requirements.
16	On the 3-year review, it appears that
17	the IBQ program objective of reducing the
18	longline catch and dead discards of bluefin, but
19	also need to make sure that the pendulum is
20	swinging back so we are not necessarily
21	overshooting that objective and we are actually

utilizing quotas, again, as mentioned on previous 1 2 slides under ATCA. 3 You know, there is no conservation basis for not fully catching our quota based upon 5 how that quota is issued out and at the ICCAT level all of it is assumed mortality. 6 And that the goals of Amendment 13 7 8 should be to fully utilize, or one of the goals of Amendment 13 should be to fully utilize the longline portion of that bluefin tuna quota and 10 11 should reform our performance metrics to disperse 12 quota to those vessels that are active getting their lines in the water. 13 14 Regarding NMFS bottom longline shark 15 survey, questions on variables, i.e. whether the 16 hooks have changed over time, whether or not

switches in bait might have implications on catch
rates, and then, obviously, tracking of the
physical environment variables and monitoring
those and the potential implications on catch
rates. I think water temperature was a key item

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Questions regarding the survey

stations on whether or not the locations were

changing over time or whether or not they were

static for consistency and what may make the most

sense given some of the environmental changes,

and there is the interplay there.

Support for the survey's decision to occur in the spring, questions about sex ratios and age ratios of the different species, and questions regarding the apex predator bottom longline survey and the bottom longline survey out of the Pascagoula Lab and some of the differences there, and then folks were looking forward to the 32-year report.

Trends in sharking season abundance, so concerns about the indices and if they are weighted or ranked properly, questions on why the split between the observer, bottom longline observer indices given the change, and the research fishery and the protocols, and I think

1 we touched on that. 2 The observer indices data review 3 should consider, you know, who is the lead of the program, so some of those internal dynamics of, 4 5 that morph over time and, you know, with any 6 particular program and whether or not thev influence results. 7 Questions on whether temperature can 8 9 be incorporated into the assessment models, spend some time there, and a question on the peak of 10 11 the curve in the plot on abundance, and if we 12 compared the data to historical data on abundance, and how close are we to getting back 13 14 to the biomass that we saw years ago. And then ultimately when is the target date for the next 15 16 sandbar assessment. right, so on to Amendment 11. 17 18 Concerns about catch data from other countries, I think that came up even just as recently as the 19 20 public comment we just had. I think Glenn had

some really good numbers there that kind of

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1	highlighted those concerns.
2	That the U.S. should use the SCRS
3	suggestions for total prohibition of landings is
4	one comment we heard. The U.S. should slow down
5	and not necessarily get ahead of the ICCAT
6	recommendations knowing that this will be another
7	topic of discussion at the annual meeting coming
8	up.
9	There was some support for the
10	preferred commercial alternatives, and/or a
11	combination thereof of $A(2)$, $A(3)$, and $A(5)$. We
12	should encourage all countries to use EM, and so
13	that is just more of a negotiating or priority as
14	we head over to ICCAT.
15	And then ultimately there was a lot of
16	support around the room as well for alternative
17	B(2) that mirrors the ICCAT recommendation that
18	differentiates minimum sizes both for male and
19	female.
20	And then a few questions regarding
21	circle hooks and then I think we responded to

those based upon what was put into play for A(5), 1 2 A(5)(b), actually, for duskies versus t.he that geographic given 3 expansion of the mako dynamics. 4 5 MRIP, so I think everyone understood pretty clearly that the Large Pelagic Survey 6 estimates have not currently been impacted by the 7 MRIP re-calibrations. 8 9 to that exercise is going But taking place in the future, that we also do not 10 11 expect that that LPS re-calibration exercise 12 would result in the same level of changes between the existing estimates because of how that survey 13 14 is designed and where the private vessels, as well as the shoreside angler, is not, or at least 15 16 the shoreside isn't nearly as prevalent in some of the Large Pelagic Survey there. 17 It was noted that LPS continues to be 18 of recreational 19 primary source catch our 20 estimates and then ultimately what do we do with the MRIP estimates as they pertain to, you know, 21

essentially North Carolina, 1 South, and down and 2 through the Gulf, whether t.hat. be 3 domestically or as well as information being reported up to ICCAT. 4

And then teasing out the estimates based upon either the Atlantic or Gulf. There were a number of requests that that would be beneficial to connect, separate those two out versus having them lumped, and then if we could refine the timeframe or sampling waves that it could also be very informative of getting at a higher level of resolution, at least of teasing those numbers out, but I think as John had mentioned there is also then risks that come along with trying to dive too deep into it that your PSEs and certainties can also be impacted.

So for the fishing effort survey and the transition plan essentially all stock assessments moving forward will be using the new catch estimates, so obviously that's really where the full cycle is where you get out of this apple

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1	and orange comparison, because until that data
2	can work through the entire process, and then
3	ultimately what would the implications on ACLs be
4	as an end of that process.
5	And, currently, John had mentioned,
6	the ability to take catch estimates and back-
7	calibrate to reflect the old survey
8	methodologies, so, you know, that information
9	still has value no versus waiting for that entire
10	cycle to cycle through.
11	And then examining ways to address
12	highly variable estimates, kind of some of those
13	outliers or the rare event species like HMS and
14	ways to make more precise or catch estimates
15	there, which tends to be an ongoing challenge.
16	And then for Amendment 14, we just
17	talked about that and Karyl is excited. So
18	noteworthy dates and upcoming actions, comments
19	on the draft, EBFM implementation plan are due by
20	September 30th.
21	The comment period for Amendment 11

wraps up on October 1st. We will have proposed 1 2 2019 commercial shark quotas coming soon, very 3 soon. The final rule regarding the bluefin 5 tuna and albacore will also be coming very soon. And then NOAA Fisheries is conducting a review to 7 whether, or how to deal National Bycatch Report and how to improve on 8 that. 10 And those comments are due -- and I 11 know we haven't really touched on that one here, 12 but I think something was just announced here meeting, so you'll 13 during the probably 14 something your email, but feedback is in 15 requested by October 31st on either 16 improve that report or what to do with that 17 report. 18 And then when it comes to oceanic whitetip 19 shark recovery outline, that available here, so we have that link. 20 And so reminders to AP members, get your travel vouchers 21

1	done by September 14th.
2	It's just money, come get it.
3	Otherwise, don't Don't jam up Pete. Where is
4	Pete?
5	MR. COOPER: I am right here.
6	MR. MCHALE: Pete gets angry when he
7	gets jammed up.
8	MR. COOPER: Very.
9	MR. MCHALE: Let's not make Pete
10	angry.
11	MR. COOPER: I sent you all the email
12	about it, so follow the email.
13	MR. MCHALE: Yep. And if folks could
14	return their tents and badges so we can reuse,
15	renew, recycle. Please do me a favor and
16	complete the AP satisfaction survey and, you
17	know, I genuinely appreciate all of your time and
18	effort once again on contributing to these
19	discussions.
20	I would like to thank the staff for
21	all the hard work of especially making me not

1	look like an ass in the front of the room. That
2	is a challenge that they really had to contend
3	with this year.
4	I hope everybody safe travels on their
5	way back to wherever you are venturing to. So
6	with that we are done.
7	MR. BROOKS: Okay. Thanks,
8	everybody. I think we are adjourned. Thanks.
9	See you in the spring.
10	(Whereupon, the above-entitled matter
11	went off the record at 3:19 p.m.)
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