

GULF OF MEXICO FISHERY MANAGEMENT COUNCIL
MEETING OF THE STANDING AND SPECIAL SHRIMP SCIENTIFIC AND
STATISTICAL COMMITTEES

May 8, 2025

STANDING SSC VOTING MEMBERS

Michael Allen.....
Jason Adriance.....
Luiz Barbieri.....
Harry Blanchet.....
Dave Chagaris.....
David Griffith.....
Tiffany Hopper.....
Jack Isaacs.....
John Mareska.....
Paul Mickle.....
Trevor Moncrief.....
Jim Nance.....
Will Patterson.....
Daniel Petrolia.....
Andrew Ropicki.....
Steven Saul.....
Ralph Townsend.....

SHRIMP SSC VOTING MEMBERS

Donald Behringer.....
Peyton Cagle.....
Jason Saucier.....

STAFF

Matt Freeman.....Economic Analyst
John Froeschke.....Deputy Director
Sarah Gardiner.....Fishery Biologist
Lisa Hollensead.....Fishery Biologist
Mara Levy.....NOAA General Counsel
Jessica Matos.....Administrative Document Editor & IT Coordinator
Emily Muehlstein.....Public Information Officer
Ryan Rindone.....Lead Fishery Biologist & SEDAR Liaison
Carrie Simmons.....Executive Director
Verena Wang.....Ecosystem Analyst

OTHER PARTICIPANTS

Shanae Allen.....SEFSC
Kevin Anson.....GMFMC
Adam Brame.....
Francesca Forrestal.....SEFSC

1 Jennifer Lee.....NOAA
2 Julie Neer.....SEDAR
3 Cheston Peterson.....
4 Skyler Sagarese.....SEFSC
5 Katie Siegfried.....SEFSC
6 Steve Smith.....
7 John Walter.....SEFSC
8
9 - - -
10

TABLE OF CONTENTS

Table of Contents.....	3
<u>Table of Motions.....</u>	<u>4</u>
<u>Introductions and Adoption of Agenda.....</u>	<u>5</u>
<u>Review and Approval of Minutes and Summary from the February 2025 SSC Meeting.....</u>	<u>5</u>
<u>Discussion: Status Determination Criteria and OFL and ABC Projections Settings for Gulf Stock Assessments.....</u>	<u>8</u>
<u>Revised OFL and ABC Projections for SEDAR 88.....</u>	<u>34</u>
<u>Review SEDAR 68 Updated Projections for Scamp and Yellowmouth Grouper.....</u>	<u>63</u>
<u>Review: Center for Independent Experts (CIE) Independent Peer Review of the Shrimp Bycatch Estimation Methodology for Finfish Species.....</u>	<u>96</u>
<u>Review: New Bycatch Estimates and Other Analyses for Smalltooth Sawfish and Giant Manta Ray.....</u>	<u>140</u>
<u>Review: Population Viability Analysis for Endangered and Threatened Resources that Interact with the Shrimp Fishery.....</u>	<u>145</u>
<u>SEDAR Process Update.....</u>	<u>165</u>
<u>SEDAR 100: Gulf Gray Triggerfish.....</u>	<u>176</u>
<u>Other Business.....</u>	<u>184</u>
<u>Adjournment.....</u>	<u>185</u>

TABLE OF MOTIONS

PAGE 42: Motion that The SSC recommends using a five-year projection from 2025-2029 to calculate an average OFL and ABC giving a constant catch for OFL at 10.17 and a constant catch of 8.16 for the ABC for red grouper. [The motion failed on page 53.](#)

PAGE 55: Motion that the SSC recommends using a three-year projection from 2025-2027 to calculate an average OFL and ABC giving a constant catch for OFL at 10.64 million pounds gutted weight and a constant catch of 8.28 million pounds gutted weight for the ABC for red grouper. The SSC recommends prioritizing interim analyses and other pertinent evaluations of the stock on an annual basis. [The motion carried on page 63.](#)

PAGE 94: Motion that the SSC accepts the updated projections produces by SEFSC for SEDAR 68 Gulf of America scamp and yellowmouth grouper setting an OFL (0.233 million pounds gutted weight) equal to yield at F 40 percent SPR and ABC (0.183 million pounds gutted weight) as the yield of 75 percent F 40 percent SPR for the period 2027-2031. [The motion carried on page 96.](#)

PAGE 159: Motion that the SSC reviewed the population viability analysis for smalltooth sawfish and concluded that it represents a useful analysis for understanding impacts of bycatch and other mortality sources on population viability. The SSC encourages cooperative research for targeted data collection and increased observer coverage in areas of high bycatch, evaluation of uncertainty around bycatch source estimates, potential impacts of range expansion, and continued refinement of effective population size estimates. Ultimately, continued development of this approach could be used to inform bycatch mitigation measures for fisheries in the Gulf. [The motion carried on page 165.](#)

PAGE 183: Motion that the SSC recognizes that scamp OFL at F 30 percent SPR would be 0.311 million pounds gutted weight, and the ABC would be 0.250 million pounds gutted weight at 75 percent F 30 percent SPR for the years 2027-2031, but the SSC does not recommend the F 30 percent SPR values for scamp, based on life history/biological attributes of this species. [The motion carried on page 183.](#)

- - -

1 The Meeting of the Gulf of Mexico Fishery Management Council
2 Standing and Special Shrimp Scientific and Statistical Committees
3 convened at the Gulf Council Office in Tampa, Florida on Thursday,
4 May 8, 2025, and was called to order by Chairman Mike Allen.

5
6 **INTRODUCTIONS**

7 **ADOPTION OF AGENDA**

8 **REVIEW AND APPROVAL OF MINUTES AND SUMMARY FROM THE FEBRUARY**
9 **2025 SSC MEETING**

10
11 **CHAIRMAN MIKE ALLEN:** All right, and it looks like we are ready to
12 go. We have an aggressive agenda today, and so we will get
13 started. My name is Mike Allen. I'm chair of the Scientific and
14 Statistical Committee for the Gulf Council. I appreciate
15 everyone's attendance and input into this meeting. Representing
16 the Gulf Council this morning is Kevin Anson, from Alabama.
17 Welcome, Kevin.

18
19 Gulf Council staff in attendance include Carrie Simmons, John
20 Froeschke, Ryan Rindone, Lisa Hollensead, Matt Freeman, Verena
21 Wang, Sarah Gardiner, Emily Muehlstein, and Jessica Matos. Notice
22 this meeting was provided to the Federal Register, sent via email
23 to the subscribers of the Gulf Council's press release email list,
24 and it was posted on the council's website.

25
26 Topics to be covered during the meeting include, and we are
27 actually going to make a slight order change in the agenda, but
28 revised OFL and ABC projections for SEDAR 88, red grouper;
29 discussion of SDC and OFL and ABC projections for Gulf stock
30 assessments; review of SEDAR 68 updated projections for scamp and
31 yellowmouth grouper; review of the CIE independent peer review of
32 the shrimp bycatch estimation methodology for finfish species;
33 review of the new bycatch estimates and other analysis for
34 endangered and threatened resources that interact with the shrimp
35 fishery; an update on the SEDAR process; SEDAR 100, Gulf gray
36 triggerfish, participants for review, for the review phase, of
37 that process; SSC SEDAR workshops update; review of takeaways from
38 the Science Coordination Subcommittee. Then we will have public
39 comment and other business, and our goal is to be done at 5:30
40 today, and so that's what we're shooting for.

41
42 This meeting and accompanying webinar are open to the public and
43 is being streamed live and recorded. A summary of the meeting and
44 verbatim minutes will be produced and made available to the public
45 via the council website.

46
47 For the purposes of voice identification, and to ensure you're
48 able to mute and unmute your line, please identify yourselves by

1 stating your full name when Jess calls your name for attendance.
2 Once you've identified yourself, please re-mute your line.
3
4 On the webinar, we will use the raise-hand function to help me
5 recognize you to speak. Jess will type up names in the memo pad
6 screen, and I'll be keeping track of hands in the room as well to
7 add to the list, and so that is our introductions. Jessica, do
8 you want to do a roll call?
9
10 **MS. JESSICA MATOS:** Jason Adriance.
11
12 **MR. JASON ADRIANCE:** Jason Adriance.
13
14 **MS. MATOS:** Mike Allen.
15
16 **CHAIRMAN ALLEN:** Mike Allen.
17
18 **MS. MATOS:** Luiz Barbieri.
19
20 **DR. LUIZ BARBIERI:** Luiz Barbieri.
21
22 **MS. MATOS:** Harry Blanchet.
23
24 **MR. HARRY BLANCHET:** Harry Blanchet.
25
26 **MS. MATOS:** David Chagaris.
27
28 **DR. DAVID CHAGARIS:** David Chagaris.
29
30 **MS. MATOS:** David Griffith.
31
32 **DR. DAVID GRIFFITH:** David Griffith.
33
34 **MS. MATOS:** Tiffany Hopper.
35
36 **DR. TIFFANY HOPPER:** Tiffany Hopper.
37
38 **MS. MATOS:** Jack Isaacs.
39
40 **DR. JACK ISAACS:** Jack Isaacs is here.
41
42 **MS. MATOS:** John Mareska.
43
44 **MR. JOHN MARESKA:** John Mareska.
45
46 **MS. MATOS:** Paul Mickle.
47
48 **DR. PAUL MICKLE:** Paul Mickle.

1
2 **MS. MATOS:** Trevor Moncrief.
3
4 **MR. TREVOR MONCRIEF:** Trevor Moncrief.
5
6 **MS. MATOS:** Jim Nance.
7
8 **DR. JIM NANCE:** Jim Nance.
9
10 **MS. MATOS:** Will Patterson. Dan Petrolia.
11
12 **DR. DAN PETROLIA:** Dan Petrolia.
13
14 **MS. MATOS:** Sean Powers. Andrew Ropicki.
15
16 **DR. ANDREW ROPICKI:** Andrew Ropicki.
17
18 **MS. MATOS:** Steven Saul.
19
20 **DR. STEVEN SAUL:** Steven Saul.
21
22 **MS. MATOS:** Ralph Townsend.
23
24 **MR. RALPH TOWNSEND:** Ralph Townsend.
25
26 **MS. MATOS:** Don Behringer.
27
28 **MR. DONALD BEHRINGER:** Don Behringer.
29
30 **MS. MATOS:** Petyon Cagle. Jason Saucier.
31
32 **MR. JASON SAUCIER:** Jason Saucier.
33
34 **MS. MATOS:** Kevin Anson.
35
36 **MR. KEVIN ANSON:** Kevin Anson.
37
38 **MS. MATOS:** Thank you.
39
40 **CHAIRMAN ALLEN:** Thank you. We are going to adopt the agenda with
41 one modification. We are going to change the order of Item IV,
42 the Revised OFL and ABC Projections, and we are going to move that
43 after Item V, which is a discussion of the status determination
44 criteria for OFL and ABC Projections more generally. It would be
45 good to have that discussion first, before we get into the SEDAR
46 88 discussion. Do I have a motion to adopt the agenda.
47
48 **DR. BARBIERI:** So moved.

1
2 **CHAIRMAN ALLEN:** Thank you, Luiz. A second? David Griffith
3 seconded. Any objection to this motion? Okay. That motion
4 carries with no opposition, and so we'll go from there.
5

6 Review and approval of the minutes from our joint South Atlantic
7 and Gulf summary, as well as the Gulf SSC summary from February
8 2025. Those minutes have been posted, and with time to review.
9 Any comments about those minutes, or any revisions? Okay. Do I
10 have a motion to approve those, to adopt those?
11

12 **DR. BARBIERI:** So moved.
13

14 **CHAIRMAN ALLEN:** Okay. A second? Okay, and David Griffith
15 seconded Luiz's motion. Any opposition to approval of those
16 minutes? Okay. Hearing none, those are approved. Excellent.
17 Okay, and so we will start with the scope of work, and, Ryan, would
18 you like to go through that? We can go through them agenda item
19 by item by agenda item, if you prefer.
20

21 **MR. RYAN RINDONE:** I do
22

23 **CHAIRMAN ALLEN:** Okay. You prefer. Okay.
24

25 **DISCUSSION: STATUS DETERMINATION CRITERIA AND OFL AND ABC**
26 **PROJECTIONS SETTING FOR GULF STOCK ASSESSMENTS**
27

28 **MR. RINDONE:** So we'll start with the lead-off hitter with the
29 discussion about projections, and so Dr. Siegfried is with us
30 today, and mostly her, but I guess a little bit of me too in there,
31 and we'll review previous decisions about projection settings for
32 Gulf stock assessments and explain some of the differences in those
33 decisions.
34

35 We're going to walk through the different pieces of the projections
36 puzzle that have to be decided prior to those being done and
37 provided to you guys to generate OFL and ABC advice, and you'll
38 see that some of these decisions have remained very consistent
39 with time, and some of them it's very case-by-case, and so the
40 idea here is to kind of establish a default, if you will, for as
41 many of these as is reasonable, a best practice, if you will, so
42 that, when the Science Center or the USF analytical group comes
43 back before the SSC to present an assessment with projections, you
44 know, they know what the expected starting point is, so we can
45 have good consistency. Katie, are you live?
46

47 **DR. KATIE SIEGFRIED:** I'm still alive.
48

1 **MR. RINDONE:** That's wonderful to hear.

2
3 **CHAIRMAN ALLEN:** Welcome Katie.

4
5 **MR. RINDONE:** Run what you brung.

6
7 **DR. SIEGFRIED:** Thank you. Ryan is being very modest. He helped
8 quite a bit with this presentation. I appreciate his contributions
9 to this. As he said, we wanted to sort of remind the SSC of some
10 previous discussions we've had about projection settings, and, at
11 the last meeting, the last SSC meeting, there was a lot of
12 discussion, when the Florida assessments were brought forward, as
13 to what the Gulf SSC normally does with projections, and so we
14 wanted to provide those to you here, and then they're relevant for
15 the red grouper and the scamp projections that you will see after
16 this.

17
18 Sorry we can't be there today. We've had -- In case you haven't
19 heard, we've had some changes at the government, some of which
20 include different procedures for approving travel. We're still
21 figuring out some of that. I do hope to be able to come to the
22 next meeting. Hopefully some of these new procedures can sort of
23 get figured out in the next few months.

24
25 The background for you here is just that both the Science Center
26 and the council's SSC, and the council itself, are striving for
27 consistent justification for projection settings. This helps with
28 the science, and I'm sure helps with justification for rulemaking
29 down the road, and, with this group, we began talking about this
30 explicitly with SEDAR 70, which was greater amberjack.

31
32 We want to review the specifications we've used previously and
33 then try to both establish and maintain a set of best practices,
34 moving forward.

35
36 What are some of the previous discussions about projection settings
37 that we've had with you all, and so, first, the first topic usually
38 is what is the MSY or its proxy. In the terms of reference,
39 generally we're asked to use the current proxy, absent a reason
40 for change. Typically, it's been an F 30 percent SPR as a proxy
41 for MSY. MSY is rarely used, as steepness is difficult to
42 estimate, and, even when it's estimable in the model, we're not
43 sure of how well it's estimated.

44
45 For reef fish stocks that are not hermaphroditic groupers, it's
46 typically been F 30 percent, but the SSC and the Science Center
47 have been moving towards using F 40 percent SPR, and we've
48 discussed even higher than that, in the literature for

1 hermaphroditic groupers, and so what level of recruitment should
2 be used going into the future, and that's the next question that
3 we usually ask.

4
5 For OFL, which is our long-term projection, we've recommended using
6 the stock-recruit curve or a long term average of estimates from
7 the model, where the idea is, you know, what is the stock size
8 that we're trying to get back to, and so using a long-term average
9 tends to basically not use recent uncertain, or declining,
10 estimates, if we don't think that that's going to continue into
11 the long-term.

12
13 However, for short-term, if we see recent trends that we expect to
14 continue, we may use those to basically project short-term
15 projections that are more in line with what we think the stock is
16 producing now.

17
18 If we use the short-term estimates of recruits for OFL though,
19 that can be interpreted as support for either a regime shift or
20 some sort of stock productivity change that we think will proceed
21 at least in, you know, the next ten to twenty years, as we're
22 setting these projections, or, sorry, but setting these catch
23 limits, or giving you advice for setting catch limits. My voice
24 does tend to be soft anyway. If you are having trouble hearing
25 me, please stop me and ask me to speak up.

26
27 **MR. RINDONE:** You're loud and clear.

28
29 **DR. SIEGFRIED:** Great. So more about what we've talked about
30 before. The next question is often what selectivity settings
31 should we be using for our projections. We often ask, okay, and
32 so have regulations recently changed, and, if they have, we want
33 to use the years where new management bias applies, and so, if
34 some sort of size regulation happens in the terminal year, but not
35 in the last three years, we want to use the terminal year
36 selectivity to project, because that new regulation will be, we're
37 assuming, held into the future.

38
39 If the regulations have not changed recently, we usually use the
40 average of the most recent three years, and so, for instance, if
41 2023 is the terminal year, we use the average of 2021, 2022, and
42 2023 selectivity projecting forward.

43
44 The next question would be, okay, which allocations are we using
45 going into the future. Often those are on the book, so to speak,
46 and you can't see my air quotes for "on the books", but, if there's
47 a 60-30 split, commercial-to-rec, we would want to want to project
48 that, if the council plans to maintain that allocation, or, if

1 there's some sort of recommended change, we can apply something
2 different going into the future. It's usually not an SSC
3 recommendation, but it is something that we've tended to do after,
4 and say at the IPT phase.

5
6 The model will use that allocation from the landings fraction up
7 to the terminal year, and then the projections will, beyond the
8 terminal year, use whatever future allocation scenario that we
9 provide, and so we don't do a different set of allocations within
10 the model. It's only specified by whatever the landings ratio is.
11 We use the allocation in just the projection period post the
12 terminal year.

13
14 Shoot, and I already explained the other two bullets, but I'll
15 just do it really quick again. We either use the current sector
16 allocation specified in the TORs, or specified by a council
17 request, or we would generate projections for separate proposed
18 allocation scenarios. That's usually at the IPT phase.

19
20
21 Here's the visualization of all of these different decisions. We
22 need to make decisions about both the equilibrium projection
23 settings and then the short term catch advice.

24
25 The table here shows you, for instance, the relative F. This is
26 just a basic example. It doesn't really matter which species it's
27 from, but the average from 2016 to 2018, and so the terminal year
28 here was 2018. The selectivity was an average, the retention was
29 an average, and then the recruitment was an average from the recent
30 years. This was used for the short-term catch advice.

31
32 We show you the interim landings that are used. Here, we separated
33 out 2019, and then 2020 and 2021, based on whether we had actual
34 landings or average landings. If the terminal year here was 2018,
35 we're probably showing it to you in 2019 or 2020, and so then we
36 would also have another interim year of 2021, before we expected
37 management to begin in 2022, and, here, the allocation ratio set
38 to 27-73 commercial to recreational, and all those decisions go
39 into making this table and setting our projection settings in the
40 model, just the projection model.

41
42 For the relative fishing mortality, if we do the fishing mortality-
43 based projections, our best practice has been to use those average
44 of the most recent three years, like what we do for selectivity
45 and retention. Basically, this is used consistently across SEDARs.
46 We haven't had a reason to use only the terminal year. It generally
47 represents the most recent trend in F for forecasting. We haven't
48 seen a reason to deviate from this.

1
2 For selectivity though, there could be a number of different ways
3 to go. The ages or the lengths of fish actually caught by each
4 directed fleet has to be modeled during that projection phase, and
5 so, for example, the private vessel fleet usually catches younger
6 fish than the commercial longline fleet, and so we want our
7 selectivity assumptions to represent what is happening in the
8 model.

9
10 Then, the consequences of that, if we're fixing the selectivity,
11 it assumes that there's a static vulnerability across current age
12 and length compositions. It will be violated if a future
13 management change causes change in selectivity, and so if there's
14 a difference in regulation, if there's a big swing between, you
15 know, the commercial and recreational, if say there's a big
16 allocation shift, but we haven't carried out new projections with
17 the different allocations, and there would be changes there that
18 you just have to be aware of if there's a management change, and
19 then the time period does matter.

20
21 If the time period is not representative of the reality that we
22 all decide on, how the stock performs under future effort will
23 differ from projections, and so, for instance, this may result in
24 unforeseen changes to SSB if older fish are actually more
25 vulnerable to the fishery than what we're projecting, and so it is
26 important to sort of set an approximate selectivity, going forward,
27 that we think will be maintained and then realize that, when any
28 management changes occur, these would be the consequences.

29
30 Some options here, and we can evaluate management bias for recent
31 changes. This is just going into more detail of what we would
32 consider when looking at the selectivity years. If there's no
33 change, we would go ahead and use our average, but, if there is a
34 change, we want to use the average of the period that represents
35 the change.

36
37 A specific example here is if there's a new hook requirement that's
38 implemented in 2022, but 2023 is the terminal year, we want to use
39 2022 and 2023 for our selectivity, rather than 2021 or prior, that
40 didn't represent that new hook requirement, and so then I've
41 basically said this again too, and I'm getting so ahead of myself.

42
43 If a management change then happened three-plus years from the
44 terminal year, we would want to use the average of the most recent
45 three years, and, oftentimes, there isn't a big management change,
46 even within the last ten years, as far as size or gear, and so we
47 have often used the most recent three years. That's been pretty
48 consistent across recent SEDARs, and we do tend to be able to

1 represent this well by seeing what the management changes have
2 been through our management history.

3
4 Retention is pretty similar here, that we want to keep consistent
5 in our projections of ages and/or the lengths of fish actually
6 harvested, and usually for retention it's length, by each directed
7 fleet. For example, the private vessel fleet usually harvest
8 younger fish than the commercial longline fleet, and so we want to
9 keep those retentions consistent.

10
11 Nathan Vaughan is doing some work on looking at retentions and
12 projections, because of the way it influences our discards, and so
13 this is something that we'll be producing more research on soon.

14
15 The consequence here is that, if we fix retention, we're assuming
16 a static vulnerability to harvest, and then also by proxy, whatever
17 the discarding rate was, or is, and what size they're discarding,
18 and, if there's a change in management, that assumption will be
19 violated, and, again, here the time period matters, because it's
20 related to management as well.

21
22 Here we have just an illustration of the options, similar to what
23 we had for selectivity. It is very similar, and it just reflects
24 more on what happens with our discarding, and so we want to
25 evaluate for management bias for recent changes.

26
27 If there's no change, we use the most recent three years, and then,
28 if there is a change, and say the minimum size limit increased in
29 2022, then we would use the -- If the terminal year is 2023, we
30 would only use most recent two years. Again, we've had -- We've
31 been very consistent about this for all of the recent SEDARs, and
32 we think that we've been representing the current management
33 changes well for our retention assumptions.

34
35 For recruitment, and this is often a big topic of discussion, often
36 one of the biggest topics of discussion, and our recruitment is
37 often model-derived, and it may not be informed by empirical
38 evidence, depending on which time period it is, and the early time
39 period recruitment is often an assumption. It's potentially just
40 the stock-recruit curve.

41
42 The model will adjust recruitment to respond to changes elsewhere
43 in the mode, and so we often critically analyze what our
44 recruitment estimates are, because we're worried about our
45 recruitment being representative of the noise instead of true
46 signal. We often bring that up and try to discuss that with you
47 all.

1 Examples here are discard mortality, natural mortality, and
2 episodic mortality. The model sometimes doesn't know the
3 difference between those three sources and changes in recruitment,
4 and so we try to find, you know, correlates, and other data
5 sources, that would either support one of those three types of
6 mortality or a change in recruitment.

8 If the fish died in the past, they must have been born prior to
9 that, and the recruitment will scale to make the math work, and
10 that's -- We see that oftentimes with our composition data, where
11 there's signals in composition. We may not see the same signals
12 in indices, and so the model oftentimes pushes and pulls between
13 the different data sources we have.

15 The consequences here are that this isn't very influential for F
16 relative to MFMT, and it can affect our status determination
17 criteria with time. It can result in additional uncertainty, that
18 we may not be able to completely characterize, although we do our
19 best to try to explain the patterns that we're seeing.

21 If recruitment -- The concern here is, if recruitment is
22 overestimated, the stock may decline unexpectedly. We would have
23 thought it was fine, but it declines, because we're overestimating
24 recruitment. If it's underestimated, then the projections may
25 result in foregone yield, and so this is a very important thing
26 for us to discuss and try to find evidence of our recruitment
27 signals.

29 The recruitment for OFL, the options here are to use the stock-
30 recruit curve, and we've done this most commonly historically, and
31 it's difficult, because sometimes there is a lack of confidence in
32 whatever steepness we've estimated. If we haven't estimated
33 steepness, we've sort of foregone the stock-recruit curve, and so
34 we have an average long-term recruitment.

36 That's the second option, is to use long-term average, which can
37 be a time period that's either selected or the entire time period
38 that's estimated, and that's actually been considered quite often
39 recently, but the time period hasn't always been consistent, which
40 is one of our concerns.

42 If we're going to use long-term average, we want to be consistent
43 about whether it's long-term estimated, long-term stock-recruit
44 curve, and not play with the years that are estimated based on
45 what the recruitment estimates look like. It shouldn't be results-
46 driven. It should be more consistent, based on principle.

48 An alternative time period has been used recently. For instance,

1 with yellowedge, we've used the recent fifteen years recruitment
2 for OFL. Hopefully, Sky is on my chat, if I got that wrong, but
3 used the recent fifteen years recruitment for OFL projection, due
4 to sort of the SSC's distrust of earlier recruitment estimates.

5
6 If there's more concern about the estimates of recruitment, and
7 there's been a lot of discussion amongst the SSC of, well, which
8 years should we trust, and what trends do we believe, and what
9 other data do we see that supports those, but it does have quite
10 a big impact on what we're trying to get back to, what that OFL is
11 being set to, and so we want to show these potential choices and
12 just try to remind ourselves, and you all, that we do need to be
13 consistent, and not sort of pick and choose, based on trends and
14 results, because it makes a big difference, and you'll see that
15 with the scamp assessment projections.

16
17 The consistency has been a little lacking recently, which I'm sure
18 is why the council staff and I thought this was really important
19 to present here. We do need to be sure that our justification
20 from deviation from our best practices is well justified, and we're
21 not sure about that for some of the recent ones, as you'll see for
22 scamp, if that's still justified, if you all still agree with that.

23
24 For ABC, there are other options, potentially, that we think are
25 available to the SSC, based on things like either -- It's not
26 necessarily a precaution, but it's mostly like trying to follow
27 recent trends, sort of believing what the stock is going to produce
28 in the next five years say, rather than the whole time period, and
29 so the options are you can use the stock-recruit curve, and that's
30 pretty uncommon.

31
32 We haven't had one recently where we use the stock-recruit curve
33 for the OFL and the ABC, for the projections. We can use the long-
34 term average. That's also been less common recently. Most common
35 has been to use an alternative time period. For example, the
36 average most recent, it's been five or ten years.

37
38 This is typically justified by the SSC based on other data, whether
39 we think that there is a true decline in recruitment, whether we
40 want to be careful that the advice being provided is possible to
41 achieve by the stock that is in the water now, rather than what
42 could be in the water twenty years from now, and so we've looked
43 at age and length compositions. We've looked at age frequencies,
44 updated reproductive data. We've looked at trends in indices,
45 whether they match the trends in recruitment, and have justified
46 using more recent time periods to set the short-term ABC advice.

47
48 It does vary recently, although I think this is more sort of legit

1 to justify, because there are varying recruitment signals species-
2 by-species, and so providing that short-term ABC advice is -- It's
3 up to the SSC to decide what level of recruitment they think is
4 probable going into the short-term.

5
6 For interim landings, we've also seen this has been somewhat
7 influential lately. Generally, our interim landings are the most
8 recent available years of data. So, for example, if the terminal
9 year is 2023, management is likely effective in 2026, and our
10 interim years are going to be 2024 and 2025.

11
12 Now, this is a nice example, because it's only two interim years.
13 We have up to six or seven interim years in some of our projections
14 lately, because of either issues with, you know, managers needing
15 more information before they act, or there being sort of a delay
16 in action, due to, you know, things getting backed up, or having
17 to come back to the SSC for other questions, but typically the
18 interim years, hopefully, is two to three years. That way, we're
19 not projecting more than what is reasonable for the model into the
20 future.

21
22 For options here, we can use finalized landings, where available.
23 That is most common, and most preferable. We do tend to update
24 our landings, and not necessarily discards, because that's model-
25 based, and landings is data-based pulls, usually, but we try to
26 use finalized data, where available, for all of our interim years,
27 when possible.

28
29 When it's not possible for those finalized landings, we do use an
30 average of the most recent three finalized years. Sometimes it's
31 been two finalized years, if there's been some change, and you all
32 probably remember, during COVID, sometimes we didn't use 2020,
33 because that was an odd year. It probably wasn't going to be
34 similar levels of landings as 2020, and so we pick years based on
35 what we think will best represent that time period, and then use
36 preliminary landings where available.

37
38 It's recently not been preferable by the council, and Ryan can
39 talk more about that if he likes here, but the most recent example
40 was with scamp, where, depending on which waves of MRIP data are
41 available, are finalized, you know, there's more uncertainty
42 brought in there than the council would prefer. Ryan, do you want
43 to comment on that before I go on?

44
45 **MR. RINDONE:** Sure, and, just more generally on this, there have
46 been examples over the past ten years or so where we've used
47 preliminary landings, and then -- You know, oftentimes, the
48 preliminary landings don't deviate more than a couple percentage

1 points from the finalized landings, but we've had experiences where
2 they've swung by 10 or 15 percent, which can have a meaningful
3 difference, especially when you're skirting the line on status
4 determination criteria.

5
6 The Council just kind of resolved like, all right, we're just going
7 to stay away from using the preliminary landings, and we're going
8 to stick with the finalized landings, that have been through the
9 QA-QC process, and they're done being dealt with, and we've been
10 operating under that mindset for probably the last four years
11 pretty solemnly, with avoiding using the preliminary landings, and
12 so that's just kind of -- That is the best practice for that now
13 already.

14
15 **DR. SIEGFRIED:** Thanks, Ryan. We do need to be -- I suppose I
16 just need to make sure to check in with council staff about that
17 species-to-species, to make sure that we're using the right thing,
18 because, for scamp, we did actually initially use preliminary
19 landings, and so that's another example that we just want to make
20 sure we maintain best practices.

21
22 **MR. RINDONE:** I guess just, Katie, one thing to add to that. With
23 -- You know, like with scamp, one of the things that's being
24 proposed now is to use that anticipated reduction for the 2025
25 fishing season, and so that would be an example of there being an
26 interim year that's being treated a little bit differently.

27
28 Again, like when we're talking about the kinds of -- You know,
29 like the recommendations that we're hoping to get from you guys on
30 these different factors, and it's not like we're going to chisel
31 this in stone, and this is the only thing that can ever be done.
32 There's always a, you know, if then, else, and so like, in the
33 case of the projections for scamp that Sky is going to present,
34 you know, our request included doing something very specific with
35 an interim year.

36
37 In those cases, you know, that would be what we would expect you
38 guys to review, but, generally speaking, sticking to the finalized
39 landings is the council's preference for dealing with the interim
40 years.

41
42 **DR. SIEGFRIED:** Yes, and it's our preference as well. There's no
43 arbitrary anything there, and there's not really much to discuss.
44 It's just using finalized data, and so we agree with that. Do you
45 want to cover the preliminary landings slide you have here too?

46
47 **MR. RINDONE:** Yes. Sure. So, if you guys go on the NOAA Office
48 of Science and Technology website, in perusing things about the

1 MRIP program and doing data queries, one thing that it will tell
2 you is the availability of those data by wave, and, you know,
3 usually those data are available within about forty-five days of
4 the MRIP wave. Prior to release though, those data are available
5 for initial scrutiny by a regional review team, and this includes
6 people from the Science Center and the Southeast Regional Office,
7 but that review period is pretty short.

8
9 It's only about a week before those data are ultimately released,
10 and so, if the people that are part of that review process don't
11 have the time, or get the opportunity, to look at that information,
12 then it still goes through.

13
14 Data can remain in this preliminary, you know, kind of vague state
15 for several months, or longer, and it just depends on multiple
16 factors that have to do with the QA-QC process, and, like I had
17 mentioned before, the data can change substantially. It's not
18 common that they're going to change by multiple percentage points,
19 but it does happen, enough that we've tried to stay away from using
20 them.

21
22 You know, like I said, you know, the closer you are to that line
23 on status determination criteria, with going one way or another,
24 the more small changes can result in those stock status changes
25 and can have meaningful effects on what the council then has to do
26 after the fact, and so council decided not to use preliminary
27 landings data.

28
29 What this means, essentially, is so, if the stock assessment say
30 terminates in 2023, and we have finalized data for 2024, but not
31 2025, then, for 2025, we would use the average of 2022, 2023, and
32 2024 and then use that to inform what we think is going to happen
33 in 2025, and then hopefully, you know, management picks up in 2026,
34 and the projections are used at that point.

35
36 **DR. SIEGFRIED:** Great. Thanks, Ryan. Okay. For the sector
37 allocation scenarios, this is actually -- This is a difficult
38 portion of it, because it's often not a big discussion at the SSC,
39 but it comes up, and it causes a lot of back and forth with us, in
40 the council.

41
42 We just wanted to make you aware of there could be multiple steps
43 later that come into play, based on what sector allocations are
44 assumed in the model, and then there's also potential to do a
45 potential -- Make a change here that could help with some of those
46 reiterations later that I'll bring up here in a moment.

47
48 The best practices, and so, if there's been no change in allocation

1 expected, if that's the case, then use existing sector allocation
2 scenario for the projection period. This is not applied to the
3 base model, and it's applied to the projection period. There is
4 no allocation applied during the base model runs.

5
6 The change in allocation, if there's one expected, there's a number
7 of options, and so we can present an existing sector allocation
8 scenario. If the council provides feedback about expected
9 alternatives, we can take that that feedback, and then present
10 projections using the council alternatives, and then the SSC
11 approves OFL and ABC using the council alternatives, and then the
12 council selects preferred allocation alternatives, and, by
13 default, the accompanying OFL and ABC projection.

14
15 This is pretty consistent in recent SEDARs. One thing that we
16 could do differently, that could streamline things, is to provide
17 a range of sector allocation ratios to show if there is an impact
18 on our status, which is of concern, obviously, and not because we
19 want to see the answer, but because the council needs to know what
20 could potentially come be coming from projection, but it's not
21 actually a change in methodology, and so the SSC really is taking
22 a look at what the OFL would be, using the specs that we've already
23 defined, and they're making ABC recommendations, but their ABC
24 recommendations likely won't change simply based on an allocation.

25
26 Ryan can speak more on this if he wants to, but it's not really
27 necessarily a science decision, and it's more of an, okay, we're
28 approving the projections, and then, if there are changes in
29 allocation, we want to be aware of them, but the Science Center
30 can provide those scenarios for discussion, and then, during the
31 IPT, that doesn't need to be revisited as to the methodology.

32
33 If little effect or change -- Well, sorry. The consequences would
34 be that little effect or change would be assumed if selectivity
35 and retention are similar across fleets. If the recreational and
36 commercial fleets capture similar size or aged fish, changing
37 sector allocations isn't expected to change much about the answer
38 we're getting from the model, or really the projections.

39
40 However, if the selectivity or the retention differ, there could
41 be a difference in the OFL or ABC, and then it can affect discard
42 fraction, and ultimately the estimate of dead discards, which
43 affects the stock size, and, not accounting for sector allocation
44 in our projections, it could potentially mask uncertainty about
45 how fleet-specific selectivity retention may affect the stock.

46
47 Now, I want to drive home that we don't impose an allocation in
48 the base model, and this is just during the projection period. We

1 can provide to the SSC what the base model says is the current
2 allocation in practice, and not in management, but, what the actual
3 allocation is in practice, we can provide that as a reference, but
4 it's not imposed on the model structure for the base model.
5

6 **MR. RINDONE:** Katie, just to clarify that point a little bit,
7 what's meant by that is, when the landings are input into the
8 model, just the fraction of landings that are attributed to one
9 sector or another, regardless of what the sector allocation is,
10 and so, if you have a fully-exploited fishery by both sectors,
11 then what comes out of the model is likely to be pretty close to
12 what the sector allocation is.
13

14 Let's say something like king mackerel, where historically the
15 commercial sector has fully exploited its ACL, but the recreational
16 sector historically has been well under, and the model might say
17 that the fraction of landings, based on what was actually
18 harvested, and not what could be harvested, but what was might be
19 like say 65 percent commercial and 35 percent recreational, which
20 is not reflective of what the sector allocation is, but it is
21 reflective of what was caught.
22

23 When we're looking into the projections, we're still assuming --
24 Like every year the projections is assuming that what was estimated
25 to be able to be caught in the previous year will be caught, to
26 the pound, and so, if it's under or over that amount, then whatever
27 is projected for the following year would be inaccurate to that
28 degree.
29

30 **DR. SIEGFRIED:** Yes, and we're assuming perfect management
31 execution in the projections to sector allocations, but, yes, your
32 description of the model is exactly right, that we're not imposing
33 an allocation,
34

35 **CHAIRMAN ALLEN:** David Griffith has a question, Katie.
36

37 **DR. SIEGFRIED:** Okay.
38

39 **DR. GRIFFITH:** Hi, Katie, and thanks for this presentation. I was
40 wondering, and is there sector allocation only between
41 recreational and commercial, or is it between different sectors of
42 the commercial fishery, and that's just my own ignorance about
43 this.
44

45 **DR. SIEGFRIED:** Hi, David. It's just between recreational and
46 commercial for all of the ones I've seen since I've been in the
47 Gulf. We haven't separated out the commercial into different
48 sectors at the assessment level. I imagine that would have an

1 impact on an economic analysis, but not on not on what we're
2 running. Any other questions about the presentation so far?

3
4 **MR. RINDONE:** So just another thing for Dr. Griffith.

5
6 **DR. SIEGFRIED:** Sure.

7
8 **MR. RINDONE:** One of the ways in which the sector allocation has
9 an effect is based on the size and age of fish that are selected
10 and retained by the different fleets, and so, if you have a strong
11 difference, like for red grouper, where there is a strong longline
12 component, that is going to be more likely to catch larger and
13 older individuals than the private vessel fleet, then you would
14 expect there to be an asymmetric view of the age compositions that
15 are landed by the commercial fleet as a whole, versus the
16 recreational fleet as a whole, versus something like king mackerel,
17 where they're generally fishing the same animals, in the same
18 places, using the same methods, and they're going to catch
19 generally the same size and age of fish.

20
21 Changing the sector allocation for something like king mackerel
22 might have much less of an effect, compared to something like a
23 reef fish species, that has a stronger component, that could see
24 some polarization in the ages that are selected by different
25 fleets.

26
27 **CHAIRMAN ALLEN:** Steve Saul has a question.

28
29 **DR. SAUL:** Yes, and thanks, Mr. Chair, and thanks so much, Katie
30 and Ryan, for this. This is really helpful, and it's really useful
31 to see it all in one place, and I think this will serve as a really
32 good reference document for us.

33
34 I just had a clarifying question, because I thought I had it
35 straight in my head, but obviously I don't, but the -- When you're
36 talking about adjusting the allocations per sector, is that being
37 done in Stock Synthesis, or external to Stock Synthesis, after
38 projection time series are produced? Thanks, and sorry if this is
39 obvious and I missed it.

40
41 **DR. SIEGFRIED:** Yes, and no problem. It's not done within Stock
42 Synthesis. It's done within Nathan's code, external to Stock
43 Synthesis, and so it uses the Stock Synthesis base run within the
44 R package that Nathan developed externally.

45
46 Basically, the reason for that is because the allocations were not
47 executed easily, or well, in the SS model, and the Fs required
48 didn't necessarily hold constant, and Nathan, of course, found

1 that, and figured that out, and wrote a code to actually be able
2 to achieve the allocations that were requested, along with all of
3 the other requirements.

4
5 **DR. GRIFFITH:** Okay. Great. Katie, thanks, and that's what I was
6 hoping was the answer, and perfect. Thanks, and kudos to Nathan
7 for sorting that out. That's great.

8
9 **CHAIRMAN ALLEN:** John Mareska has a question, Katie.

10
11 **MR. MARESKA:** Thank you, Mr. Chairman. Thank you, Katie. Katie,
12 I wanted to back up to slide 11 about recruitment. You've got the
13 statement in there that, if fish died in the past, they must have
14 been born prior to that, and recruitment in the model will scale
15 to make that math work.

16
17 Is it also scaling this spawning stock biomass in there, and I'm
18 just curious, you know, how much can the model scale recruitment?
19 Is it kind of bounded by the stock-recruitment curve, and is there
20 some kind of diagnostic for you to check to make sure that it
21 hasn't gone outside the bounds of the stock-recruitment curve?

22
23 **DR. SIEGFRIED:** Yes, and so we have -- Great question. We have
24 limitations available to us in SS, and all -- I mean, all other
25 modeling platforms have these sorts of options, where we can limit
26 the deviations from the stock-recruit curve.

27
28 We can have them add to one, and we can -- Which basically allows
29 there to be sort of the shotgun blast around zero of negative and
30 positive deviations, and so often we do limit the deviation, so
31 that we don't get, you know, crazy recruitment estimates, and sort
32 of -- I think of like a balloon, that pops out one direction when
33 you hold it on the other end, and we limit the amount of deviations
34 from that stock-recruit curve.

35
36 There are options within SS to let the recruitment estimates
37 basically go wherever they think they need to go. We haven't had
38 a lot of luck with that option yet, and so we do tend to apply
39 those deviations limits.

40
41 The types of diagnostics we would do would be to look at the stock-
42 recruit curve, look at general trends, see if we can match sort of
43 a long series of low recruits, or high recruits, with some other
44 evidence, like an index, or what the compositions are showing us,
45 and so this is sort of a reduced-down way of saying we have to
46 make the math work, by, you know, balancing out the deviations
47 from that stock-recruit curve and incorporating the likelihoods of
48 all the other data sources in the model. Does that help?

1
2 **MR. MARESKA:** Yes. Thank you.

3
4 **CHAIRMAN ALLEN:** We've got Harry Blanchet.

5
6 **MR. BLANCHET:** Thank you. This goes back to one of the original
7 comments regarding sector allocation. I thought that the
8 allocations took into account the different fleets within that
9 sector.

10
11 I'm thinking particularly of king mackerel, where you've got a
12 gillnet fleet and a troll fleet, that may have different
13 selectivities, and, if one fraction of that sector is not achieving
14 its allocation, other subsectors may, and so that could affect
15 what your overall selectivity of that, of that allocation would
16 be. Do you understand where I'm going with that? I thought that
17 was taken into account, but it sounded like it wasn't.

18
19 **DR. SIEGFRIED:** So your question is -- Let me see if I get it. If
20 we have multiple sectors, like say multiple types of gear for
21 commercial, and we have one commercial allocation, and one
22 recreational allocation, that there could -- There's different
23 selectivities amongst the commercial fleets, then you're concerned
24 that there's going to be a potential for one fleet to take over
25 that commercial allocation that isn't reflected well in the
26 selectivity that we assume?

27
28 **MR. BLANCHET:** Well, I think that -- Yes, and I was thinking more
29 in terms of -- Well, another example is within the groupers, and
30 you've got a vertical line fleet, that has a different age
31 composition in its harvest than the longline fleet, and so, if you
32 have a million pounds going to the commercial sector, if the
33 longline doesn't harvest its allocation, but the vertical line
34 does, that's going to have a different impact on the stock than
35 otherwise. I'm just saying that you may have some information to
36 show that, historically, one gear type is able to achieve its
37 allocation, and another one is not. That's all.

38
39 **DR. SIEGFRIED:** Sure.

40
41 **MR. BLANCHET:** It just seems that, if you have changes in the
42 harvest composition within that sector, that could be problematic
43 if you're just using an overall sector allocation. Maybe I'm
44 confused.

45
46 **DR. SIEGFRIED:** No, and I don't think you're confused. I think
47 you're bringing up fine-scale details of processes that we make
48 kind of general, and so let me tell you how we're making it general.

1 The allocation is just commercial and recreational. However,
2 there's other things that go into the projections that could
3 represent the differences across the different fleets within
4 commercial or recreational.

5
6 Say the relative F that we assign during the projections
7 specifications, and the relative F is going to be a place where we
8 combine the effects of all of the different types of fishing within
9 a sector, and so like say gillnet, or longline, or vertical line,
10 and they're going to each have their own F, and that's going to go
11 into the math to impose that relative F on the projections.

12
13 That would be the only place that we would be able to get that
14 difference in the different gear within the commercial sector, and
15 so we don't have a commercial fleet-by-fleet allocation. We have
16 a generalized allocation, but we do have a relative F that takes
17 into account the fishing mortality of each of the different fleets
18 within a sector.

19
20 **MR. BLANCHET:** Okay. Thank you.

21
22 **DR. SIEGFRIED:** Sure. It's a -- It is a generalization, and it
23 would be something you could test, in something like an MSE, say,
24 okay, well, if one fleet within a sectors is -- "Underperforming"
25 is not the right word, but underutilizing, or not taking advantage
26 of what they're allowed to catch, but another portion of the
27 commercial sector is, and we could take a look at the impact of
28 that on the population, but we don't -- We are not able to do that
29 in the projections as we have them here.

30
31 **MR. BLANCHET:** Okay. Thank you.

32
33 **CHAIRMAN ALLEN:** Thank you, Katie. Go ahead.

34
35 **DR. SIEGFRIED:** Okay, and I think I was. There we go. Thank you.
36 So another question for our projection settings, and also for you
37 all to decide, is how far out we should accept projections. It's
38 just how far we should project, and then how long we should trust
39 the projections, so there's --

40
41 We brought the South Atlantic Council SSC practices here, because
42 you all worked with them at the last meeting to look at the Florida
43 stocks, and so it is relevant for you all to know. It's also good,
44 you know, when you go to the national SSC meetings, to understand
45 what other SSCs potentially are doing.

46
47 The South Atlantic projects up to five years out from the terminal
48 year. They assume selectivity, and they don't actually use

1 retention, because BAM doesn't have retention, but they assume
2 selectivity, and retention is built into that recruitment. They
3 don't actually change their sector allocations, and they remain
4 unchanged through the end of projections.

5
6 For instance, if the terminal year is 2023, they'll accept
7 projections up to 2028, at which point they either need new data
8 to update, in order to think that the projections are useful, and
9 they don't tend to regularly do interim assessments at this time,
10 and so they do have issues trying to get management advice,
11 because, as you can imagine, it's hard to keep it to a five-year
12 limit with no other data in between.

13
14 The Gulf Council SSC, you all have asked for projections up to
15 five years, beginning from the projection period. That can result
16 in projections several years beyond the terminal year, and this is
17 often because say you have a terminal year of 2023, and you're not
18 seeing it until 2024, and management is not starting until 2026,
19 but you want to set catch advice for three or five years from then,
20 and you're going to have to allow for more interim years of data
21 in order to accept that projection period.

22
23 We do update, with finalized landings, the interim period as much
24 as possible though, and so it's not just sort of guessed data in
25 between the terminal year and the projection period. We tend to
26 assume the selectivity, retention, recruitment, sector allocations
27 et cetera remain unchanged through the end of projections.

28
29 We don't do sort of adaptive management procedures yet during the
30 projections, although Harry's question could lead you all to think,
31 well, what happens if a sector is not fully utilizing -- Or a fleet
32 is not fully utilizing their sector allocation, and what would
33 happen, and those types of questions would have to be answered
34 through research before we could take them into account for
35 projections.

36
37 Sometimes the issues of OFL and ABC advice -- Sometimes you all
38 issue OFL and ABC advice for a three-year period, and sometimes
39 it's been for a five-year period, and you tend to want a constant
40 catch, which is just an average of the years of the projection
41 period.

42
43 So, if there's -- If you want to take into account any other
44 approaches, then it would be a good time to have a discussion here,
45 to sort of revisit or formalize the approach that you've taken,
46 ask for other research, other considerations, et cetera.

47
48 Just for a summary slide for you here, and the things that we have

1 to decide on are relative fishing mortality, the selectivity, the
2 general selectivity, that takes into account all of the different
3 sectors, the retention, which also takes into account all the
4 sectors, assumptions about recruitment, the interim landings,
5 whether the post-terminal year are finalized or not, and then the
6 sector allocations assumed into projection period, and then the
7 duration of the projections, how many years out you would like to
8 see them.

10 The SSC also tends to recommend some sort of interim approach,
11 whether you all want to take a look at some specific index, and we
12 often, at the Science Center, recommend an index, based on its
13 performance in the model, to use for interims, sort of to either
14 to monitor, or potentially to update, catch advice as well.

16 I think this is a good time to answer any other questions you may
17 have about what we've done in the past, any changes you would like
18 to make, and then if you all want to talk about your approach and
19 whether you want to take any steps to formalize that or, or ask
20 for any other research, and this would be a good time. Thank you.

22 **CHAIRMAN ALLEN:** Thank you very much, Katie. We appreciate that
23 summary of the issues, and also reminding us kind of what we've
24 done consistently, and inconsistently, in the past. Okay, and
25 we've got Harry Blanchett first. Then Luiz.

27 **MR. BLANCHETT:** Thank you, Katie. I just had one small nit to pick,
28 and, throughout a lot of the beginning of the discussion, we
29 mentioned long-term averages, and three-year averages, et cetera.
30 In many cases, this has been geometric means, but, in some cases,
31 it has also been arithmetic averages, and so perhaps
32 clarifications, and perhaps not necessarily here, but, if the
33 presentation gets done again, to -- If there is a consistent use
34 of one or the other of those, it might be useful to clarify that.
35 Thank you.

37 **CHAIRMAN ALLEN:** Thank you, Harry, for clarifying that. We'll
38 keep that in mind. Luiz.

40 **DR. BARBIERI:** Thank you, Mr. Chairman, and, Katie, I don't really
41 have any, any questions. I just want to make some statements from,
42 you know, my perspective on this. One, I want to thank you and
43 Ryan for thinking about putting together this presentation. I
44 think this is super helpful.

46 Just like what Steve saw said, and, I mean, I'm going to save this
47 as sort of like a reference document, because lots of things here,
48 right, are clearly presented, in a way that's really helpful for

1 us to think about those decisions along the way, and so this has
2 been very helpful.

3
4 The only other comment I want to make is that, for some situations,
5 even though we want to standardize the process and procedures,
6 it's difficult to do so, because the status of the stock, the
7 differences in exploitation history, the differences in life
8 history, and so, oftentimes, we have to have debate, at this stage,
9 at the SSC review, to discuss what we feel, right, what we think
10 will be most applicable to that specific situation.

11
12 Fortunately, we have a very close relationship with you guys, and
13 a very collegial one, and usually we work together, and you address
14 all of our questions, and you help us develop a set of projection
15 procedures, or choices in configuration, that will be best
16 applicable to the stock in case, and so that's the one thing I
17 want to say, is that I would like to retain some of their
18 flexibility in changing some of that criteria, and I was glad to
19 hear Ryan say, well, this is not chiseled in stone, and we still
20 have some opportunity for input as discussions happen, assessment-
21 to-assessment. Thank you.

22
23 **CHAIRMAN ALLEN:** Thank you, Luiz. That's an excellent comment.
24 Ryan.

25
26 **MR. RINDONE:** Yes, and, I mean, these are default settings, but
27 it's not to say that, you know, no one gets to touch the control
28 panel, and so it just gives the Science Center and the USF staff,
29 when they work on these assessments, a good starting place.

30
31 You know, they know what to bring to you guys first, what you're
32 most commonly going to expect to want to see, and likely to use,
33 and there's always the opportunity for debate on, you know,
34 different circumstances, and to make different decisions, and so
35 by no means -- Jess, can we go back one slide just so we can see
36 all those factors up there?

37
38 There's no reason for you guys to think that any recommendations
39 that come from this exercise are permanent and the only option.
40 It just gives the -- It helps standardize things, coming into a
41 review for the SSC, so that you guys know what you're expecting to
42 see first. The Science Center and USF knows what to bring you.
43 It's going to create an efficiency there, and help simplify things,
44 and so if, along the way, you want to do something different, like
45 we almost always do, especially with recruitment, then fine, and
46 that's great.

47
48 Historically, you know, since we're talking about this stuff, for

1 things like relative fishing mortality, selectivity and retention,
2 the average of the last three years in the model has kind of been
3 the standard there, unless there's been some management bias that
4 would lead us to think that, you know, we should be seeing
5 something different, and so, in the absence of any hand-raising,
6 I'm going to assume that that's still okay.

7
8 Recruitment is one that I would like to hear some discussion from
9 you guys on. We've got some direction from council preference in
10 the past regarding the interim landings, about what to do, you
11 know, post terminal year of the model, and using, you know, the
12 recent average of the finalized landings that are available, if
13 finalized landings are not available for that year, and not using
14 preliminary landings.

15
16 I think there's a discussion point to be made about sector
17 allocation, and then also about the duration of projections. and
18 so, Mr. Chair, I don't know if you want to kind of walk everybody
19 through all of these and get something on the board.

20
21 **CHAIRMAN ALLEN:** You know, in going through this presentation, I
22 thought -- I do think -- I agree that this presentation could be
23 really useful for us long-term, and it strikes me that maybe, these
24 bulleted items on this slide, we could develop a cheat sheet, like
25 a little cheat sheet, that's a one page, that just summarizes
26 historically what we've done on each of these, and keeping in mind
27 that, for some of them, like recruitment, I suspect we want to see
28 the situation, right, and we want to be able to have some debate
29 about what recruitments we use, but I think that that would be
30 really useful. Some of these we've done fairly consistently, and
31 then some of them we probably want some debate, and so I'll open
32 up conversation about that idea. Dave.

33
34 **DR. CHAGARIS:** Well, to that point, Mr. Chair, I agree like some
35 type of cheat sheet, and this this presentation was very
36 informative, and helpful, but allowing us to kind of go back and
37 look, species-by-species, what our decisions would have been would
38 be really helpful.

39
40 I did have a question for Katie, or a couple of questions, and
41 maybe something for the group to think about, and so when we're
42 doing like these -- Taking the average over the interim years,
43 when we just have one or two years, you know, to average through,
44 I think that's okay, but like, as we'll see with scamp, there's
45 quite a few years that we're pulling averages over, and my question
46 is, you know, what do we do if there's a trend in these recent
47 time periods?

1 You know, if there's a declining trend in recruitment, or a
2 declining trend in F, maybe that was imposed by some previous
3 management action, is it still appropriate to take the average, or
4 should we be looking at like some short-term forecasting approaches
5 to fill in these interim years? Has that been done anywhere else
6 around in the other regions as far as, you know, using some of
7 these time series forecasting tools to fill in these later years?

8
9 **DR. SIEGFRIED:** Yes, and so -- Did you have another question too,
10 or --

11
12 **DR. CHAGARIS:** Well, my other question was kind of simple, and it
13 was just if you could talk about how you incorporate uncertainty
14 into those projections, because we see those in the plots, but I
15 wasn't sure exactly where that uncertainty is coming from.

16
17 **DR. SIEGFRIED:** Sure, and so we actually would like to do more
18 research to take a look at some of the effects of trends in our
19 terminal year recruitment, and so, if there's some sort of issue
20 with what happens in the landings, it's not matched with other
21 data sources.

22
23 You know, Nathan's projection project, through RESTORE, should
24 help us do some of that in the in the coming years. I do agree
25 that, you know, if you have this declining trend, taking an average
26 is kind of ignoring that there's a trend in those recruitments,
27 really at all, and we're always sort of waiting to see what the
28 next set of data look like, right, and we're waiting to see if it
29 rebounds.

30
31 We're waiting to see if it goes down, but managers have to do
32 something in the meantime, and so, you know, taking the average of
33 whatever number of years usually comes down to an arbitrary
34 discussion of which data we trust most, which, of course, is
35 unfortunate, because that becomes more of a results-based
36 conversation, as opposed to uncertainty of those data, sources of
37 those data, corroboration with other data sources, which is part
38 of why I said that a lot during this presentation, that, you know,
39 it should be more of a holistic look to see what other data sources
40 support recent trends in recruitment or recent trends in fishing
41 mortality.

42
43 It's a long way of saying we're not sure how else to handle it,
44 pending further research, but I do think your point is a good one.
45 What was the other -- The other one was the uncertainty, and so
46 the other thing that I would like to take a look at is -- I think
47 I've mentioned this before, and I feel like I need more of me, or
48 more of my people, to be able to do all these things we want to

1 do, but do an analysis of uncertainty that would allow us to take
2 more of a probabilistic look of what might happen.

3
4 You know, sampling either -- Not just bootstrap sampling, but doing
5 the sort of draws that are done, similar to the South Atlantic.
6 I've brought that up in the past, sort of doing a Monte Carlo
7 bootstrap sort of analysis.

8
9 All that is though is just 3,000 model runs, and just showing the
10 different model runs as levels of uncertainty, which you could
11 argue that's a probability, but it's not actually a probability,
12 and it's more just taking a look at that many different sensitivity
13 runs.

14
15 Generally, what SS provides is very narrow uncertainty around the
16 F estimates, and so we would prefer to take a look at other
17 parameters and uncertainty. I don't know, and am I forgetting
18 anything? My team are all on the line if they want to weigh-in
19 too, but we definitely need to do more work to characterize
20 uncertainty in our projection period.

21
22 **DR. CHAGARIS:** If I could follow-up, and so the uncertainty is
23 derived from the base model and not from the decisions that we
24 make about the projection settings, and is that correct?

25
26 **DR. SIEGFRIED:** Yes, and I would say so. I think the sector
27 allocation proposal that I wanted to make could allow us to sort
28 of put an envelope of uncertainty of what the status might be,
29 given different allocations, and so sort of set a low and a high
30 for the commercial, or recreational, and then do the opposite sort
31 of on either end of what the allocations would be. That could be
32 another way to take a look at the uncertainty around status due to
33 allocations, but yes. The answer to the last question is yes.

34
35 **CHAIRMAN ALLEN:** Okay. Thank you, Dave. Thanks, Katie. Ralph
36 has a question.

37
38 **MR. TOWNSEND:** Mr. Chairman, I got, from Ryan's comment, that he's
39 looking for some clarification on some of these, or
40 recommendations, and I guess, one, I'm mindful of the time and the
41 schedule that Ryan set up for the day, and I'm suggesting that
42 maybe the right thing to do is to identify where is the areas of
43 clarification, and putting that on the agenda for the next meeting
44 to discuss those areas specifically, just to suggest in terms of
45 process.

46
47 **CHAIRMAN ALLEN:** I think that's an excellent suggestion, because
48 I don't think we're going to be able to completely button this up,

1 but I do think we've made a lot of progress here. Ryan and Katie,
2 I would volunteer to work with you on a cheat sheet that summarizes
3 this presentation, and we can at least identify places where we've
4 been very consistent over time, and where the committee is going
5 to want some more input before we make a decision for each
6 assessment, and then revisit that at this time. Katie.

7
8 **DR. SIEGFRIED:** If I may, Mr. Chair, and thank you. The thing I
9 think is most important for the SSC to consider today, and, yes,
10 of course, I'll work with you on a cheat sheet, sort of a guide
11 for folks as they're looking through projections for the future,
12 but the thing that is most important for today is the assumption
13 about recruitment and the justification from deviating from the
14 assumptions about OFL recruitment.

15
16 That will come up with scamp, and the -- What I put on that slide.
17 And I don't remember which side it is, and it's you need to make
18 sure that, if you deviate from the long-term average or the stock-
19 recruit curve, that you're accepting -- Sorry, and maybe we could
20 just go to it, and I won't try to paraphrase. There it is. It's
21 slide 3.

22
23 So, for the short-term projection comments, if the short-term
24 recruitments are used for OFL, this can be interpreted as support
25 for a regime shift. Basically, the SSC is saying that they think
26 that the stock can no longer achieve the recruitment that the
27 stock-recruit curve, or the long-term average, says that it can,
28 or has in the past.

29
30 You're basically assuming that stock productivity has changed, and
31 you don't anticipate it going back to historical levels, and so
32 it's important to note, because of the scamp discussion for today,
33 and we have deviated from the long-term average, or the stock-
34 recruit curve for OFL, for scamp and yellowedge, and so just keep
35 that in mind. You can come back to this presentation when you
36 have that discussion, and, otherwise, yes, I'll work on a cheat
37 sheet with you, Mike and Ryan. Thanks.

38
39 **CHAIRMAN ALLEN:** Thanks, Katie. You know, I recall that it's --
40 That kind of discussion we've had pretty explicitly, with regard
41 to a potential regime shift and lower recruitment, and amberjack
42 comes to mind, and that discussion, and so maybe we'll keep that
43 in mind. Dave has a comment.

44
45 **DR. CHAGARIS:** Wasn't the use of, you know, short-term recruitment
46 for OFL, and wasn't -- Hasn't that been discouraged already,
47 because of, you know, the idea that it would be moving the
48 goalpost, and I think there was a paper by Cody Szuwalski that,

1 you know, that detailed that process, and that was the situation
2 that we found ourselves in with greater amberjack.

3
4 Are we still -- I guess we did it for scamp and yellowedge, and I
5 don't recall the context of that decision, but it seems like that
6 would be discouraged, right?

7
8 **DR. SIEGFRIED:** Yes, and that paper is very useful. We could
9 probably get that to you to put on the drive. As a reminder, the
10 reason that the SSC chose to deviate for scamp and yellowedge was
11 because of issues with trusting the recruitment estimates and the
12 long-term nature of the species, and so how old the species get,
13 which I'm not -- I'm just reminding you.

14
15 I'm not saying that I support those, necessarily, and I do think
16 that the Szuwalski paper, and then the Neil Klaer paper, about
17 whether a regime shift has occurred -- We went through that for
18 amberjack, and showed that there was not evidence of a regime
19 shift, and that we would be moving the goalposts and saying
20 amberjack will never allow for larger take levels again, and so,
21 yes, we would say that that we're discouraging that, and that
22 discussion happened at the last SSC meeting too, where the South
23 Atlantic Council tends to have the same opinion about long-term
24 recruits for setting OFL.

25
26 **CHAIRMAN ALLEN:** Okay. Thank you. Luiz.

27
28 **DR. BARBIERI:** Thank you, Mr. Chairman. Real quickly, my
29 recollection of this discussion we had last time, Katie, was it's
30 something that we're trying to look into long-term, if we have a
31 rebuilding plan, right, and so we're trying to identify a target
32 biomass in the long-term, be it equilibrium or not, but it would
33 be the capacity of the stock to rebuild to that biomass, and, in
34 that case, we would have to use something that's longer term of
35 the stock-recruitment relationship and reflects the totality of
36 the stock productivity.

37
38 Our decision for the short-term was, what we are observing from
39 the recent past, we're applying to the near future, right, and we
40 haven't seen a response, in terms of recruitment production in the
41 short-term, and we felt it would be too risky to try to assume
42 that, at that level where the biomass was, that the stock would be
43 able to produce higher levels of recruitment. To me, you know,
44 that distinguishes between the recommendation that we made for
45 short-term, versus looking into the future and the rebuilding.

46
47 **DR. SIEGFRIED:** Yes.

1 **CHAIRMAN ALLEN:** Go ahead, Katie.

2
3 **DR. SIEGFRIED:** I was just going to say, yes, that's right, and so
4 if we use -- Yes, and so OFL also determines -- The settings used
5 for OFL will also determine our status. That's why the long-term
6 and stock-recruit curve -- That's why I flagged it here, so that
7 you could keep an eye on that for scamp, because it's -- Assuming
8 we can get back to that point also helps us determine what our
9 status is.

10
11 Our long-term, our equilibrium long-term, OFL projections help us
12 inform status for our SS models. The short-term can vary, and not
13 affect status, and that's just simply, okay, what sort of catch do
14 we think the stock can support now, as opposed to where should it
15 get back to and what is the status of the stock, and so, yes.

16
17 **CHAIRMAN ALLEN:** Okay. Thank you, Katie. Ryan, final thoughts on
18 how we can help with this process at this stage?

19
20 **MR. RINDONE:** I mean, as it relates to the projections you're going
21 to see on red grouper and scamp, I mean, you guys just need to
22 make your best informed decisions on those, and so you're going to
23 see those projections based largely on the recruitment settings
24 that were provided previously for those respective sets, and so
25 just be considerate of those.

26
27 In the meantime, you know, we'll work up that that cheat sheet, if
28 you will, and I think probably the most efficient way to do that
29 will be just to identify, you know, what's been most commonly done,
30 in the last five years or so, and focusing on, you know, the last
31 few years, because, you know, research changes with time, and with
32 that changes, you know, the most appropriate advice.

33
34 It's always something that you guys will be able to go back and
35 revisit, if you like, you know, as circumstances change, and you're
36 like, oh, we really think we should do this differently, or what
37 have you.

38
39 I think, you know, when we're generating that, you know, nobody
40 get too married to what we put in there, because it will be
41 something that will be open for debate, and so -- But we will fill
42 out something recommended for each of those factors to be
43 specified.

44
45 **CHAIRMAN ALLEN:** I think that would be super helpful, and I really
46 appreciate this kind of high-level discussion, general discussion,
47 about consistency through all of these decisions that we have to
48 make so, and so we will move on, and look for that cheat sheet to

1 be developed, and we can reference that as we go forward.

2
3 All right, and so next is going to be Item IV on OFL and ABC
4 projections for SEDAR 88 for red grouper. Ryan, do you want to
5 give us the scope of work on that?

6
7 **REVISED OFL AND ABC PROJECTIONS FOR SEDAR 88**
8

9 **MR. RINDONE:** Francesca is here with us today, and she's going to
10 provide updated catch projections for red grouper, based on SEDAR
11 88, and you guys saw this last February 2025 meeting, where you
12 recommended an OFL and ABC for 2027 to 2029 at an FMSY proxy of 40
13 percent SPR.

14
15 At its April council meeting, the council requested an emergency
16 rule, on social and economic grounds, to be initiated by NMFS to
17 increase the red grouper catch limits beginning this year, for the
18 2025 fishing season, and, in order to meet this request, the
19 council has requested that the SSC review these updated
20 projections, which, instead of beginning in 2027, will begin in
21 2025.

22
23 Previously, 2025 and 2026 were modeled as interim years in the
24 catch projections, and so the SSC should consider the revised
25 projections and select from either a three or five-year constant
26 catch scenario, consistent with what you guys considered the last
27 time, and recommend a revised OFL and ABC for red grouper to the
28 Council.

29
30 **CHAIRMAN ALLEN:** Excellent. Thank you, Ryan. Francesca, if you're
31 on the line, please proceed.

32
33 **MS. MATOS:** Francesca, if you're speaking, you're still muted.

34
35 **DR. FRANCESCA FORRESTAL:** Oh, wonderful. I just -- Something went
36 strange with my headphones, but can everyone hear me okay?

37
38 **MS. MATOS:** Yes.

39
40 **CHAIRMAN ALLEN:** We hear you just fine. Thank you.

41
42 **DR. FORRESTAL:** Wonderful. Okay, I am Francesca Forrestal. I was
43 the lead analyst for the Gulf red grouper assessment, and so SEDAR
44 88, and I'm just going to be presenting some updated projections,
45 and so this is an overview.

46
47 There was a couple of requests. The first was to provide the SEDAR
48 61 projections, and so this was the last assessment in 2017, and

1 use SRFS data inputs. SEDAR 88 uses SRFS data within the model
2 and within the projections, while SEDAR 61 used the MRIP-FES
3 currency, and so we just wanted to see what the effect was of using
4 the SRFS currency, the SRFS data, within SEDAR 61.

5
6 The projections for SEDAR 61 were updated, replacing just the
7 private Florida catches, or, sorry, the landings data with SRFS
8 data, and then this was with the original model, and then we also
9 provided the interim analysis, and so this is what the current
10 catch device is based off of, the SEDAR 61 interim analysis. Then,
11 finally, I'm going to be presenting the SEDAR 88 projections, and
12 so that's the most recent stock assessment, with management
13 beginning in 2025, as opposed to 2027.

14
15 I just want to put a big caveat out, because we -- I presented
16 this slide back in February, and these are all the changes that
17 were made from the last assessment, SEDAR 61, to the new one, and
18 so SEDAR 88, and so, while I could provide projections for SEDAR
19 61, I cannot replicate everything that was changed, and show how
20 that could impact the projections, but what I can show is just the
21 effect of replacing the MRIP-FES Florida landings with the Florida
22 SRFS landings data, and so this is what this slide is.

23
24 The table is a little bit messy, but the first two rows have what
25 the SEDAR 61 FES units were, the OFL and the ABC, and then what
26 would have happened if the SRFS data were used, and so it just
27 drops the OFL and ABC down from 4.66 to 4.21 for the OFL.

28
29 Then we have what the current catch advice is on the books now for
30 red grouper, which is a 5.99 OFL, and then what would happen if
31 SEDAR 61 used the SRFS equivalent units, and so, again, it just
32 drops it down a little bit, and then we have -- The last two rows
33 are the new advice, and so what was presented back in February,
34 and so, for the SEDAR 88, we have it both for the MSY proxy at 40
35 percent SPR or 30 percent SPR, and the recommended was the 40
36 percent SPR. If there's any questions -- If there's not questions
37 on the SEDAR 61 projections, I'll move over to what the SEDAR 88
38 projections are.

39
40 **CHAIRMAN ALLEN:** I am not seeing any questions.

41
42 **DR. FORRESTAL:** Perfect. Thank you, and so this is very similar
43 to what I presented back in February. None of the projection
44 settings have been changed. The allocations are all the same.
45 The only thing that has changed is the year from which the
46 projections start from, and so when management would begin.

47
48 Initially, we presented them beginning in 2027, but, for the

1 reasons that Ryan outlined, we were requested to provide them from
2 2025 onwards, and so this is at the 40 percent SPR, and these are
3 the OFL projections, and so just it shifts up two years.

4
5 You can see the comparison in the document we provided, and I think
6 that's also on the agenda, and so you can look at the difference
7 between using a management year of 2025 versus 2027, and so, if
8 you use the three-year average, with the constant catch, the OFL
9 is 10.64 million pounds gross weight, but the five-year average is
10 a little bit lower.

11
12 Now, looking over at the ABC, again, this begins in 2025, and then
13 you have the three-year average constant catch, as opposed to the
14 five-year average constant catch, and now I'll open it up to the
15 group for discussion. Thank you.

16
17 **CHAIRMAN ALLEN:** Thank you, Francesca, and so just a clarification.
18 The catch scenarios are declining because the stock is heading
19 back towards MSY, correct?

20
21 **DR. FORRESTAL:** Sorry, and I should have clarified, and so, yes.
22 These are lower than what we presented in February, with management
23 beginning in 2027, and that is because the catch is being kept
24 lower, and so the stocks have a little bit more time to recover,
25 or just, you know, grow larger without this larger catch device.

26
27 **MR. RINDONE:** The previous interim years assumed that the
28 management measures that are currently in place would have remained
29 in place, and so harvest would have been constrained to, you know,
30 the roughly four-and-a-half-million-pound range, instead of being
31 allowed to go as high as say, 8.28, or 8.16, depending on which of
32 those time series you were to elect to use, and so, because you're
33 allowing comparatively increased harvest in 2025 and 2026, the
34 yield for these updated projections, compared to the old ones, is
35 going to be a little bit lower, because, under this version, you're
36 removing more fish in the interim years than the previous version
37 said that you were going to.

38
39 **CHAIRMAN ALLEN:** Okay, and so how we can help this process, with
40 this pending emergency rule, is to decide on the three-year or the
41 five-year projection window, and so I'll open it up, and our vice
42 chair, Jim Nance. Jim, good to hear from you.

43
44 **DR. NANCE:** My only concern is can we do anything? I mean, 2025
45 is already right now, and so is there management in place to do
46 something, or is this just theoretical?

47
48 **CHAIRMAN ALLEN:** Ryan.

1
2 **MR. RINDONE:** The council has requested an emergency rule, or
3 appropriate measure, from the Southeast Regional Office to
4 implement something for this fishing year, and it is a top priority
5 for the Regional Office and the council, and so the expectation
6 should be that a management change could be in effect for red
7 grouper for 2025.

8
9 **DR. NANCE:** Thank you, Ryan.

10
11 **CHAIRMAN ALLEN:** Yes, and thank you. Luiz, please.

12
13 **DR. BARBIERI:** Thank you, Mr. Chairman, and so a few points to
14 consider here, for the committee to discuss, right, and, I mean,
15 I think that this assessment last time was what we used to call an
16 operational assessment, right, and that didn't really look into
17 revising all the inputs and metrics and all of that, right, for
18 spawning potential, et cetera.

19
20 There are some issues, I think, to be resolved in there, and so,
21 from that point of view, I would prefer to have shorter-term
22 projections for this stock, because that would allow us to have an
23 assessment earlier, and the possibility of reversing course.

24
25 Now, looking at the SEDAR schedule for the Gulf, as projected,
26 right, there are no assessments scheduled for red grouper. The
27 schedule now just covers through 2029, and red grouper is not
28 there, right, and so, if that cannot be addressed before 2029,
29 then, in that case, I think that the five years would be advisable.

30
31 **CHAIRMAN ALLEN:** Thank you, Luiz. John, please.

32
33 **DR. FROESCHKE:** Just a little bit of information. I guess how I
34 envision this is there's kind of two parts, and so this
35 recommendation would be applicable to the emergency rule, which
36 would be in effect, whenever we get it into place for 2025, for
37 180 days.

38
39 We're also going to be developing an amendment that's going to
40 consider sector allocations, which I presume we would bring those
41 back to you again, because the OFLs and ABCs change a little bit,
42 and so presumably you would likely get another crack at these when
43 we change the status determination criteria, the allocations, the
44 catch limits, and whatever else.

45
46 In this case, really, this would be in effect for 2025, but we
47 would need to have the amendment in place prior to 2026, because,
48 on January 1, 2026, that emergency rule is going to expire, or,

1 whenever, but early 2026, and it will revert back to those lower
2 catch levels until such time we put in place an amendment that
3 would change them. So, ideally, we would have that done in 2026,
4 before the seasons would close again and all that, but that's kind
5 of how I see this going.

6
7 **CHAIRMAN ALLEN:** Yes, and so this would be -- This is definitely
8 a short-term projection we would be approving, and we would see
9 this again. Ryan.

10
11 **MR. RINDONE:** Just to more directly address Dr. Barbieri's comment,
12 whether the SSC selects a three-year or a five-year period, unless
13 there's updated catch advice, and a management change put into
14 place, whatever you set is going to stay on the books until it's
15 changed, and so it's 2025 to 2027 and subsequent years, or 2025 to
16 2029 and subsequent years.

17
18 Whichever one you pick, you need to be under the presumption that,
19 you know, that will be what is there until it's changed, and the
20 SEDAR stock assessment schedule, as you intimately know, is
21 something that does change, but typically, you know, not within a
22 two-year window from present day, but there's a lot of demand on
23 the stock assessment side of things, and our resources have become
24 a little more limited as of late.

25
26 You know, where we plug in the next red grouper assessment is
27 something that the SEDAR Steering Committee will have to be
28 thoughtful about, but, just because it's not on there right now,
29 you know, outside of 2027, doesn't mean it won't show up there,
30 and Dr. Simmons is our resident representative on the SEDAR
31 Steering Committee, and so be sure to tell her your thoughts about
32 that, but, whatever you guys pick, whether it's three years or
33 five years, expect that to be what stays on the books until
34 changed, however long that is.

35
36 **CHAIRMAN ALLEN:** Okay. Thank you, Ryan. I'll just note that I
37 would support Luiz's comment about, given all that information,
38 the five-year projections is probably preferable, in my mind.
39 Other comments? Ralph.

40
41 **MR. TOWNSEND:** So let me see if I understand what's being proposed.
42 A mid-year change in the allocations is being proposed, correct,
43 for 2025?

44
45 **MR. RINDONE:** Not allocations, and just the catch limit, and so
46 just the catch limit would be updated.

47
48 **MR. TOWNSEND:** Well, the catch limit gets updated, but you multiply

1 the catch limit times the share, and this is an ITQ fishery,
2 correct?

3
4 **MR. RINDONE:** IFQ, yes.

5
6 **MR. TOWNSEND:** IFQ. Excuse me, and so the individual quota holder
7 will get more fish mid-year.

8
9 **MR. RINDONE:** Yes.

10
11 **MR. TOWNSEND:** Let me say, from a socioeconomic point of view, I
12 think that's a terrible idea. I think it undermines both this IFQ
13 and future IFQs, because economic decisions have already been made
14 this year, based on the total IFQ that was available, and this
15 will dramatically change the value of those IFQ.

16
17 I was talking with Andrew this morning, and he suggested that this
18 IFQ may not be caught, which will imply the IFQ value will go to
19 zero, or close there to, and so, I think, from a -- I guess I'm
20 curious what's the social and economic goals that justify
21 undermining an IFQ system, which I think this does.

22
23 The other question is, is what we're really proposing is to allow
24 more fish to be caught now, and fewer fish in the future, and is
25 that -- Looking at the graphs, that's what we're really suggesting?
26 That's what the modeling would tell us, that we're going to catch
27 more fish now, and we're going to reduce catches in the out years.

28
29 **MR. RINDONE:** So you're fishing down towards your estimate of MSY
30 at 40 percent spawning potential ratio, and so what it's telling
31 you right now is that there's a surplus of biomass that exists
32 within the stock, and, if you catch 8.28 or 8.16, million pounds
33 per year, if you harvest that whole amount for that five-year
34 period, then the trends that you're seeing in the plot there --
35 Like that's what you can expect to happen for that biomass over
36 time.

37
38 It's saying that the stock can handle it, and, if it's not landed,
39 then you remain -- You continue to have some kind of a surplus of
40 biomass that will carry over to the following year.

41
42 Regarding the social and economic side of things, just so you guys
43 know where things currently stand, the average dockside price for
44 red grouper right now, depending on whether or not the fish are
45 brined before being brought back, stands anywhere from seven to
46 eight-dollars a pound, which is nearly twice what it was last year,
47 or two years ago.

1 That has a lot to do with the strong drop in the amount of gag
2 that's available to be caught, and so the strong reduction in gag
3 following SEDAR 72's change in catch limits drove the price of
4 grouper up pretty considerably, and so the fishermen are getting
5 a strong price right now for grouper in general, including red
6 grouper.

7
8 The expectation, based on the division of the sector allocation,
9 would be that, yes, there would be a strong -- There would be a
10 large amount of pounds that would go into the commercial market
11 mid-year.

12
13 At the end of last year, there were fishermen that were trying to
14 lease red grouper quota for as little as twenty-five cents, because
15 they weren't going to catch it, twenty-five cents a pound, and
16 simply they weren't going to go out to catch it, for whatever
17 reason, and they were just trying to get it out to somebody who
18 could.

19
20 That's not necessarily uncommon when there's a fishery that, you
21 know, might have some leftovers at the end of the year like that.
22 It's less common for fisheries like red snapper, which, year-over-
23 year, are consistently fully exploited to the commercial quota.

24
25 **CHAIRMAN ALLEN:** Andrew.

26
27 **DR. ROPICKI:** We have seen, with the red snapper, with some of
28 these late-year increases, both the allocation price and the ex-
29 vessel will tank. I mean, it's happened in the past.

30
31 I'm just curious, and this is probably getting out of what the SSC
32 is supposed to do, but, if there's going to be an emergency rule,
33 could there be an emergency rule to push some of what the
34 commercial sector would get in 2025 into 2026? Like still give
35 them their bump in 2026, but push some of the 2025 increase into
36 2026, to avoid that market glut that you might create, because you
37 have a lot of operations that line up, you know, their allocation
38 at the beginning of the year, and, if they haven't caught it, the
39 price is going to go way down.

40
41 **CHAIRMAN ALLEN:** Thank you. Ryan.

42
43 **MR. RINDONE:** The short answer is no, and that has to do with the
44 risk of exceeding the OFL, because, ultimately, like we couldn't
45 take the two-million pounds or whatever that the commercial sector
46 might get and then tack it on to 2026, and then now the ABC is,
47 you know, nearly equal to, or equal to, the OFL at that point,
48 even if it was for that year.

1
2 Plus, we don't have a carryover provision that's lined up as part
3 of our ABC control yet, and so we don't have a functional way to
4 do that, from a regulatory perspective, but the idea is well taken,
5 and it does align with the idea of carryover, and there are some
6 rules that, when we had last talked about that, that we had
7 discussed, that you didn't want to be carrying over a whole bunch
8 of fish when the capacity to exploit those fish doesn't exist.
9 You don't want to end up with some massive amount of carryover
10 that just keeps rolling over every year that will never be caught.
11 At the same time, you want to allow for the ability to capitalize
12 on that foregone yield, when it's appropriate to do so.
13

14 **DR. ROPICKI:** Yes, and I kind of knew the answer, but I figured I
15 would ask anyway.
16

17 **CHAIRMAN ALLEN:** Thank you, Andrew. Carrie, please.
18

19 **EXECUTIVE DIRECTOR SIMMONS:** Thank you, Mr. Chair, and so, I mean,
20 essentially, we're going back to what I think we asked you guys in
21 February to do, essentially, because what ended up happening, I
22 think last time, is you started your yield stream projections in
23 2027, right, because we did not think we could get anything in
24 place before then.
25

26 So, to me, it's almost a formality that we're coming back to you
27 all to ask you to re-specify and do something now in this year, if
28 we can in fact try to act upon this new catch advice. I think,
29 you know, some valid points are being brought up regarding, you
30 know, dumping too many fish in late in the year, and some of that
31 stuff has been discussed at the council level, which is why I think
32 the council recommended taking like 90 percent, I believe, of this
33 yield stream in the emergency rule, and not taking the entire --
34

35 **MR. RINDONE:** For the ACL.
36

37 **EXECUTIVE DIRECTOR SIMMONS:** For the ACL, for the stock ACL, and
38 so both sectors would get those fish, potentially, this year, but
39 I think, you know, those are valid concerns, but I think some of
40 that probably should be discussed further at the council meeting,
41 but, really, to me, what we're asking you guys to do is almost a
42 formality here, because we kind of --
43

44 We, as staff, and the Regional Office staff, did not think we could
45 do anything until 2027, but now we think we can try to do something
46 before then, and so we're coming back to you and saying, hey, can
47 you consider 2025 now, and re-recommend those projections for us,
48 and are you comfortable with the three or the five years? But,

1 that being said, if we do an emergency rule, like John said, we
2 can only put that in place one year, right, and we're -- At the
3 same time, we're going to have to be working on a full plan
4 amendment, because this assessment changes the recreational
5 currency to SRFS.

6
7 I'm assuming the council wants to consider allocation changes, and
8 so we're going to have to be working through that in a full plan
9 amendment, and so I think -- I think you will see this again if
10 those allocation shifts make changes in the overall OFLs and ABCs.
11 That will have to come back to the SSC, and so I think that's what
12 we were saying, is you're probably going to see this again. We
13 just don't know what those shifts are going to be yet, because we
14 haven't worked through the council process, as far as allocation
15 changes, and so I hope that makes sense.

16
17 **CHAIRMAN ALLEN:** It does. I think that's super helpful. Okay.
18 Jim Nance.

19
20 **DR. NANCE:** Thank you, Chair. Good discussions on the economics
21 and so forth, but, from my perspective, I'm comfortable with the
22 five-year, over the three, and so that's kind of where I'm putting
23 my vote, is to go with the five-year, and I think that's a better
24 scenario. Thank you.

25
26 **CHAIRMAN ALLEN:** Jim, are you willing to put that in the form of
27 a motion for us?

28
29 **DR. NANCE:** I can. Let's see. **The SSC recommends using a five-**
30 **year average for the ABC projections at F equals 75 percent of F**
31 **40 percent SPR, giving a constant catch of 8.16 million pounds**
32 **gutted weight.**

33
34 **CHAIRMAN ALLEN:** Excellent.

35
36 **MS. MATOS:** Could you repeat that a little slower, please?

37
38 **MR. RINDONE:** So we need OFL and ABC, Jim.

39
40 **DR. NANCE:** Okay.

41
42 **MR. RINDONE:** So I don't know if you want to roll both of them in
43 there under the same --

44
45 **DR. NANCE:** I think we can.

46
47 **CHAIRMAN ALLEN:** I think we should, yes.

1 **MR. RINDONE:** So I think it's a 10.17 and 8.16, and is that right?
2
3 **CHAIRMAN ALLEN:** Yes.
4
5 **DR. NANCE:** How much did you get of that, Jess? Anything? I think
6 the SSC recommends using a five-year average 2025 through -- You
7 took my thing away.
8
9 **CHAIRMAN ALLEN:** Yes. The SSC recommends a five-year projection.
10
11 **MS. MATOS:** Sorry. I had Francesca's screen showing, and you
12 couldn't see my motion, and so hold on a second, please.
13
14 **CHAIRMAN ALLEN:** Okay. No problem.
15
16 **DR. NANCE:** Thanks, Jess.
17
18 **CHAIRMAN ALLEN:** Those two slides, that one and the one below it.
19
20 **DR. NANCE:** Okay. The SSC recommends using a five-year average
21 projection to determine a five-year -- Let's see. A five-year
22 average projection for determining OFL and ABC, giving us a
23 constant catch for OFL at whatever that value was, and a constant
24 catch.
25
26 **CHAIRMAN ALLEN:** 10.17.
27
28 **DR. NANCE:** And a constant catch of eight-something for the ABC.
29
30 **CHAIRMAN ALLEN:** A constant catch of 8.16 for the ABC.
31
32 **MR. RINDONE:** 10.17 for the OFL and 8.16 for the ABC.
33
34 **DR. NANCE:** I think, Jess, for the five-year average, put the years
35 in there, please.
36
37 **MR. RINDONE:** I've got it in the summary.
38
39 **DR. NANCE:** Okay. Thank you, Ryan.
40
41 **MR. RINDONE:** Horseshoes and hand grenades.
42
43 **DR. NANCE:** Okay.
44
45 **CHAIRMAN ALLEN:** All right. Excellent. Do I have a second for
46 this motion? Steve Saul seconds.
47
48 **DR. SAUL:** Yes, and I can second it.

1
2 **CHAIRMAN ALLEN:** Then we'll have discussion.
3

4 **DR. SAUL:** I was going to recommend a friendly amendment, but Jess
5 might have gotten it in there. Let me see.
6

7 **CHAIRMAN ALLEN:** Okay.
8

9 **DR. SAUL:** Yes and I was going to recommend that the SSC recommends
10 using a five-year -- We're using a five-year projection, from 2025
11 through 2029, to calculate an average, and then delete
12 "determining", and so an average OFL and ABC, because really it's
13 that we're -- We're projecting all those five years and then taking
14 an average of that, unless I'm -- Unless that's not correct. If
15 it's not correct, then correct me, but I'm just trying to clarify
16 the language in the motion.
17

18 **DR. NANCE:** I think that's correct, Steve.
19

20 **DR. SAUL:** Okay. Are you okay with that change?
21

22 **DR. NANCE:** Absolutely.
23

24 **DR. SAUL:** Cool.
25

26 **CHAIRMAN ALLEN:** Thank you, Steve and Jim. Daniel, please.
27

28 **DR. PETROLIA:** So we're in the discussion part now?
29

30 **CHAIRMAN ALLEN:** We're in the discussion part.
31

32 **DR. PETROLIA:** I just want to make sure I understand, and so we're
33 not recommending whether we think the emergency rule is a good or
34 bad idea, but rather, if the council chooses to do it, whether
35 they should use the three or the five-year, because, you know, as
36 an economist -- So the emergency rule is being brought up on
37 economic grounds, though I don't feel like I've -- What those
38 grounds are has been made really clear to me, and then, especially
39 this year, they'll have economic consequences, an analysis of which
40 we have none, though, as economists -- Well, everybody in the room
41 can apply their own reason and sort of figure out what they expect
42 those consequences to be, and so I just want to make sure what we
43 are and are not recommending. Thanks.
44

45 **CHAIRMAN ALLEN:** Go ahead, Ryan.
46

47 **MR. RINDONE:** Thanks, and so the majority of the economic grounds
48 came from the recreational sector, and specifically the for-hire

1 component of the recreational sector, and Mr. Anson is on the
2 council, and he can speak to this as well, from what he recalls
3 from public testimony, and council discussion too, but, generally
4 speaking, the additional pounds would allow for the booking of
5 additional trips into the summertime, and into the fall, which
6 would provide economic relief for the for-hire component, but also
7 for all the industries that support recreational fishing in
8 general.

9
10 The commercial comments that we heard were in favor of doing the
11 emergency rule to provide these extra pounds, and then a couple of
12 them had acknowledged that they expected the lease price to go
13 down considerably, and that there may even be extra pounds at the
14 end of the year, but, you know, they had said, if the fish are
15 there to be caught, then let people catch them, was the public
16 testimony, and so if Mr. Anson wants to add anything, but --

17
18 **CHAIRMAN ALLEN:** A follow-up, Daniel?

19
20 **DR. PETROLIA:** Okay, and so just the general sentiment from both
21 sectors has been positive, that the economic impacts are good
22 things, I guess, so to speak, because I was more worried about
23 what the negative impacts would be, and so thank you.

24
25 **CHAIRMAN ALLEN:** I appreciate those comments from our economists.
26 Andrew.

27
28 **DR. ROPICKI:** So I just want to clarify again. If we're going to
29 do this, I prefer using a five-year to the three-year, but is it
30 an implicit endorsement of the mid-year emergency rule?

31
32 **MR. RINDONE:** So the desire to request the mid-year emergency rule
33 is a council prerogative, and a council action and the advice to
34 you -- You know, like what catch limit to use for that is being
35 informed by this, but this is also going to inform the follow-on
36 framework amendment that Dr. Froeschke had mentioned that we hope
37 to have in place for next year, and so this is essentially being
38 used for both purposes, and these catch limits would be expected
39 to remain on the books until changed.

40
41 **CHAIRMAN ALLEN:** Ralph, please.

42
43 **MR. TOWNSEND:** So the SSC currently has social science members on
44 it, as well as science members, and so to say the council can only
45 ask for science advice, and it doesn't need to get analysis or
46 advice on the socioeconomics of a mid-year decision, it's, in my
47 mind, not defensible.

1 There should have been analysis. As I suggested earlier, what
2 this modeling says is we're going to take more fish now and fewer
3 fish in the future. The answer that the stock can support that is
4 not the same as what's the net benefit of that stream.

5
6 That we can calculate that there are going to be fewer fish, and
7 I assume this model is going to mean there's actually going to be
8 fewer fish in total caught, because we're reducing the biomass
9 now, and those analyses could have, and should have, been done to
10 justify this.

11
12 I just don't see the justification for making a recommendation
13 that allows a mid-year adjustment, and, again, there's a long-run
14 impact here, and that is, if you introduce the possibility that
15 ITQs are going to have mid-year adjustments, you're going to
16 undermine the functioning of ITQs in the future, because someone
17 is going to say, well, I can't make my decision in January, or
18 whenever the fishing year starts, because the council might do
19 something in July.

20
21 All of that should have been considered in this, and I think to
22 come back to this group and say, hey, enable us to make a decision,
23 for which we've done no socioeconomic analysis, is not justified,
24 and so I would have to vote against this motion unless we're going
25 to amend it to say we recommend against a mid-year adjustment.

26
27 **CHAIRMAN ALLEN:** Thank you, Ralph. Katie, please.

28
29 **DR. SIEGFRIED:** Thank you, Mr. Chair. Some of the discussion that
30 you all have had recently, I just felt the need to make a few
31 clarifications. As far as the recommendations from the group last
32 time, and sort of the discussion of the three versus five-year
33 average, and so the model is -- As the last speaker was saying,
34 the model now is saying, yes, you can catch more, because there's
35 yield out there above the stock size that's required to support
36 MSY, but that's not a sustainable catch in the long-term, right,
37 and then we showed the equilibrium, the long-term sustainable
38 catch, last time, and the SSC did not choose to go that direction,
39 but just to remind you that it's 7.019 million pounds gutted
40 weight.

41
42 That was what we were actually recommending, in light of the fact
43 that we weren't sure about, you know, what the short-term
44 management was going to be. This is also a really big increase.
45 There's a lot of questions about what the projection settings were
46 last time, and also the fact that the -- It's just a big change
47 from the time before.

1 We mentioned that we wanted to make sure to monitor this stock
2 annually with the G-FISHER index. It's highly dependent. The
3 results are highly dependent on the trend of the G-FISHER index,
4 and so we mentioned all those things last time, but, using a three
5 to five-year projection, a three-year is not saying, oh, we only
6 -- It's not really achieving the, oh, we only want to give short-
7 term advice.

8
9 It's actually choosing to set it, in the long-term, because, and
10 Ryan has repeatedly said it, and it will be on the books until it
11 comes off the books, setting it at a higher value, instead of
12 setting it at a more long-term sustainable value.

13
14 I just wanted to mention those things, because using the three-
15 year is not necessarily temporary, if it's not going to come off
16 the books soon, and using the long-term average, the five-year, is
17 almost a million pounds, or more than a million pounds, more than
18 the equilibrium, the true long-term catch that the stock assessment
19 model says is sustainable for this stock. I don't want to confuse
20 things, or mess up, and, you know, Carrie said you all were just
21 asked to review this again, as a formality, but that was the
22 discussion we had last time, and that's the difference between the
23 three and five-year projections this time.

24
25 **CHAIRMAN ALLEN:** Thank you, Katie. Super helpful. I've got John
26 Mareska, and then Mara.

27
28 **MR. MARESKA:** Thank you, Mr. Chairman. I'm just going to say that
29 -- I'm going to record that I'll be voting against this motion as
30 well, just because, from the science side, the robustness of the
31 age structure of this stock doesn't seem to support this long-term
32 yield into the future.

33
34 The long-term average back in time is around six-million pounds,
35 and we're saying that we're going to exceed this many years into
36 the future, and it just doesn't seem plausible. This seems like
37 a flashback to SEDAR 42. Thank you.

38
39 **CHAIRMAN ALLEN:** Thank you, John. Mara.

40
41 **MS. MARA LEVY:** Can you hear me?

42
43 **CHAIRMAN ALLEN:** Yes.

44
45 **MS. LEVY:** Okay. Thanks. I just wanted to just chime-in on maybe
46 what would happen after this, and so, I mean, you all can make
47 whatever recommendation you think is appropriate, but, I mean, the
48 council already requested the emergency rule, and so it wasn't a

1 situation where this was going to go back to the council for
2 further discussion, or input.

3
4 NMFS is already considering the request, and so, just from a
5 practical perspective, and I certainly don't want to dissuade you
6 from making whatever recommendations you feel are appropriate, but
7 the request has already been submitted, and so I just wanted for
8 you all to know that. Thanks.

9
10 **CHAIRMAN ALLEN:** Thank you, Mara. Assane.

11
12 **DR. ASSANE DIAGNE:** Thank you very much, Mr. Chair. To sum up the
13 comments that were made here, it seems to me that, if we look at
14 this in the big picture, the way in which the council process works
15 -- I mean, everyone here knows it's very slow, meaning that, if
16 the council had the ability to draft a framework action and get it
17 through the system before -- I mean, in very short order, there
18 wouldn't be any need for an emergency rule.

19
20 Right on the heels of this, the framework action to implement
21 essentially the new catch limits will be considered by the council,
22 approved, and then would through the channels, and so, in the
23 interim, what is to be done, essentially, what the council wants
24 to do, is to not let some of the yield be foregone by using this
25 special tool, quote, unquote, of an emergency rule to take a
26 shortcut and provide relief to the recreational sector in general,
27 and mostly to the charter-for-hire, as Ryan talked about.

28
29 It is not catching too many fish right now and pay it later on.
30 It is just a shortcut, because of, I guess, the speed at which
31 regulatory actions are being developed in general.

32
33 **EXECUTIVE DIRECTOR SIMMONS:** So you'll develop the analysis.

34
35 **DR. DIAGNE:** Yes, and, of course, all of the socioeconomic analysis
36 will be included in the emergency rule, and would be evaluated
37 accordingly.

38
39 **CHAIRMAN ALLEN:** Thank you very much. I appreciate that context.
40 I wanted to follow-up a bit on John Mareska's point and just make
41 the point that we did debate this assessment before, right. and
42 we've been through that, and we approved these, the long-term OFL
43 and ABC, at our last meeting, and so that increase in catch is
44 something that we've already evaluated and approved, and so just
45 for context. Okay. Daniel.

46
47 **DR. PETROLIA:** Thank you, Mr. Chair, and I realized my comment is,
48 again, aside from what the motion is, but so I'm relatively new.

1 How much precedence is there for these emergency rules? I mean,
2 are the sectors accustomed to something happening right now that
3 will affect them a few months out?
4

5 **CHAIRMAN ALLEN:** Excellent question. Ryan.
6

7 **MR. RINDONE:** Emergency rules are uncommon, because they're
8 emergencies, and so they've been requested by fishermen in the
9 past, and not put forward, for a variety of reasons, and then there
10 are circumstances then where they would be, and this is one where
11 the timing was such that, between when the council got the request
12 from the public to put this forward and it was supported by the
13 State of Florida's representative on the council, who I think was
14 the lead motion maker on it, and it was something that, based on
15 timing of how long it takes to develop an emergency rule and get
16 it implemented, it could have been put in place before the end of
17 the fishing year and actually provide the relief that its purpose
18 was for, and so rare circumstances, but, you know, the name implies
19 its use.
20

21 **CHAIRMAN ALLEN:** Okay. Thank you. We'll go to Harry, and then
22 Paul, and then we're going to have to move on and have a vote, and
23 so Harry, please.
24

25 **MR. BLANCHET:** Thank you. This goes back to a comment that Katie
26 made that, at the end of the five-year period, if you were
27 calculating with the long-term constant catch, OFL and ABC, you
28 would be a million pounds under where we're talking about here. I
29 may have overgeneralized Katie's comment, but that was kind of the
30 thing that triggered my thought.
31

32 In essence, if we do not get another assessment for this species,
33 for this significant species, it seems that then we, at this point
34 -- At that point, at five years, if we continue to fish at this
35 rate, that would be above what we would be doing with a new
36 assessment.
37

38 We have not historically gone beyond that projection period, but
39 perhaps it's a separate motion to say that, beyond 2029, a more
40 appropriate OFL and ABC would be 10.17, minus whatever, to actually
41 give what would be the -- To at least give some guidance that we
42 don't end up remaining at an ABC of 8.16 in a time period where
43 that's not appropriate, because of that -- If you look at the
44 graphics, the decline in the stock will continue well beyond this
45 five-year projection period. Thank you.
46

47 **CHAIRMAN ALLEN:** Thank you, Harry. Paul.
48

1 **DR. MICKLE:** I'm just soaking in Harry's comment there. It's
2 interesting, but I'm going to circle back to the motion. We
3 probably need to put some units on the metrics in there, just
4 million pounds gut weight, I guess.

5
6 Then I'm going to vote against this motion, because it's -- Again,
7 it's just a formality, right, and so it stays on the books, but,
8 if you all remember, historically, this has been an overfished
9 species, and I'm pretty sure we did emergency control rule on the
10 council in 2018, or 2019, because it was -- The fishermen were
11 screaming there was nothing out there to catch, and this is -- I
12 think it's historically been a very boom-and-bust species, and
13 anything we can do to encourage a SEDAR discussion on getting this
14 on --

15
16 So we don't have these massive gaps between, I guess, operational,
17 or assessments in general, as things are changing, but the fact
18 that this species is hermaphroditic, and it's IFQ, and it's
19 susceptible to episodic recruitment constraints from red tide, and
20 we've delved into that quite deeply, and it's spatially located in
21 one of the highest effort areas in the Gulf, and fairly spatially
22 recused, right, and so it's not a Gulf-wide, and it's mostly over
23 here.

24
25 The fact of all those bullets, and I think having that many years
26 between assessments is very dangerous, and it's susceptible for
27 overfishing in general, and so anything we can do to incorporate,
28 other than writing a letter to try to get SEDAR, or whoever
29 identifies those species, to prioritize this one in our future
30 discussions, but I'm going to vote against this, because it is
31 just a formality, and I do feel that, if it's going to stay on the
32 books, that maybe a three-year might at least give us some
33 protection and consideration of that we need to address this
34 species more frequently. Thank you.

35
36 **CHAIRMAN ALLEN:** Thank you for those comments, Paul. Ryan.

37
38 **MR. RINDONE:** Just quickly, and, again, you know, whether you use
39 a three-year or a five-year, it's going to be -- Whatever that is
40 is going to be on the books until it's changed, and so I think
41 probably a more useful recommendation from the SSC with regard to
42 that would be -- This is one for you to consider, would be to
43 request that the SEDAR Steering Committee consider putting red
44 grouper on the SEDAR schedule for 2028, or something like that,
45 which would be the next available point to try to plug it in.

46
47 **CHAIRMAN ALLEN:** Do we need a motion for that or --
48

1 **MR. RINDONE:** You could do that separately, if you would like, but
2 just something for you to consider.

3
4 **CHAIRMAN ALLEN:** Okay. Thank you. Okay. Carrie.

5
6 **EXECUTIVE DIRECTOR SIMMONS:** Thanks, Mr. Chair. I guess what I
7 was trying to say earlier, when I was saying formality, is remember
8 your recommendation started in 2027, and it went to 2029, right,
9 the three years, because we thought we couldn't do anything,
10 management-wise and so, if you don't recommend something in 2025,
11 my understanding is the council and agency cannot take action in
12 an emergency rule, and I'll ask Ms. Levy to weigh-in on that.

13
14 The other thing is I think, Ryan, this is going to come back to
15 the SSC. We don't know what the council is going to do with the
16 changes to allocation, now that this stock is in SRFS, and I think
17 we'll have to bring that back, later this year, and get
18 recommendations, if those allocations change the overall OFLs and
19 ABCs. We're going to have to bring that back to you.

20
21 This, you know, emergency rule, the idea is it can only be in place
22 -- It has to meet specific criteria in Magnuson, and it can only
23 be in place for one year, at most, 180 days at a time, and it has
24 to be followed-up with something else, and so this has to -- We
25 have to like post-haste be working on amendment, at the same time
26 we're working on that emergency rule, and so I wanted to just bring
27 that up, because I don't think -- If you don't start your yield
28 stream in 2025, I don't think the council can act upon that.

29
30 **CHAIRMAN ALLEN:** Okay. Thank you, Carrie. Jim Nance, did you
31 have a comment?

32
33 **DR. NANCE:** Yes, and just real quick. I think, for this species,
34 we have the opportunity to have an interim analysis, and so that
35 gives us the opportunity to look at this. I think we've been doing
36 on a yearly basis, and so I think that helps to alleviate some of
37 the concern, in my mind. If we start seeing trends going down,
38 then we can make some other actions. Thank you.

39
40 **CHAIRMAN ALLEN:** Thank you, Jim. All right. We're going to have
41 to move forward. I think we should do a vote on this motion.
42 Jessica, I think that should be a roll call vote.

43
44 **MS. MATOS:** Tiffany.

45
46 **DR. HOPPER:** Yes.

47
48 **MS. MATOS:** Steven Saul.

1
2 DR. SAUL: Yes.
3
4 MS. MATOS: Dave Chagaris.
5
6 DR. CHAGARIS: Yes.
7
8 MS. MATOS: Jack Isaacs.
9
10 DR. ISAACS: No.
11
12 MS. MATOS: Andrew Ropicki.
13
14 DR. ROPICKI: No.
15
16 MS. MATOS: Ralph Townsend.
17
18 MR. TOWNSEND: No.
19
20 MS. MATOS: John Mareska.
21
22 MR. MARESKA: No.
23
24 MS. MATOS: Harry Blanchet.
25
26 MR. BLANCHET: Yes.
27
28 MS. MATOS: Jason Adriance.
29
30 MR. ADRIANCE: No.
31
32 MS. MATOS: Luiz Barbieri.
33
34 DR. BARBIERI: Yes.
35
36 MS. MATOS: Will Patterson.
37
38 DR. PATTERSON: Yes.
39
40 MS. MATOS: Dan Petrolia.
41
42 DR. PETROLIA: No.
43
44 MS. MATOS: Jim Nance.
45
46 DR. NANCE: Yes.
47
48 MS. MATOS: David Griffith.

1
2 **DR. GRIFFITH:** No.

3
4 **MS. MATOS:** Paul Mickle.

5
6 **DR. MICKLE:** No.

7
8 **MS. MATOS:** Trevor Moncrief.

9
10 **MR. MONCRIEF:** Abstain.

11
12 **MS. MATOS:** Mike Allen.

13
14 **CHAIRMAN ALLEN:** Yes. **Okay, and so the motion failed.** Hold on
15 one second, Steve, and so what is our option at this point?

16
17 **MR. RINDONE:** If there's any other recommendations you guys want
18 to make with respect to red grouper, then you could make them,
19 but, as of right now, you know, the motion failed.

20
21 **CHAIRMAN ALLEN:** Okay. Fair enough. Steve, a comment?

22
23 **DR. SAUL:** Yes, and thank you, Mr. Chair. I just had a couple of
24 procedural kind of questions, and I really appreciate the
25 discussion we had this morning on this, and I can see both
26 perspectives, and I appreciate the sort of socioeconomic component
27 to this as well, and so my head is kind of -- You know, I can see
28 both sides of it, I suppose, but, procedurally, and, when we met
29 in February, and we voted, it was unanimous to -- We decided
30 unanimously, or the motion carried without opposition, to have
31 NMFS develop the emergency rule, et cetera, et cetera. How, is
32 that in conflict with what just happened here in terms of the vote?
33 There just seems to be --

34
35 **MR. RINDONE:** Do you mean the revised catch limits following like
36 the first set of projections? I think that's what you meant,
37 because the emergency rule didn't come about until April, and so,
38 in February, you guys --

39
40 **DR. SAUL:** Right. Okay.

41
42 **MR. RINDONE:** Right, and so you guys unanimously approved the
43 increase in the catch limits starting in 2027 back in February.

44
45 **DR. SAUL:** Okay.

46
47 **MR. RINDONE:** So this is essentially, or this was essentially, the
48 same decision, but instead starting in 2025, instead of starting

1 in 2027.

2
3 **DR. SAUL:** In the minutes from the February meeting, there is a
4 motion that says, quote, to direct staff to request NMFS to develop
5 an emergency rule for 2025 for red grouper based on results of --
6

7 **MR. RINDONE:** Those are the council minutes.

8
9 **DR. SAUL:** I opened the wrong one. Never mind.

10
11 **CHAIRMAN ALLEN:** Yes, and that came from the council.

12
13 **DR. SAUL:** Strike it from the record. Sorry.

14
15 **CHAIRMAN ALLEN:** Okay. Luiz.

16
17 **DR. BARBIERI:** Thank you, Mr. Chairman. Can we ask maybe Dr.
18 Simmons and Dr. Froeschke to give us a better idea of what are the
19 consequences of us not making a catch level recommendation today,
20 right, for red grouper, and where would that put us in the council,
21 as far as management of this species?
22

23 **CHAIRMAN ALLEN:** Yes, and thank you, Luiz.

24
25 **EXECUTIVE DIRECTOR SIMMONS:** Thank you, Mr. Chair. So, in
26 February, you made three motions, right? You found the SEDAR 88
27 stock assessment for Gulf red grouper to be consistent with the
28 best scientific information available and appropriate for
29 management advice, and then you made OFL recommendations, at the
30 40 percent SPR, for fishing years 2027 to 2029, at 11.28 million
31 pounds gutted weight for the OFL, and then 8.78 million pounds for
32 the ABC.
33

34 Because those projections start in 2027, I don't think the council
35 can do anything before then. We don't normally -- Or we haven't
36 consistently done that, I don't think. I believe, for even
37 yellowtail and mutton snapper, and we can pull those up, and I
38 think those started in like 2024 or something, and so I think you
39 are kind of tying the council's hands, and not making them able to
40 do -- To move these catch limits forward until 2027, but I would
41 ask Ms. Levy to weigh-in, because I might be misspeaking here.
42

43 **CHAIRMAN ALLEN:** Thank you, Carrie. Ms. Levy, do you have some
44 context for us?
45

46 **MS. LEVY:** I'm going to have to think about this, and so there's
47 two issues. There's the emergency rule, which NMFS is going to
48 have to talk about, just because of the way that it's phrased, and

1 it was sort of based on a recommendation from you all for a 2025
2 catch limit, which you just did not recommend, and I haven't talked
3 to them, obviously, and we haven't talked about the implications
4 of that and what that means for deciding whether to implement an
5 emergency rule.

6
7 The other piece of that is the council's action. If they wanted
8 to try to get something in place in 2026, they can't. I agree
9 with Carrie. At this point in time, the catch recommendations
10 started in 2027, and so, outside of the emergency rule context,
11 whatever the council would be developing would have to start catch
12 levels in 2027. There would not -- There is no ABC recommendation
13 from the SSC for 2026 even at this point.

14
15 **CHAIRMAN ALLEN:** Okay. Thank you, Mara. Paul, please.

16
17 **DR. MICKLE:** I'm going to propose a motion. Jessica, it's going
18 to be real easy. You can just copy and paste the previous motion,
19 and I would like to change the "five-year" to "three-year" and the
20 "2029" to "2027" in the second line.

21
22 This motion is based on our discussions of the previous motion
23 that failed, and also the request of the council, and so I'm hoping
24 that the previous discussions that reflected in the failure of the
25 vote may carry this one forward, and so, if I get a second, I'll
26 open it up for discussion. Thank you.

27
28 **DR. NANCE:** Mike, I'll second.

29
30 **CHAIRMAN ALLEN:** Okay, and we have a second from Luiz in the room.
31 Thank you though, Jim, and we need to change the values here for
32 the three-year projection, and those would be ABC is 8.28, and the
33 OFL is 10.64. Okay. Discussion? John, please.

34
35 **MR. MARESKA:** So, listening to the economists in the room, I think
36 their major gripe was the fact that this was going to be
37 implemented in 2025, and it would be implemented mid-year. I'm
38 just curious, if this started in 2026, and we did a four year for
39 2026 through 2029, would that be more agreeable to the economists,
40 and just for the overall economics of the fishery? I know that
41 would probably require a different rerun, to get different numbers,
42 but just an option here.

43
44 **CHAIRMAN ALLEN:** That's a fair question, John. Thank you. Andrew.

45
46 **DR. ROPICKI:** That would be a yes for me. A 2026 start date would
47 be a yes, but I don't -- It sounded like, and I'm sorry, and I
48 don't know who was on the call, but they seem to indicate 2026

1 isn't an option.

2
3 **CHAIRMAN ALLEN:** Okay. Thank you. Assane.

4
5 **DR. DIAGNE:** Yes, and just, I mean, for your consideration, I mean,
6 for other IFQ species, and red snapper would come to mind, we have,
7 on several occasions, implemented mid-year quota increases, and,
8 I mean, some cases as warranted by conditions of the stock, and
9 we've also had some reductions, and that is one of the reasons why
10 the agency has the ability to preemptively retain quota from IFQ
11 species when we see that there's going to be a mid-year change.

12
13 So, again, the timing of the stock assessments, and the dynamics
14 of the council, would not always allow for quota changes to happen
15 on January 1 for IFQ species, and so this is not something new,
16 but that's just for your consideration.

17
18 **CHAIRMAN ALLEN:** Yes, and thank you very much, and I'll just point
19 out from -- I attended the council meeting, and I think this is
20 essentially the council trying to be nimble, and trying to be able
21 to use these updated projections from the new assessment in the
22 shorter term as well. John, please.

23
24 **DR. FROESCHKE:** Just one other point of clarification. When we
25 discussed, earlier, this kind of fishing down the stock, which is
26 true, but it was kind of implied that we would result in lower
27 long-term yield, and I don't think that's correct, because we're
28 fishing it down to MSY. MSY should give you the maximum total
29 harvest over a given amount of time.

30
31 So, in theory, the farther you're away from that, either above or
32 below, you're resulting in foregone yield, and so we're trying to
33 approach this -- We would be approaching it at a faster rate,
34 meaning we would get there faster if you implement the catch limits
35 sooner.

36
37 **CHAIRMAN ALLEN:** Yes, and thank you, John. Jason, please. Thanks.

38
39 **MR. ADRIANCE:** Thanks, and I would likely vote no for this as well,
40 and I have an issue with the high yield stream, that the IFQ can't
41 even meet to begin with. To me, the request, from what Ryan said,
42 was from the for-hire sector. I think, ultimately, this may be
43 something better addressed when the council deals with allocation,
44 and not necessarily on our scientific side, but I think I'll still
45 vote no for this.

46
47 **CHAIRMAN ALLEN:** Okay. Thank you, Jason. Trevor, please.

1 **MR. MONCRIEF:** So I understand kind of the back-and-forth has been
2 going on about priorities, when it comes to having, you know, mid-
3 year changes, or whatever else like that. You know, I trust that
4 the council represents the fishery, and the management side of it
5 to be able to make decisions based on the fishery that are priority
6 of the fishery. That's where they stand.

7
8 Our job is to evaluate what we have in front of us, and, in all
9 honesty, John's comments are where my concern was, and that's why
10 I abstained. Just I brought up those points before we passed the
11 last motion at the last meeting about it, about how high it is,
12 and, if someone is willing to entertain a friendly amendment to
13 this motion, and I know we don't usually do it within the OFL and
14 ABC motions, but one thing I would like to see, given the
15 discussion I heard, and kind of where we're heading with the
16 fishery is, you know, the SSC recommends prioritizing annual
17 reviews of the stock performance, looking at the indices, that
18 kind of stuff, essentially on an annual basis, since what we're
19 doing is going to be outside really what we've observed in this
20 fishery for the last two decades.

21
22 That alone, for me, would help me support this a little bit more,
23 because then there would be eyes on the fishery. There would be
24 eyes on how it performs, how it's responding, even the economic
25 side of, you know, how much is being sold, and things like that,
26 and so I'm thinking about the South Atlantic's, you know, fleet
27 reports, stuff like that, just a breakdown of, you know, basically
28 how the fishery is performing and how it's responding to the
29 updated ABC and OFLs. I think that would be a useful thing, and
30 probably start my support.

31
32 **CHAIRMAN ALLEN:** Would you be willing to make an add-on sentence
33 to this motion, because I think it's okay to do it here.

34
35 **MR. MONCRIEF:** Yes, and, I mean, I think in general, and I'm not
36 going to get into the specifics of what can it include, but I would
37 say that the SSC recommends prioritizing, and what do we call them
38 now? Interim assessments, and is that --

39
40 **MR. RINDONE:** Interim analyses.

41
42 **MR. MONCRIEF:** **Interim analyses and other pertinent evaluations of**
43 **the stock on an annual basis.** Just something general like that.

44
45 **CHAIRMAN ALLEN:** Okay. Thank you, Trevor. I've got Steve, and
46 then Luiz, and then Jim Nance.

47
48 **DR. MICKLE:** I have to be able to accept that.

1
2 **CHAIRMAN ALLEN:** Thank you, Paul. Paul, do you accept this
3 amendment?
4

5 **DR. MICKLE:** It just seems so different. It seems like a separate
6 motion, procedurally.
7

8 **CHAIRMAN ALLEN:** Okay, and we can take it out of here and take it
9 up after.
10

11 **DR. MICKLE:** It doesn't matter if it's separate, Trevor, but you
12 made a statement where you feel like you would be more comfortable
13 if it was included in this motion.
14

15 **MR. MONCRIEF:** A little bit contingent, yes.
16

17 **DR. MICKLE:** It is contingent? Then, yes, it's fine.
18

19 **MR. RINDONE:** Paul, procedurally, I mean, essentially what you
20 guys are saying, by having these things in the same motion, is
21 that one is kind of predicated on the other.
22

23 **DR. MICKLE:** May I respond? Yes, and I agree. It's just the first
24 part is very SSC scientific-based, and the second part -- It is
25 scientifically-based, but, perceptually, the way that it reads, it
26 seems more of a management style, and I want to keep it -- I don't
27 think we should do that kind of stuff, but I understand that the
28 valuation is on an annual basis, and maybe one more sentence of
29 why, based on the -- I'm going to think about that. **Anyway, it's**
30 **fine how it is for now.**
31

32 **CHAIRMAN ALLEN:** Okay. All right. Thank you, Paul. I've got
33 Steve next.
34

35 **DR. SAUL:** Thank you, Mr. Chair. I just had a quick follow-up
36 question for Assane. I was curious to know, or I would be curious
37 to know, when NMFS does put these mid-year emergency rules in
38 place, and when catch is increased, do we know what -- Or is there
39 past research, or evidence, to show how that has affected the
40 fisher behavior, and specifically the sort of IFQ fisher behavior,
41 and market conditions? In other words, to some of the concerns
42 that the economists and other social scientists in the room have
43 justifiably raised, have we seen that play out in the past?
44

45 **DR. DIAGNE:** Thank you. No published research yet, but we have
46 some evidence, based on the annual IFQ reports, and, I mean,
47 looking at this, adding quota to the IFQ system disrupts, of
48 course, the quota market, the share market.

1
2 I mean, the short of it is some folks would have too many annual
3 allocation shares, and typically they don't know what to do with
4 it, and so, for that year, some of that fish would remain uncaught,
5 and also the price of annual allocation would be depressed.

6
7 We have seen that, but, that being said, the majority of IFQ
8 holders that came to the council podium recognized that potential
9 consequence, but still were in favor of doing something on the
10 grounds of the economic benefits that the for-hire sector would
11 get, and so their recommendation would be let's give enough fish
12 to extend the for-hire sector season, but let's not go overboard
13 and do it too much, to mitigate, or limit, the disruptions in the
14 quota market.

15
16 **CHAIRMAN ALLEN:** Excellent.

17
18 **DR. SAUL:** Thank you.

19
20 **CHAIRMAN ALLEN:** Thank you. Luiz.

21
22 **DR. BARBIERI:** Thank you, Mr. Chairman. Well, a couple of things.
23 One, I completely understand the economic perspective on this, and
24 we're happy to have economists and social scientists part of this,
25 because a lot of us don't really understand all the details of
26 this part, and having your contribution to the committee is
27 invaluable.

28
29 Having said that, unless I'm misunderstanding what I'm hearing,
30 this discussion is more a management discussion, in terms of
31 setting policy that would either, I mean, maximize, right, yield
32 and/or revenue for one sector versus the other, right, and so IFQ
33 holders are really in the commercial sector.

34
35 The council is trying to be responsive to the charter sector. I'm
36 not passing judgment one way or the other, but I think this is a
37 little outside. I mean, I appreciate that -- I wish they had
38 consulted with you ahead of time, to understand the consequences
39 of this, but they didn't, and they decided to proceed with this,
40 to expedite the process.

41
42 In that case, I feel that we're leaving them in a bind, where we
43 did not -- Making a recommendation that is based on our evaluation
44 of the assessment at the time that we considered the best
45 scientific information available.

46
47 One more thing, Mr. Chairman, and what I think is critical here is
48 that either our perception of the productivity of the stock has

1 changed fundamentally, right? No? What I'm saying is it looks
2 like the ability, given observed levels of recruitment to produce
3 higher yields, has changed. The production of landings, harvest,
4 that's sustainable for this is actually much higher than we thought
5 it was, and that's what I'm saying productivity, right?

6
7 It has to assume that there is enough reproduction from SSB, and
8 there is enough survival of recruits to actually recruit into the
9 fishery, and so this is what I'm thinking about, you know, in terms
10 of stock productivity, and now we are saying, well, the stock --
11 Some of us are discussing that we don't think that it can produce
12 this much, right, and that, to me, is a critical issue, and I think
13 we need to make a separate motion that really encourages the
14 council to work, and, of course, Dr. Simmons is in the room, and
15 she's our representative within the SEDAR Steering Committee, to
16 prioritize a new assessment of red grouper.

17
18 I do think that, at this point, we have questions about this
19 assessment that couldn't be resolved within the constraints of an
20 operational assessment, and so the team did what they could. They
21 looked high and low to find out why the results were coming out
22 the way that they did, and they couldn't find anything wrong with
23 it.

24
25 We couldn't either, right, and we accepted it, and so, until we
26 push the reset button, and we do an analysis, and we look at all
27 the metrics, all the inputs of this, we're not going to know what's
28 going to happen, but, to me, this is critical, because you're
29 really talking about we always landed, right. this much, and that's
30 what the stock was able to produce, and now we're saying, no,
31 actually, it can produce quite a bit more. Until we resolve that,
32 I think we're in a bind.

33
34 **CHAIRMAN ALLEN:** Thank you, Luiz. I've got Jim Nance, and then
35 Paul.

36
37 **MR. NANCE:** Thank you, Mr. Chair. In listening to this, you know,
38 it seems like the first motion failed really because of the
39 emergency rule, and not because of OFL and ABC recommendations.
40 My only issue with this one is we're now recommending higher OFL
41 and ABC, with using a three-year projection, and, like we're
42 saying, these numbers will stay on the books until we have an
43 assessment, and so that's my concern on this one. Thanks.

44
45 **CHAIRMAN ALLEN:** Go ahead, Ryan.

46
47 **MR. RINDONE:** So, just quickly to that, if you guys are getting
48 annual interim analyses, which seems to be the goal of the second

1 sentence there, those interim analyses have the ability to modify
2 the ABC, and so, if things are looking like they're more rosy,
3 less rosy, however, you know, the garden shakes out, if you will,
4 then the ABC could be so modified, based on those interim analyses,
5 and you guys could recommend an updated ABC, based on those, to
6 the council when they come.

7
8 **CHAIRMAN ALLEN:** Okay. Thank you. Paul, and then Ralph.

9
10 **DR. MICKLE:** Yes, and I would just request to the chair a vote. I
11 think we've talked about it enough. This is a request from the
12 council. I suggest we do it. We're giving a scientific
13 recommendation, and fishing above a million pounds, and the
14 concerns there, that's a management discussion. It has no place
15 here, in my opinion. Thank you. I call for vote.

16
17 **CHAIRMAN ALLEN:** Thank you. Ralph, quickly.

18
19 **MR. TOWNSEND:** So a question and a comment. The question was there
20 was some discussion about changing the date to 2026 to 2028 early
21 in this discussion.

22
23 **CHAIRMAN ALLEN:** The motion on the floor is 2025 to 2027.

24
25 **MR. TOWNSEND:** Okay, and so that was not. Okay. So let me say
26 that my broad concern is it seems to me that the council may be
27 trying to be nimble, but I think the council is being reckless,
28 and there's a difference, and that is jumping in and saying, at
29 the first opportunity, we're going to do something on an emergency
30 basis, without doing any analysis of the impacts, when the
31 emergency is, oh, part of the fleet is asking for it. A lot of
32 the time the fleet is going to ask for things, and I don't think
33 that makes an emergency.

34
35 **CHAIRMAN ALLEN:** Thank you, Ralph. Okay. Let's call this to a
36 vote. Jessica, we'll do a roll call vote again, please.

37
38 **MS. MATOS:** David Griffith.

39
40 **DR. GRIFFITH:** Yes.

41
42 **MS. MATOS:** Tiffany Hopper.

43
44 **DR. HOPPER:** Yes.

45
46 **MS. MATOS:** Jason Adriance.

47
48 **MR. ADRIANCE:** No.

1
2 **MS. MATOS:** Daniel Petrolia.
3
4 **DR. PETROLIA:** No.
5
6 **MS. MATOS:** Harry Blanchet.
7
8 **MR. BLANCHET:** Yes.
9
10 **MS. MATOS:** Andrew Ropicki.
11
12 **DR. ROPICKI:** Yes.
13
14 **MS. MATOS:** John Mareska.
15
16 **MR. MARESKA:** No.
17
18 **MS. MATOS:** Dave Chagaris.
19
20 **DR. CHAGARIS:** Yes.
21
22 **MS. MATOS:** Luiz Barbieri.
23
24 **DR. BARBIERI:** Yes.
25
26 **MS. MATOS:** Jack Isaacs.
27
28 **DR. ISAACS:** Yes.
29
30 **MS. MATOS:** Steven Saul.
31
32 **DR. SAUL:** Yes.
33
34 **MS. MATOS:** Will Patterson.
35
36 **DR. PATTERSON:** No.
37
38 **MS. MATOS:** Trevor Moncrief.
39
40 **MR. MONCRIEF:** Yes.
41
42 **MS. MATOS:** Jim Nance.
43
44 **DR. NANCE:** Yes.
45
46 **MS. MATOS:** Ralph Townsend.
47
48 **MR. TOWNSEND:** No.

1
2 **MS. MATOS:** Paul Mickle.

3
4 **DR. MICKLE:** Yes.

5
6 **MS. MATOS:** Mike Allen.

7
8 **CHAIRMAN ALLEN:** Yes.

9
10 **MS. MATOS:** The motion carried twelve to five with two absent.

11
12 **CHAIRMAN ALLEN:** The question carries twelve to five. Okay. Thank
13 you. Let's take a ten-minute break, and we will come back at 11:15
14 Eastern.

15
16 (Whereupon, a brief recess was taken.)

17
18 **REVIEW: SEDAR 68 UPDATED PROJECTIONS FOR SCAMP AND YELLOWMOUTH**
19 **GROUPE**

20
21 **CHAIRMAN ALLEN:** Okay, gang. Let's get started. Okay. Our next
22 item is Number VI, Review of SEDAR 68 Updated Projections for Scamp
23 and Yellowmouth Grouper. We are going to start with a presentation
24 from Dr. Froeschke. Do we want to do the terms of reference, Ryan,
25 or the scope of work?

26
27 **MR. RINDONE:** I would going to say -- Terms of reference?

28
29 **CHAIRMAN ALLEN:** Yes, and scope of work, please.

30
31 **MR. RINDONE:** Okay, and so Dr. Froeschke is up at the podium to
32 regale you with a brief overview of council actions and requests
33 since the SEDAR 68 scamp and yellowmouth projections were last
34 reviewed and recommended, and Dr. Skyler Sagarese is on the line
35 to provide updated catch projections for these species, which were
36 assessed together in SEDAR 68.

37
38 These projections have been updated, at the council's request, to
39 include finalized landings for 2021 through 2023. Those were
40 previously interim years that were informed by averaging the prior
41 years, and these have been done using FMSY proxy values at 30
42 percent and 40 percent SPR, and so, based on this request, the
43 projections result in a change in stock status for scamp and
44 yellowmouth under a 40 percent SPR, such that the complex is
45 considered to be overfished and undergoing overfishing, and this
46 is because the caps limits haven't yet been reduced, and so then
47 the stock has been sustaining a higher than estimated to be
48 sustainable harvest level in the interim years.

1
2 These projections at 40 percent SPR will be projected at F rebuild,
3 and so a rebuilding scenario to rebuild the stock from 2026 through
4 2035, and projections under both proxies will assume a 54 percent
5 reduction in landings from the 2021 to 2023 average for the 2026
6 interim year, in keeping with the framework action that John is
7 going to tell you about that's being developed by the council to
8 reduce fishing mortality ahead of the more comprehensive Reef Fish
9 Amendment 58A.

10
11 You guys should consider this bucketful of information and
12 recommend a revised OFL and ABC under each scenario for the council
13 to consider, since the setting of the MSY proxy is still a council
14 prerogative.

15
16 **CHAIRMAN ALLEN:** Thank you, Ryan. John, proceed please.

17
18 **DR. FROESCHKE:** I've just put together three or four quick slides,
19 and just to kind of give you an update of what has happened. Yes,
20 this has taken a long time, but it's not necessarily just idle
21 hands. There's a lot of pieces, and so we're trying to -- The
22 council is trying to learn as we go on how to do this, which we're
23 still trying to figure that out, and so just to kind of give you
24 an update and frame what the projections information you're going
25 to receive -- How that fits into this.

26
27 Just kind of the brief review on this, and there's the other
28 shallow-water grouper complex, and that's four species, two of
29 which are scamp and then yellowmouth grouper, which is very
30 difficult to distinguish from scamp, and so that was assessed as
31 one stock in the Gulf.

32
33 That was the first stock assessment that was ever attempted for
34 this stock, and it resulted in review as both the research track
35 and the operational assessment. You all reviewed and provided OFL
36 and ABC advice for those two species as a single management advice,
37 based on this, and we can kind of go over the timing of that.

38
39 The way it's currently managed, the shallow-water grouper stock,
40 there's one OFL, or one ABC, and I won't even touch the OFL.
41 That's a different issue. That also includes black grouper and
42 yellowfin grouper.

43
44 Collectively, those are put together, and that's how the catch
45 advice is managed now, and so, in theory, the current ACL is
46 710,000 pounds, I think, and so any one, or some combination of
47 those species, so long as it's under that threshold, is
48 permissible.

1
2 The scamp catch limits are very much lower than what that is.
3 They're on the order of 200,000 pounds, relative to the 700,000
4 for this aggregate. The scamp are the majority of the aggregate,
5 and so kind of how it works is scamp are most of the catch, say
6 300,000 pounds historically, on average, and black grouper is about
7 30,000 pounds, and the other two are about a thousand pounds, and
8 so they're virtually negligible.

9
10 The reason that the ACL is so high was, when this put together, it
11 was based on a landings approach, our Tier 3 kind of system. Well,
12 at the time, we thought black grouper landings were much higher,
13 and, if you recall -- If you've been on the SSC for some time, we
14 kind of went through that exercise, and so we thought that they
15 were probably 300,000 pounds, on average, but now we think they're
16 probably more like 30,000 pounds, and so not necessarily a stock
17 decline, but just the way that the landings were tabulated,
18 potentially partitioned with Monroe County, and other things.

19
20 Had we known that, that other shallow-water grouper complex level,
21 which has been in place since 2012, I think, and we've never
22 changed it, we were probably much lower.

23
24 Both of those, you did provide new catch advice for black grouper
25 and yellowfin grouper, based on updated information, and so we're
26 going to work on-- We're working towards that in this amendment,
27 what we're calling 58A, and so, as part of this Amendment 58A, the
28 council has looked at the previous catch advice, which is based on
29 FSPR 30, okay, and they've had this back-and-forth discussion,
30 which is sort of unrelated to all the vagaries of this, and they
31 said, well, we would really appreciate if you would all take a
32 look at FSPR 30 and just provide us new catch recommendations on
33 either scenario, perhaps, and some pros and cons of what are the
34 risks, or potential gains, of either recommendation.

35
36 As part of that, we wrote a letter to the Science Center and said,
37 hey, can you do some new update projections, and part of this was
38 the terminal year was a long time ago, and I think it was 2020,
39 and so we tried to update the projections, as reasonably as we
40 could, and replace the gap years with landings, where we could.

41
42 Since we never implemented catch level reductions, those gap years
43 catches were higher than we initially estimated they would be, and
44 so, if you kind of just fast-forward how that would work, it's
45 going to drive the catches down, and the projections, for whichever
46 one you do.

47
48 In terms of how we -- Why is this taking so long in the management,

1 and, well, when we did this, and we got separate catch levels for
2 scamp, essentially there's no way -- Well, one, it's in a different
3 currency, and so that was an FES, and the other species would still
4 be in MRFSS, and there really wasn't --

5
6 Given it was so much lower, there's not a straightforward way to
7 ensure that you bring down the catches of scamp to prevent
8 overfishing as part of this complex, and so, well, we're going to
9 have to split this complex likely into two, the black grouper and
10 yellowfin and the scamp and yellowmouth.

11
12 Well, that requires changes to the IFQ system, how all that's done,
13 which is a fairly intensive lift, and we worked -- We had a lot of
14 discussion with SERO, and, you know, they said, well, that's going
15 to take at least until 2027, in order to do that, just because you
16 have to reprogram the IFQ and all that, and so the council
17 discussed that they were concerned that these recommendations are
18 just dying on the vine.

19
20 They directed the staff to work on sort of a -- I won't call it an
21 interim, because that's a special term, but a framework for 2026,
22 to try to get some of these catch reductions in place while we
23 complete work on Amendment 58, and so, like everything we do,
24 there's no straightforward way to do that, because the current one
25 is a complex, and it's based on a different currency.

26
27 What we did is we tried to figure out, well, on average, your
28 recommendations were about a 54 percent reduction, based on some
29 basic math, and so we said, well, let's take that and develop some
30 options on how we could, on a percentage basis, provide options to
31 reduce it by about that much, and so that's what this framework is
32 going to do.

33
34 We're going to try to get that done for 2026, or at least shortly
35 after, so we can begin that and finish work on this reef fish
36 amendment that will consider catch limits, status determination
37 criteria, like SPR proxy, and a recreational season. Let me look
38 at my bullets. I think hopefully I covered most of -- Yes. Okay,
39 and I think I covered that.

40
41 This is just kind of for your information. I mentioned that this
42 has taken a very long time, but it isn't just idle hands, and so
43 we first looked at the research track assessment in 2021, took a
44 look at that, and provided a lot of feedback. Remember those are
45 intended to be you do this, and then it was just like carry forward,
46 but there were a lot of changes, and so that operational assessment
47 did take some time.

1 We reviewed that in 2022, accepted the assessment, provided catch
2 advice, and the stock status, at the time, was not overfished, and
3 not overfishing, but, if you looked at the trend of biomass, it
4 was declining, and it had been declining toward -- Or MSY was
5 perhaps below it, depending on how you set that up, for a long
6 time.

7
8 The tea leaves suggested that, if you continued to fish at that
9 level, you were going to drive down the stock. Well, we've
10 continued to fish at that level.

11
12 We did, in this interim period -- The gap between that green dot
13 and those orange dots, that's where we kind of started working on
14 the amendment, to sort of flesh out all these different ideas and
15 these concepts of what it takes to change the IFQ system, which
16 we've really never done, the programming, and how we were going to
17 deal with all these things, and so that took some time.

18
19 We began to understand that, yes, we're going to have to modify
20 black grouper management. The stock assessment for black grouper
21 was based on 2010. Henceforth, we can realized, the collective
22 we, that it probably wasn't as reliable as we had hoped at the
23 time, and so it's never been used since then, and, in fact, you
24 know, FWC is working with Bill Harford to develop an MSE-ish thing
25 to try to work on that.

26
27 We went through a few iterations, and remember there were some
28 data challenges with the black grouper, and we did get -- We worked
29 with you all to get updated Tier 3 management, OFL and ABC
30 recommendations. This OFL, there's not an OFL. Black grouper is
31 a jointly-managed stock, and so splitting that is problematic, and
32 so there's that portion.

33
34 That's sort of this interim period, and kind of fast-forward to
35 last fall, and we started working on this framework action to do
36 this, and I'm going to call it temporary, the short-term, measure,
37 while we work on the long-term measure, and so that's where this
38 request came back to take a look -- For you all to take a look at
39 this SPR proxy, which has come up in other species, as you're well
40 aware.

41
42 That's kind of where we're at, just to give you an overview, and
43 there's been a lot of things happening, even though it hasn't
44 transformed into management, but that's why, and so you'll see the
45 presentation on the projections. There's a few different details
46 in there for you all to consider, and we'll look forward to your
47 advice.

1 **CHAIRMAN ALLEN:** Thank you, Dr. Froeschke. Okay, and so next we'll
2 go to the projection presentation. Dr. Sagarese, please, and the
3 floor is yours.

4
5 **DR. SKYLER SAGARESE:** I'm here. Can you hear me?

6
7 **CHAIRMAN ALLEN:** We can.

8
9 **DR. SAGARESE:** Okay. Great. Thank you so much. I mean, John
10 kind of set the stage really well, but, just to reiterate, this
11 was the first research track. Actually, it started in 2019 for
12 stock ID and yellowedge -- Sorry. Scamp and yellowmouth grouper
13 ultimately were considered a complex, because there were a lot of
14 issues with misidentification throughout a range of the data
15 sources, but, overwhelmingly, the data comes from scamp. The
16 landings are primarily scamp, and so, for here on out, and in all
17 the documentation, you'll see us refer to scamp, but what we really
18 mean is our scamp and yellowmouth grouper complex.

19
20 In terms of the assessment result, the operational assessment was
21 reviewed back in September of 2022. I think final catch advice,
22 according to my records, was set in March of 2023, and, shortly
23 thereafter, the IPT started, but, as John mentioned, there's been
24 a lot of different moving parts of trying to get the advice of
25 this assessment implemented, and here we are in May of 2025, and
26 this assessment is still kind of sitting on the shelf.

27
28 I just wanted to highlight that we have developed just essentially
29 one-pager for executive summaries of our assessments. This one is
30 for scamp, and we've been putting these up on the SEDAR website
31 since SEDAR 61, and so, just to kind of focus in on the projections
32 here, just a review of SEDAR 68, our terminal year was 2020.

33
34 In that situation, and, as Katie mentioned earlier, the OFL and
35 ABC, and so catch advice was set from projections that were using
36 the recent mean recruitment from the last ten years, where they
37 were estimated, and so, in the top-right, you'll see that -- That's
38 just a plot of the recruitment over time, for the entire assessment
39 period, and that assessment started in 1986, and the red line is
40 the recent recruitment.

41
42 When we reviewed this assessment a couple of years ago, there was
43 a lot of discussion about concerns with that's a big drop from the
44 average recruitment, and that was one of the reasons behind setting
45 the OFL and ABC based on this recent mean recruitment trajectory.

46
47 The table below that is the final catch advice that was recommended
48 at that time. We had started our management in 2024, and the

1 projections were based on the 2024, 2025, and 2026. This was the
2 OFL and the ABC that was recommended from that March 2023 meeting.

3
4 The intent is that these one-pagers ultimately -- Whenever these
5 assessments are finalized, this would be where you could come and
6 see all these specifications, and, at the top-right, you can see
7 that, you know, our goal is to show when this process was
8 completed. In this case, it was March of 2023 for SEDAR 68, up
9 until this new request.

10
11 In December, we received a request to update our projections for
12 SEDAR 68, and pretty standard. Whenever there's new information,
13 it's definitely a straightforward process to provide updates, and
14 I will touch on a lot of those differences coming up, but,
15 basically, just to reiterate what John said, that we were requested
16 to provide both at 30 percent SPR and 40 percent SPR projections
17 for the scamp and yellowmouth complex and use the most recent
18 finalized data possible.

19
20 This advice, as John mentioned, there is a sort of a short-term
21 framework under development. This catch advice that we're showing
22 today would be to help try to get Amendment 58A over the finish
23 line, once all those complex issues get figured out.

24
25 I think this is kind of pretty standard, a standard table that we
26 currently have in our assessment reports that summarize all the
27 different settings that Katie talked about, Katie and Ryan, in
28 their presentation, and so everything in red -- In this case, these
29 are the only changes that have been made since you saw the
30 projections in March of 2023.

31
32 Everything else is the same. We basically assume that recent
33 trends in selectivity and retention have remained consistent.
34 Relative F is from those last three years, the average from those
35 last three years. Again, as I mentioned, recruitment for catch
36 advice was based on that recent mean recruitment, which is much
37 lower, and cause for concern, and -- Well, I should say, luckily,
38 for this complex, currently there is no commercial and recreational
39 allocation issue, and so that's one less problem we will need to
40 discuss during this presentation.

41
42 Basically, the only major changes that have been made in this
43 projection is we have updated the interim landings, 2021, 2022,
44 and 2023, used all finalized landings estimates for all of our
45 commercial and recreational fleets, and 2024 and 2025 are based on
46 the average of 2021 to 2023 for each fleet, and then, as John
47 mentioned, for 2026, we've taken that average and knocked that
48 down by 54 percent, essentially implementing what will be done in

1 the framework action.

2
3 I think this might be a record of having six interim years.
4 Normally we would only have maybe two, or maybe three, but the
5 fact that this assessment ended -- The data ended in 2020, and now
6 we're setting projections and starting management for 2027, and
7 that's a huge gap, that I don't think we've ever seen, and so just
8 keep that in mind.

9
10 At the request of the council staff, here is just a table of the
11 updated landings that we've included in our projections. Just a
12 reminder that I've provided the recreational landings in weights
13 here, but, in our stock assessments, we input our commercial
14 landings as weights and our recreational landings as numbers, and
15 so these are the data that went into our projections, just for
16 your record.

17
18 This is going to be similar to the format you've seen in the past
19 for the scamp output. The difference is, again, we're now starting
20 our management in 2027, and we now have the six years of interim
21 catches that we fixed in the model, and normally we would not show
22 those interim years, but, because we've had so many, and because
23 of the concerns over how the stock status may have changed, we're
24 showing all of these metrics for 2021 to 2026 as well.

25
26
27 Just to orient you to anything below the thick line at the bottom,
28 that's the projections. Above that line is our fixed catches that
29 we've put in the model, and so, basically, we've added whatever
30 data we had, and, in this case, just landings, and we've
31 reprojected the model.

32
33 In the recruitment, you'll see it's 900,000 fish, and so that's -
34 - This is all based on those recent mean recruitment, which is
35 lower than what we've seen in the past, and, you know, the big
36 take-home is, in this case -- Here, we're showing the 30 percent
37 SPR projections, which you can see that we're achieving our target
38 of one in the projection, to make sure that's working, but what's
39 concerning here is that, in our interim years, and so 2021 through
40 2026, we've actually had a -- There's evidence that we've been
41 overfishing.

42
43 Again, it's important to note that 2024, 2025, and 2026 are based
44 on average -- Or assumptions about what the landings would have
45 been, and so these are preliminary until we get final data, but I
46 think the concern here is, even for this 30 percent SPR, the
47 fishing rates have been a little higher than, you know, what the
48 model has projected, and so, on the rightmost columns, that would

1 be your estimates of OFL and OY. For this case, OY is 90 percent
2 of our MSY proxy.

3
4 All of these yields that you'll see are in million pounds gutted
5 weight, and so same setup, but, in this case, this is the ABC
6 projection. Again, this is for the 30 percent SPR proxy, where
7 ABC is defined as fishing at 75 percent of our fishing mortality
8 that achieves 30 percent SPR.

9
10 The numbers up above the line are the same, because, again, that's
11 the fixed period, but, on the bottom, below that number, starting
12 in 2027, the rightmost column would be your yields for that ABC
13 projection, for the 30 percent SPR, and so about 250,000 pounds,
14 which is a lot lower than what's currently on the books, but,
15 again, it's not quite apples-to-apples, since this is coming from
16 a stock assessment, and that initial catch limit was set using an
17 assumption of average landings from a reference period that was
18 thought sustainable, and so just keep that in mind.

19
20 The difference here is now we're projecting using the 40 percent
21 SPR, and this was the SPR proxy that was recommended last time by
22 the SSC, for a variety of different reasons.

23
24 In this case, the same kind of setup, where we've got our
25 projection period starting in 2027. The recruitment assumption is
26 coming from recent mean recruitment, which is lower than what we've
27 seen in the past, and one thing you'll note immediately here is
28 that, in those interim years, basically five of the six years,
29 overfishing is occurring.

30
31 Again, we haven't been able to lower those yields, as the
32 assessment, you know, had suggested would need to be done, and so
33 we've seen much higher fishing rates, and now we're starting to
34 see that these projections suggest that, in 2025, we actually drop
35 below MSST, and remain there for the first few -- Or for the short
36 term from this projection for the OFL.

37
38 Again, it's really important here to think about that assumption
39 of what recruitment we're using, because that plays a pretty
40 important part here, and so this is the 40 percent SPR. This is
41 basically the equivalent of the projection that you recommended in
42 March of 2023, but the concern is that, with this, the stock is
43 actually projected to be overfished, because the catch levels have
44 just been much higher in the last few years, based on these
45 projections.

46
47 Again, final data used through 2023, and then three years of
48 assumed landings, which you can see that that 2026 is highly

1 reduced, but that's because the framework will reduce the current
2 catch advice on the books.

3
4 Okay, and here is the ABC projection, and what we see is, even
5 though we have reduced yields, as you can see in that rightmost
6 column, we still are projecting that the stock is going to go below
7 MSST in 2025, and, in this case, under these conditions, would go
8 above MSST in 2030, and so, you know, this is not quite -- I'm not
9 sure this situation has ever come up, where we're actually looking
10 at changes in status in the interim years.

11
12 We've always been a little bit closer, in terms of implementing
13 the management. This is just a really rare case, where there's
14 been a real delay, and, unfortunately, we're seeing some major
15 changes in these outputs. You know, the catches are getting lower
16 and lower, but, again, we've had a few years there of catches that
17 were higher than should have been.

18
19 Because of these results, we did provide a projection for an F
20 rebuild, and so the stock would rebuild to the target SSB by 2035,
21 and, in this case, you can see that in that column, about the sixth
22 column, the ratio of SSB to SSB SPR 40 percent. We would rebuild
23 to that target value by 2035, but, in this case, the yields are
24 much, much, much lower in this F rebuild scenario. All of these
25 projections so far, again, are using that assumption of recent
26 mean recruitment being low, based on recent trends.

27
28 We did want to provide some initial insight, given the summary of
29 projection settings that we've used in the last few years, to just
30 reiterate that, for scamp, this is one of those stocks where we
31 actually have deviated, in terms of getting our OFL projections
32 from recent mean recruitment.

33
34 What we're showing here is the projections where we would have
35 obtained recruitment in our projection period from the spawner-
36 recruit curve, and so kind of more in line with what's been done
37 for some of the other stocks.

38
39 In this situation, and, again, the same settings, and we're
40 starting in 2027. This one is based on a 30 percent SPR, and what
41 we would see is, as you would expect, our recruitment time series,
42 here in this case, as opposed to about 900,000 age-zeroes each
43 year, we're seeing over a million, and so there is a big difference
44 in that recruitment trajectory, and that leads to slightly higher
45 OFL estimates in these cases.

46
47 The table at the bottom is just a comparison of the OFL that
48 essentially is what was used last time, using the recent mean

1 recruitment, the first column, and the next one is that comparison
2 of what those values would have been had we obtained recruitment
3 from the spawner-recruit curve, as we're showing right here, and
4 so, you know, it's about 60,000 pounds, for example, in 2027, but,
5 for a species such as scamp, where that is actually quite a big
6 difference, in terms of the catches.

7
8 Just for comparison's sake, we wanted to also provide these
9 scenarios, in case the SSC -- In case you would like to maybe re-
10 discuss this assumption and how to set the OFL, and this is the
11 same output, but for the 40 percent SPR.

12
13 Again, the same assumption of recruitment now coming from our
14 spawner-recruit curve, being predicted from the spawner-recruit
15 curve, and, in this case, you'll see the same sort of difference,
16 where it's about 40,000 pounds in that 2027 year, but there is a
17 slight difference, because the importance of those recruitment
18 estimates does drive what is actually coming out of our catch
19 advice, and so, with that, that's all I have, and I'm happy to
20 take any questions.

21
22 **CHAIRMAN ALLEN:** Okay. Thank you, Skyler. We appreciate that
23 summary for the group. We're going to start the conversation here,
24 and then we'll take a break for lunch, but let's open it up for
25 questions.

26
27 **MR. RINDONE:** Mr. Rindone's comment is not audible on the
28 recording.)

29
30 **CHAIRMAN ALLEN:** Yes, and I think that's a good suggestion, and so
31 why don't we do that? Let's go ahead and grab our lunch, and we'll
32 pick up the conversation in say ten minutes, and so we'll start
33 back at 11:55. Thank you.

34
35 (Whereupon, a brief recess was taken.)

36
37 **CHAIRMAN ALLEN:** All right, everyone. We're going to go ahead and
38 get started here and have a working lunch. We've got a packed
39 agenda. Okay, and so we'll start now with the discussion of the
40 scamp and yellowmouth grouper, and I will open it up for questions.
41 We've got a lot to consider here, and so questions and discussion.
42 Dave, please.

43
44 **DR. CHAGARIS:** Thank you. Skyler, I have a question about the
45 fishing mortality rates for the years 2021 through 2025. How were
46 those arrived at?

47
48 **DR. SAGARESE:** Yes, and so those are coming from the fixed landings

1 that we put into the assessment, and so we're telling the model
2 what the landings were, and it's estimating those fishing mortality
3 rates based on the landings that we have, the information, the
4 selectivity, the retention. That's where those are coming from.

5
6 **DR. CHAGARIS:** Okay. Okay. That's what I thought. Thank you.

7
8 **CHAIRMAN ALLEN:** Other comments, or questions? Luiz, please.

9
10 **DR. BARBIERI:** Thank you, Mr. Chairman. Actually, my question is
11 more general. I'm trying to -- As I eat lunch, I'm trying to kind
12 of trying to identify what the ask is here, and so, you know, I'm
13 trying to break it down.

14
15 We have been provided new projections, with updated landings,
16 right, and, before what had been estimated now have been updated
17 to actual landings, right, and, also, we've been presented with
18 two scenarios of SPR proxies of MSY, and so do you want to handle
19 those separately or together?

20
21 **CHAIRMAN ALLEN:** Are there specific questions about the updated
22 landings we need to discuss? I'm willing to take them one at a
23 time, but I'm just thinking -- Okay. Keep in mind that our goal
24 here is to decide the revised projections and recommend a revised
25 OFL and ABC under the two scenarios the council has asked us to
26 do.

27
28 The way that they obtain this is to add in the new landings since
29 2020, and ran the projections that way, and we also need to talk
30 about recruitment in a bit, right, and they ran two scenarios, one
31 with the low recent recruitments and one with the spawner-recruit
32 curve, right, and so all of that is on the table. Ralph, please.

33
34 **MR. TOWNSEND:** Mine is really a two-part question. The first part
35 is what is the implications of what we're doing, and the second
36 part is what's the proposal? What are we looking at for the
37 interim change which is going to deal with the underlying issue of
38 overfishing? I mean, I don't understand the context for what we're
39 doing, and so I'm interested in both of those things.

40
41 **CHAIRMAN ALLEN:** John, do you want to weigh-in?

42
43 **DR. FROESCHKE:** I'll try. The first part I think is the SPR
44 recommendation, and considerate of SSC's previous recommendations
45 for species of similar life history, other groupers, whether you
46 feel confident that remains the appropriate recommendation or not.

47
48 If so, you know, what's the rationale for that? If you were to go

1 with something more aggressive, what might be the potential, you
2 know, outcomes, or negative consequences, and then what was the
3 second part of it?

4
5 **MR. TOWNSEND:** You discussed that the context for this is, and
6 it's an interim -- Some sort of interim process to reduce the
7 overfishing that's occurring. Can you provide a context? Why are
8 we overfishing so badly, and what are we going to do in the interim
9 to solve that problem?

10
11 **DR. FROESCHKE:** Okay, and so this is -- What we have here would be
12 the basis of the long-term solution, and so what we call the
13 interim measure is that this has taken so long to materialize that
14 we're trying to do something in the interim to reduce the fishing
15 mortality in the short-term, such that these are not further
16 eroding the stock status and those kinds of things, but this is
17 the basis of the long-term solution, we hope, and that, if put
18 into place, we would expect to grow the stock such that it can
19 support MSY and all that.

20
21 **MR. TOWNSEND:** So, Mr. Chairman, but so the interim measures --
22 You're asking us to assume that the interim measures actually are
23 effective, because we're building those interim measures into our
24 assumptions, and is that -- Am I understanding that correctly,
25 and, if I am, what are the interim measures that we should be
26 confident about?

27
28 **DR. FROESCHKE:** Okay, and so that would be -- In the way that you
29 would see that -- Skyler, or Jess, could you go back up to the --
30 Keep going. That one. The way that the interim measures would
31 work is, if you look at this column in 2026, you'll see the F over
32 SPR 30. In 2025, it's 1.110, which is consistent with overfishing.

33
34 What we did is, based on the reductions that this interim document
35 put in place for 2026, we're trying to reduce the fishing
36 mortality, what we think the estimate in reduced fishing mortality
37 would be as a consequence of reducing those landings.

38
39 There are a number of challenges with that. One, that it's not
40 perfect. It's a multi-species complex, and we're trying to do
41 that. We can't control the exact composition of the catch. The
42 other thing that's difficult about that is the reductions are
43 actually in a different data currency, and we've kind of been
44 through that, and so mapping that to the actual of what's this,
45 and then the corresponding -- All of that is there's some
46 assumptions in that.

47
48 What we tried to do here was the best estimate. We are confident

1 that it would substantially lower the fishing mortality in 2026,
2 if we did that relative to that we didn't, and so, if we didn't do
3 that, the projections in 2027 and beyond would be lower still.

4
5 **CHAIRMAN ALLEN:** Luiz, please.

6
7 **DR. BARBIERI:** Thank you, Mr. Chairman. If we try to break this
8 down into pieces, right, so one of the scenarios that Skyler
9 presented was showing projections at F rebuild, and I'm trying to
10 get clarification here that, even if we use a 40 percent SPR MSY
11 proxy, we don't have the determination that the stock is officially
12 overfished, because the fishing year 2025 is still ongoing. Is
13 that correct, Ryan?

14
15 **CHAIRMAN ALLEN:** John.

16
17 **DR. FROESCHKE:** I will try not to make this worse than it is. What
18 we have right now, this is managed currently as part of the
19 shallow-water grouper complex. The status determination criteria
20 are based on SPR 30. We don't really have a -- We only have a
21 stock assessment for one of those, and so we don't really have a
22 way to take the stocks as we have here and say, yes, it's
23 overfished, based on what we have on the books.

24
25 The practical implications are we would modify this determination
26 criteria as part of this amendment. If we weren't considerate of
27 that, the way I would see it play out is that you would implement
28 catch levels, and, if they weren't consistent with like the
29 rebuilding or whatever, you would immediately go into overfished
30 status, because you would specify status determination criteria
31 that your yield stream didn't support, but, right now, it's not an
32 overfished or overfishing situation, because what we have on the
33 books, as far as status determination criteria -- Well, we can't
34 really do that, and so the overfished, because -- So you can go to
35 overfishing, but the overfishing would be based on exceeding the
36 overfishing level. Well, that's a whole different thing, but the
37 ACL is 710,000 pounds, and so we're very unlikely to exceed that,
38 regardless, and so we don't think that that's biologically
39 sustainable. That's why we're doing all this, but it's kind of a
40 confusing situation.

41
42 **CHAIRMAN ALLEN:** Luiz.

43
44 **DR. BARBIERI:** Right, and so just point of clarification then.
45 So, in that case, actually considering the projections at F rebuild
46 are not directly applicable to this. I mean, we could recommend
47 that, but the value of F rebuild would assume that we actually
48 have a predetermined rebuilding plan, that would have all the

1 criteria there, with input from the council, for how fast you want
2 to rebuild, right?

3
4 **DR. FROESCHKE:** That, and there's -- As you all are well aware,
5 the MSY proxy is a council decision, but the SSC weighs heavily on
6 that, and the Science Center evaluates all of those kinds of
7 things, and so there's a lot of coordination, and so to say that,
8 well, we're going to do F rebuild right now would presume a lot of
9 different things that -- I certainly couldn't presume all those.

10
11 **CHAIRMAN ALLEN:** Luiz.

12
13 **DR. BARBIERI:** If I may, and thank you, Mr. Chairman. So I --
14 Just to start a conversation going, right, I would reiterate our
15 previous recommendation of a 40 percent SPR for scamp, or for the
16 other species in this complex as well. I really feel that all of
17 this has to do with stock productivity, you know, the biology,
18 compensatory capacity, right, of the species, and, of course,
19 selectivity pattern as well, but, in this case, I feel -- You know,
20 the council, if they are waiting -- I mean, expecting us to provide
21 some advice, right, even though they can weigh-in with the risk
22 factor of this, I would feel, from a biological perspective, more
23 comfortable with 40, because I do not feel that this species has
24 the same level of productivity that I would associate, for example,
25 with the snappers, you know, generation time, recruitment success,
26 et cetera, et cetera.

27
28 **CHAIRMAN ALLEN:** Thank you, Luiz, and I'll just note that that
29 would be consistent with what we've done for other members of this
30 group, the hermaphroditic groupers. If we didn't do 40 percent,
31 that would be inconsistent with our recent decisions, and so just
32 FYI. Any other discussion about that topic, the SPR proxy? John.

33
34 **MR. MARESKA:** Thank you. Yes, and I agree with Luiz's comments,
35 and I think we should go with the ten-year recruitment, not trying
36 to incorporate the stock-recruitment curve into these projections,
37 and are we to present a three or five-year average? I don't
38 remember much discussion on that.

39
40 **CHAIRMAN ALLEN:** I don't know, and let's hold that, but I
41 appreciate your comment, John. Katie, please.

42
43 **DR. SIEGFRIED:** Thank you, Mr. Chair. It might be a little late,
44 actually. I was going to comment as to Luiz's question about what
45 we're -- Sort of a recap of what we're providing. I'll be quick,
46 though. We only provided the SPR, the 30 percent SPR, because
47 that was in a council request. We don't have any new information
48 to provide you with to change your decision from the previous

1 decision of SPR 40 percent, and so that's the only reason we're
2 presenting 30.

3
4 The only new science for you all to consider here is what the
5 interim landings values are, and then we wanted you to be aware
6 that this was a deviation from what we consider best practices for
7 the OFL, where we would use a longer-term average recruitment for
8 OFL, but you could use a shorter-term average recruitment for ABC.

9
10 It just so happens that, if you use the longer-term recruitment
11 for your OFL, there is no occurrence of the overfished status from
12 2027, and it's not really a results-based issue. It's more of a
13 being consistent with previous decisions. It just happens to avoid
14 the need for consideration of a rebuilding plan, and so those are
15 the three decision points, io the SSC members agree with the
16 interim, and, if the council wants you to reconsider SPR, but we're
17 not asking for that. We're just providing those model runs for
18 you, and then do you want to stay consistent with the recruitment
19 decision for OFL, and hopefully that helps. Thanks.

20
21 **DR. BARBIERI:** Yes, and thank you, Katie. That does help.

22
23 **CHAIRMAN ALLEN:** Okay. Let's tackle these one at a time, and so
24 any more comments on the SPR? Let's deal with that, while it's -
25 - The SPR proxy being 40 percent, any other comments there? That
26 was our previous decision. So our advice is -- Luiz.

27
28 **DR. BARBIERI:** I just want to say, you know, for our report, just
29 to be, you know, communicating to the council a more in-depth
30 reasoning for all of this. We can write a longer little narrative
31 there that explains all of those issues and provides them with
32 more information to evaluate why we recommend 40 for this, versus
33 30 for others.

34
35 **CHAIRMAN ALLEN:** Thank you, and they did ask for that, a biological
36 justification, and so that's good. Okay. I'm hearing no further
37 discussion on that issue. What about the interim landings and how
38 that influences the projections, and keep in mind -- The next one
39 would be recruitment, but let's talk about the interim landings.
40 Trevor.

41
42 **MR. MONCRIEF:** So, currently, we're using fixed landings across
43 that time, or we're using the actual landings?

44
45 **CHAIRMAN ALLEN:** Katie, please.

46
47 **DR. SIEGFRIED:** Skyler can cover it, I think.

1 **CHAIRMAN ALLEN:** Thank you. Skyler.

2
3 **DR. SIEGFRIED:** She's telling me she's muted.

4
5 **CHAIRMAN ALLEN:** Okay. Just a second.

6
7 **DR. SAGARESE:** There we go. Can you hear me now?

8
9 **CHAIRMAN ALLEN:** We do.

10
11 **DR. SAGARESE:** Okay. Perfect. My internet flickered, and I
12 imagine that might've screwed up my settings that were working
13 before. Yes, and so, if you go back to the projection settings,
14 so we have finalized landings, the real data, for 2021, 2022, and
15 2023. For 2024 and 2025, we're using the average of the three
16 most recent years of 2021 to 2023.

17
18 That's the most recent data that we have, and we usually, for years
19 that we don't have actual data, we use an average, and, for 2026,
20 as John mentioned, we've taken that average and dropped it by 54
21 percent, to be consistent with what's going to happen with the
22 framework, and so all those interim years -- We've got three years
23 of final data and three years of assumptions for the interim
24 period.

25
26 If you go back to those tables showing the OFL catch advice, you
27 can see the effect of that, as John said, in the F estimates, the
28 ratios of F over FSPR, and so you can see, in 2026, that that F
29 rate drops considerably, and that -- I certainly hope something is
30 done to drop the fishing, because we are seeing these trends, and
31 I think 2026, if we can get this framework in place, will be a
32 huge step in the right direction for this complex.

33
34 **DR. NANCE:** We ought to show the 40 SPR though.

35
36 **CHAIRMAN ALLEN:** Yes, and thank you, Jim. Jessica, the next slide
37 for the OFL at 40, the next one.

38
39 **DR. SAGARESE:** One more. There you go.

40
41 **CHAIRMAN ALLEN:** Dave, please.

42
43 **DR. CHAGARIS:** So, on the issues of the interim landings -- Well,
44 we had the finalized landings for 2021 to 2023. Across a lot of
45 those fleets, those landings have been declining, and this is kind
46 of like we're taking an average of three years of landings where
47 there's a trend, at least for some of those fleets, and so I'm
48 wondering how -- How much influence does the assumed landings in

1 2024 and 2025 impact the estimate of fishing mortality in those
2 years, and how much weight -- You know, I guess, how much weight
3 do you put behind those estimates of F and the F ratios in those
4 interim years, where we've had to make assumptions about the
5 landings?

6
7 I'm just -- I'm a little uncomfortable sort of inferring stock
8 status determination from these projections, just because of, you
9 know, we've had to assume some landings that are unknown, and it's
10 not really -- You know, it's not really a full assessment, where
11 we're able to evaluate like terminal year F or terminal year
12 biomass, and so I'm curious, and like how sensitive do you think
13 it would be to those interim landings that were assumed for 2024
14 and 2025?

15
16 **CHAIRMAN ALLEN:** Skyler, you can add to that.

17
18 **DR. SAGARESE:** Yes, and so, of course, that's a great point, and
19 I do want to stress that these are based on six years of interim
20 catches, and, the more years of data we don't know, the more
21 uncertain we do get. I think there's a lot of cause for, you know,
22 caution with this, and I think 2024 and 2025 -- We did do other
23 iterations of projections, where those assumptions were different,
24 and it will make a difference.

25
26 The concerns, you know, the things to keep in mind is the other
27 groupers -- Gag been considerably dropped recreationally for the
28 season, and red grouper has been much, much more reduced, in terms
29 of catch limits, and so is it plausible that pressure has gone
30 more for scamp in the last few years? I mean, that's one thing
31 that I've worried about and why I initially used the 2024
32 recreational preliminary landings, because I thought that was at
33 least the most recent information we had, but I absolutely
34 understand the concern with just focusing on finalized landings,
35 since this is not necessarily a target species, but I think it's
36 important to keep that in mind with what's been going on with the
37 other stocks and how that might be affecting scamp.

38
39 At the end of SEDAR 68, we were seeing kind of an increase in
40 landings for charter private, and so has that continued? You know,
41 those are all things to keep in mind, but absolutely our
42 projections are only as good as the assumptions we're making, and,
43 again, normally you have one or two years that you have to make
44 these sorts of fixed -- You know, either fixed data or fixed
45 assumptions, and here we have six, and so that's definitely
46 weighing on my mind, but, unfortunately, this is what we have for
47 getting this assessment used.

1 **CHAIRMAN ALLEN:** Thank you, Skyler. Trevor, please.

2
3 **MR. MONCRIEF:** Yes, and, just as a side note to what Dave was
4 talking about, so it looked like the commercial landings at least
5 have been fairly consistent since like 2018. I mean, they've been
6 hovering around 150,000 pounds, with relative consistency. It
7 looks like in 2024 at least, from what's in front of me -- I mean,
8 you went from an average of around 300,000 pounds for 2020 through
9 2022, and then now we're at 195,000 and 183,000, and so there
10 seemed to be a little bit of a drop-off, and there's a lot of, you
11 know, uncertainty associated with those recreational estimates,
12 but it is showing -- You know, it is lower than what we've had
13 when we're taking the average of that other time series.

14
15 As far as the fishery is concerned, I mean, Ryan could probably
16 speak to a little bit more on the Florida side and everything else,
17 but, I mean, for scamp and everything else, you've got to get out
18 a pretty good ways, and it's usually not a solo target day. You're
19 going for multiple species, and a lot of those species are open
20 year-round, and so I don't expect a large scale fluctuation, or a
21 shift, in effort with shifting of other seasons. It's going to be
22 basically an activity as a whole.

23
24 I think that activity of going out to deep water and fishing for
25 these, for scamp, is going to remain relatively consistent,
26 regardless of the regulations on the other species that we
27 discussed.

28
29 **CHAIRMAN ALLEN:** Thank you, Trevor. Ralph, please.

30
31 **MR. TOWNSEND:** Well, I guess that Trevor's comment makes me ask,
32 and, if he doesn't expect the catch of this species to change, how
33 in 2026 are we going to reduce it to 54 percent? That doesn't --
34 Those two things don't seem to line up.

35
36 **CHAIRMAN ALLEN:** John, please.

37
38 **DR. FROESCHKE:** So the framework action that we're implementing
39 would do two things. One, on the commercial side, we would reduce
40 the number of shares and quota that is distributed, and so that
41 part would -- You know, they will be limited. The recreational
42 season currently is open all year round, and the council has
43 selected, as a preferred alternative, a season that would open
44 July 1 through the December 31.

45
46 What we did is we looked at the proportion of the harvest that is
47 allowable by the recreational, and we tried to figure out how many
48 -- What the daily catch rate in those is, and tried to constrain

1 the season until we expect that they won't exceed it, and so it's
2 a projection consistent with what we normally do.

3
4 IFQ is very -- It's self-governing, because you can't land fish if
5 you don't have the quota, and the recreational is a season
6 projection based on a daily harvest rate.

7
8 **CHAIRMAN ALLEN:** Thank you, John. My sense is we're struggling
9 with what to do with this given that the most recent data in the
10 assessment are 2020. The landings have been updated. We did say,
11 when we reviewed that assessment, it's a solid assessment, and
12 very well done. The recent years showed some erosion of the age
13 structure in that assessment, and then, with the recent landings
14 estimate, it sent it into this place, but those are older data
15 now, and so -- Luiz.

16
17 **DR. BARBIERI:** I agree completely, Mr. Chairman, but, you know, I
18 think John did a great job giving us the history behind all of
19 this, and the reasoning behind it, the complications and
20 complexities with this particular complex, right, and scamp
21 embedded in it, that I don't know if I would, you know, have made
22 any better decisions than what's presented here. That's what I'm
23 looking for, is like those reasonable decisions to be made, that
24 seem to be well justified, and they may not be ideal, but they are
25 handling the uncertainties that we know, right, exist, because the
26 terminal year of the assessment is way back, and we just updated
27 landings. I don't know what else to do to get out of this pickle.

28
29 **CHAIRMAN ALLEN:** Thank you, Luiz. Harry.

30
31 **MR. BLANCHET:** Thank you. Trevor sent me off on what might be a
32 tangent, the point being that this is not a target species, in a
33 lot of cases, on the recreational side. Are we just -- Have we
34 accounted for increased discards in the recreational sector,
35 because, if it's not targeted, you're not going to change the
36 number of trips, or probably the number of hooks.

37
38 Now, there may be some areas where you have some targeting, but,
39 you know, it sounds to me like the -- How would you say that? That
40 the motives and structure is different if you're talking a targeted
41 or a non-targeted species, and so I don't know if you can just
42 say, okay, we've got, you know, 50 percent of the days, and so we
43 have got 50 percent of the F, because you have some discard
44 mortality for the rest of the time.

45
46 **CHAIRMAN ALLEN:** It seems to me that's a fair question, Harry, and
47 so would the -- How are the discards handled in here for the future
48 projections?

1
2 **DR. SAGARESE:** Yes, and so, in our future projections, we're not
3 entering discard data. We're only entering in the fixed landings
4 for those interim years, but the way that the discards are being
5 projected in the model is we're using the retention function, and
6 we're using the selectivity curves, and basically, from those
7 retention functions, the fish are being discarded in the
8 projection.
9

10 That's something that I think Katie mentioned, that we -- There's
11 more research we want to do on how to better incorporate the
12 discarding. If there is changing discarding, that invalidates the
13 assumptions that we're making, in terms of when we assume that the
14 recent retention and recent selectivity will remain the same, and
15 we're assuming those trends will be the same, but, if there's
16 changes in discarding behavior, that's something that we haven't
17 quite figured out how to do in our projections yet, but that's
18 something that Nathan is looking into for the work that he's doing.
19

20 **CHAIRMAN ALLEN:** So, Skyler, the discarding, and the behavior might
21 not change, but the number of discards would change, based on the
22 projections, right?
23

24 **DR. SAGARESE:** Yes, and so that's right. I don't think it's
25 intuitive, and, Nathan or Katie, please correct me if I'm wrong,
26 but, when the landings go up in the model, the discards don't
27 necessarily go down. That's one of the issues that we've had in
28 the assessment, is, when you reduce those landings, like for gag,
29 I think, you would assume that your landings would go up, but
30 that's not how -- Sorry. You reduce your landings, and your
31 discarding would go higher, but that's not how the projections are
32 currently set up.
33

34 That is something that is on our list of things to do, to try to
35 -- What's the word? To try to deconstruct that behavior, and so
36 that's something that -- As I said, like we're just assuming that
37 the current rate will go forward in time, discard mortality is
38 going to stay the same, the, you know, sizes that will be discarded
39 are going to be the same, and the population, as it's going in
40 time -- You know, it's just discarding fish, and killing some of
41 them, and landing others, in the projections.
42

43 **CHAIRMAN ALLEN:** Okay, thank you. Very helpful. Will, please.
44

45 **DR. PATTERSON:** Thanks, and thanks, Skyler, for that recent
46 information, and Harry for bringing this up. It's a problem,
47 because the size and age composition of the discards is going to
48 change, you know, and you're going -- You know, it's going to --

1 All the fish will be discarded if you have a closure, and, even if
2 they aren't targeted, and I think there is some targeting from
3 certain sectors that definitely exists, and, Skyler, can you remind
4 us what the discard mortality rate for scamp currently is estimated
5 in the assessment?

6
7 **DR. SAGARESE:** Let me just double-check on that. This is not my
8 most recent assessment, and so I don't want to misspeak.

9
10 **DR. PATTERSON:** Sure.

11
12 **DR. SAGARESE:** One second.

13
14 **DR. PATTERSON:** But I was a bit confused about Skyler's comments
15 about the sort of decoupling, or needing to decouple, this behavior
16 of retained catch versus discarded catch, because, intuitively, if
17 the behavior of the fleet doesn't change appreciably -- You know,
18 if it were vermilion snapper, or even red snapper, and there were,
19 you know, this level of shift in what the ABC would be, then of
20 course there would be fleet change, but since it's, you know, a
21 relatively minor component of the overall fishery, then maybe the
22 fleet behavior doesn't change, and so you would expect then just
23 to shift the catch from landings to discards.

24
25 That should be -- There should be an inverse relationship there,
26 I would think, and then I would expect the release mortality rate
27 to be incredibly high for scamp, given they're mostly caught fifty
28 meters and deeper, and given their biology, physiology.

29
30 **DR. SAGARESE:** Yes, and so I can follow-up with those estimates.
31 Commercial vertical line is 47 percent, commercial longline is 68
32 percent, and the recreational is percent for the discard mortality
33 rates that were used for the assessment.

34
35 **DR. PATTERSON:** Do you happen to recall where those came from?

36
37 **DR. SAGARESE:** I think they came from the observer program data,
38 whether it was the commercial reef fish observer program or FWRI,
39 and I remember there was some work like, and Jeff Pulver, at the
40 time, did some bootstrapping from the commercial observer data,
41 and I think he followed a similar process for recreational.

42
43 **DR. PATTERSON:** So that was surface observation data then, right?

44
45 **DR. SAGARESE:** Yes.

46
47 **DR. PATTERSON:** Yes, and I expect the below-surface mortality to
48 be much higher than 26 percent for scamp. Jeff Buckel has done

1 some work on deepwater groupers in the Atlantic. I don't remember
2 if they've worked on scamp, and I know they've done snowy and some
3 other species, but, anyway, 26 percent is not very convincing.

4
5 **CHAIRMAN ALLEN:** Trevor.

6
7 **MR. MONCRIEF:** So it is logical, if you think about that you pretty
8 much have year-round 100 percent retention, and the only ones that
9 are getting thrown back are sub-sixteen inches, in shallow water.
10 Taking away the season, while we've talked about, and I hate that
11 I got us in this rabbit hole, but I think it's a worthwhile
12 discussion to have on the species.

13
14 Will is right that the majority of the harvest of larger
15 individuals is between 200 to 300 feet, with a little bit between
16 150 and 200. Now, a lot of folks are going out there to catch
17 grouper, and even your guys that are deep-dropping or whatever
18 else, engaging in another activity, they're going to be catching
19 yellowedge and snowies and everything else.

20
21 You'll still have beeliners open all year round, and that will
22 fill up a box or whatever else, and so the point I was trying to
23 make is that I don't think you're really deviating behavior,
24 because the people are still going to be going out there to get 80
25 percent of the other species that are still open, and, when those
26 fish come up from 200 to 300 feet of water, it does not look good,
27 and it's just a consideration.

28
29 I'm glad the discussion happened, but like it's -- Shutting off
30 access to that fishery just for half a year is going to have some
31 ramifications that often we overlook, and so --

32
33 **CHAIRMAN ALLEN:** Thank you, Trevor. Ralph.

34
35 **MR. TOWNSEND:** I mean, does this discussion get back to questioning
36 whether the assumption about fishing mortality in 2026 is justified
37 if you close the season, if the way you achieve that is by closing
38 the season for half the year? Is that really where people are
39 going?

40
41 **CHAIRMAN ALLEN:** It would essentially affect the effective fishing
42 mortality that you would see, right, because fish would be
43 discarded all year long.

44
45 **MR. TOWNSEND:** Right, and I'm wondering if the committee should
46 point out that it has questions about that assumption for 2026, if
47 that's a point we ought to make in commenting on the question of
48 the assumptions about catch and fishing mortality.

1
2 **CHAIRMAN ALLEN:** Thank you, Ralph. Luiz.

3
4 **DR. BARBIERI:** Thank you, Mr. Chairman, and, Ralph, I don't
5 disagree with that, right, and so that is a reality that we have
6 to face.

7
8 Having said that, because we don't know what the actual discards
9 is going to go, is going to be, right, into the future, as we apply
10 this new season, whatever it might be, we're going to have to make
11 separate different assumptions as well, that are not going to be
12 based on observations, right, observed data.

13
14 This is the first assessment, as far as I can remember, of the
15 scamp stock, right? I think we have reviewed the assessment at
16 the stage that it was, and we recognized that, going forward, yes,
17 there's room for improvement, because, the more assessments we
18 conduct, the more data we collect, you know, the more we can course
19 correct, right, but, again, I go back to what would be a practical
20 solution here.

21
22 I think that what they propose here, in my view, is reasonable.
23 We could be transparent to the council, as we made a
24 recommendation, and say, listen, we're making this recommendation
25 based -- This could be potentially some of the best-case scenarios,
26 because we are not properly accounting for discards, right, you
27 know, in the way that it would be more realistic, but that would
28 allow us to move forward with this and get the council to implement
29 regulations that would be beneficial to the stock, instead of
30 delaying the process based on assumptions, because we don't have
31 any data, and so we could refresh all of this, and integrate all
32 of this, at the next assessment of scamp.

33
34 **CHAIRMAN ALLEN:** Thank you, Luiz. Ralph.

35
36 **MR. TOWNSEND:** Well, I guess my problem is that it's not correct
37 that we don't have any data. We do know that it's a bycatch
38 fishery, and, Trevor, we do know -- I think we can probably all be
39 pretty sure fishing is going to continue. There is going to be
40 catch, and so, assuming that it's like the past, we know that's
41 wrong, and that there are other assumptions that could be made.

42
43 For example, we could assume, during the closed season, it simply
44 becomes from catch to discards, right, and, of course, that answer
45 would be, well, those regulations don't have any impact, but I do
46 have a concern that, when we make these assumptions, all we don't
47 know, and so we'll assume the discard rate is the same, even though
48 we know it's different, and we tell the council that it can do the

1 same thing, and actually, in implementing the regulation, the
2 council should be considering the changes in behavior.

3
4 For us to say, oh, well, assuming the past is prologue, or
5 whatever, in how we do this, that -- Simply saying, oh, that's
6 okay for our assessments implies to the council that that's also
7 okay for your regulations, and so I think it's not, oh, we're doing
8 -- I'm not criticizing the work at this point.

9
10 I'm saying there's a piece of it that I think, from a management
11 point of view, is very important, that question of whether the
12 particular change we're doing, a season, is going to convert a lot
13 of the catch to discards, for no benefit to the stock, is an
14 important issue, and, if it's important in the assessment, then we
15 should -- I'm not saying we say redo it, but we absolutely need to
16 flag it, I think.

17
18 **CHAIRMAN ALLEN:** Luiz, please. Good discussion.

19
20 **DR. BARBIERI:** To that point, yes, very good discussion. Ralph,
21 I agree completely with your points. I agree completely, and so,
22 just to clarify, I was not recommending that we ignore the fact
23 that we have an expectation, right, an expectation based on our
24 best professional judgment, right, but we're still trying to
25 predict the unknown, right?

26
27 This is an uncertainty as well, and so I think the most transparent
28 that we can be to the council, as far as what we know and we don't
29 know, is to point out to them that, if we go ahead with this, which
30 is what we have in front of us now, please be aware, and I agree
31 with you completely, and please be aware that this is not
32 accounting for the potential increase in discards that would be
33 associated with the season.

34
35 **CHAIRMAN ALLEN:** Really good points. Trevor, please.

36
37 **MR. MONCRIEF:** Yes, and just one more note. Is there any chance
38 of including 2024 in that, and, instead of a three-year average,
39 doing a four-year average with 2024, and using that for 2025 and
40 2026?

41
42 **MR. RINDONE:** No, because 2024 is preliminary landings.

43
44 **MR. MONCRIEF:** It says "final" right here.

45
46 **MR. RINDONE:** Where's here?

47
48 **MR. MONCRIEF:** On the data query.

1
2 **MR. RINDONE:** Oh.

3
4 **MR. MONCRIEF:** It says "final".

5
6 **MR. RINDONE:** As of the first week of May, and so this analysis
7 was completed prior to that, and so it would need to be rerun, and
8 so that's a Sky question.
9

10 **DR. SAGARESE:** If I can just follow-up, and the commercial landings
11 are not available as quickly as the recreational are, and so I'm
12 not sure when the final 2024 commercial landings by fleet would
13 be. It's not just getting the final estimate total.

14
15 They actually have to parse it out to vertical line and longline,
16 and that takes a little bit more time, as well as -- I'm not sure,
17 and it might be maybe next month that they get the 2024 data, but
18 that would be -- We would need final recreational and commercial,
19 I think, to update 2024.
20

21 **CHAIRMAN ALLEN:** To be clear, we don't have those for 2024?
22

23 **MR. RINDONE:** (Mr. Rindone's comment is not audible on the
24 recording.)
25

26 **CHAIRMAN ALLEN:** Okay. Thank you, Skyler. Okay. Other comments
27 or questions about path forward here? Go ahead, Luiz.
28

29 **DR. BARBIERI:** I'm sorry, Mr. Chairman, that I keep --
30

31 **CHAIRMAN ALLEN:** I appreciate you speaking up.
32

33 **DR. BARBIERI:** Well, and I know this is a little outside, right,
34 of our evaluation of the science here, but, from practical reasons,
35 right, we have to take into account the fact that the Science
36 Center has already received a fairly large reduction in staff,
37 right, and I don't know the details about how many people from the
38 assessment team, you know, have been let go, but that probably
39 trickles at all the different levels there within the Science
40 Center.
41

42 I know the final gameplan for what's going to happen is not
43 completely finalized, but I know that there are reductions being
44 considered now, different scenarios being developed, you know,
45 that are considering from 25 up to 50 percent reductions, right,
46 and so I'm not saying let's forget about the science that we need
47 to have on the table here, but I think we have to, in this
48 situation, evaluate what would be the cost of not taking action on

1 this as far as implementation of a regulation that could be
2 beneficial to the stock, given the low likelihood, in my view,
3 given other things that are on the table now for the Science
4 Center, in terms of analysis to be completed.

5
6 This could be redone, and, I mean, if they're talking about 2027,
7 and I don't know what the timelines are there, in terms of when do
8 we have to have this finalized for management advice to kick in in
9 2027, but I feel that their capacity has been reduced, and they're
10 going to have to prioritize what gets done, and so I just want to
11 put this out there, because I think it's a factor that we need to
12 consider.

13
14 **CHAIRMAN ALLEN:** Thank you, Luiz. Am I correctly paraphrasing
15 your statement as we may need to work with what we have, that's
16 finished, rather than count on there being the capacity to go do
17 some new analysis?

18
19 **DR. BARBIERI:** Yes.

20
21 **CHAIRMAN ALLEN:** Ralph, please.

22
23 **MR. TOWNSEND:** I mean, I just think though that there's a -- There
24 should be a footnote on that, and that is, if we recognize that
25 assessments are going to be less frequent, the opportunities for
26 annual assessments are going to be lower, then that implies that
27 the science ought to be more cautious, and so it's not we simply
28 take what we get.

29
30 I think we need to integrate into our understanding what is the
31 science going to be like going ahead, and how would that affect
32 the kinds of decisions we make today, and science is not something
33 that sits off in a bubble by itself.

34
35 **CHAIRMAN ALLEN:** Yes, and excellent point, Ralph. Steve, please.

36
37 **DR. SAUL:** Thanks, Mr. Chair, and, just to those two points, I
38 think we, as an SSC going forward, should be keeping those in mind.
39 We should really consider, okay, what do we really want to
40 prioritize, right, and what can we live with, and like can we live
41 with this, you know, the analysis done for this, versus like the
42 discussion before lunch regarding red grouper, and is that
43 something we can live with or not, you know, or do we --

44
45 You know, of course, we don't come up with the SEDAR schedule
46 ourselves, but we can, obviously, influence it, and chat with those
47 in the room who do, and it sounds like red grouper is more
48 preferable, or pressing, to be re-evaluated, over something like

1 this complex, and so we may, in our voting, in our decision-making,
2 in our motion-making, just want to keep that in mind.

3
4 **CHAIRMAN ALLEN:** Thank you, Steve. Okay. So, given those
5 excellent points, and I think that's important for us to consider
6 about the rate of which we're going to get new scientific
7 information, we need a path forward on this one, and I think the
8 question is can we recommend, based on this analysis, an OFL and
9 ABC at F30 and F40, as the council has requested? Luiz, please.

10
11 **DR. BARBIERI:** John, just real quickly, from my perspective, yes,
12 right? However, as Ralph suggested, and I agree, Ralph, and I
13 think those are valid points, and we need to make sure that, in
14 our report, in our narrative report, right, and we have Mr. Anson
15 here as the council liaison as well, and listening to all this
16 conversation, to identify all these uncertainties and issues that
17 could be taken into account as the council decides to move forward
18 with this. That is as transparent as we can be.

19
20 **CHAIRMAN ALLEN:** John, did you have a comment?

21
22 **MR. MARESKA:** Thank you, Mr. Chairman. I really had a question,
23 and so, early on, it was presented that, if we went with the 40
24 percent SPR, if that's the proxy we were recommending, that the
25 stock status would be determined overfished and overfishing.

26
27 Thus, we were also giving an F rebuild scenario, but there's
28 nothing in the statement of work about -- Do we need to recommend
29 that back to council as well, because, if our preference is for 40
30 percent, then it should, I guess, by default, go into an F rebuild.

31
32 **CHAIRMAN ALLEN:** Ryan, any comments there? That's correct?

33
34 **MR. RINDONE:** I mean, at F 40 percent, it's projected under F
35 rebuild right now, and so, John.

36
37 **DR. FROESCHKE:** I think Skyler talked about one other situation
38 that wasn't the case.

39
40 **MR. RINDONE:** That was if you use the long-term recruitment, as
41 opposed to the recent recruitment, and so the SSC would have to
42 determine a justification for switching that decision.

43
44 **CHAIRMAN ALLEN:** Let's talk about that one next. Go ahead.

45
46 **DR. FROESCHKE:** Well, that, and, yes, just to reiterate that, right
47 now, we don't have stock status determination criteria for scamp,
48 and so just -- I mean, it's part of this other shallow-water

1 grouper that we're going to modify all that, and so it's correct
2 that -- Or it's likely that, in the event we would do an amendment,
3 the 58A, we would have to put stock status determination criteria
4 in there, and then it likely would be overfished, but we don't
5 have anything today like where it's going to be overfished, based
6 on the results of this, because we don't have the criteria, and so
7 we're not going to get a letter and have to do a rebuilding plan
8 on that timeline, is my understanding, and so it gets very
9 complicated.

10
11 I don't know if that really helps you in your decision-making, but
12 I would like if Skyler could kind of just reiterate that other
13 portion of that about the recruitment, so that everyone is clear.

14
15 **DR. SAGARESE:** Yes, and so, all the projections and the decisions
16 that were made last time, the OFL projections we got from the
17 recent mean recruitment, which has been much lower than what's on
18 average.

19
20 Now, Katie mentioned it earlier, but it's been more common practice
21 for that OFL projection to not use recent mean recruitment, but to
22 pull the recruitment from the spawner-recruit curve, and those are
23 the two extra slides that I had included at the bottom, in case
24 the SSC wanted to reconsider that decision now that we've kind of
25 seen what's been done for other stocks.

26
27 As Katie mentioned, the decision -- Or one of the implications of
28 pulling the OFL catches from that recent mean recruitment scenario
29 is that it's basically changing your baseline. It's assuming there
30 was a regime shift, and that's something that, you know, they
31 mentioned earlier in that presentation, that I think is really
32 important to consider, is does the SSC still support that
33 assumption to pull the OFL numbers out of the projection that
34 assumes recent mean recruitment, or do you want to consider going
35 with the standard practice of getting those OFL trajectories from
36 the assumption of recruitment from the spawner-recruit curve, and
37 so we've provided the projection results both ways.

38
39 Yes, it's basically -- It's a comparison of this as the OFL, slide
40 9 to slide 15, for 40 percent SPR, and, yes, you can see that there
41 are changes. We would not be projecting an overfished state if
42 the recruitment were derived from the spawner-recruit curve, as
43 Katie mentioned earlier, and so that assumption does have some
44 implications on these results, but, you know, just keep that in
45 mind.

46
47 **CHAIRMAN ALLEN:** Skyler, let me clarify one thing, and so I'm glad
48 you brought that up. I think the -- I wanted to point out that

1 the, quote, recent recruitment, and it's like a decade of lower
2 recruitments. It's not just a few years, right?

3
4 **DR. SAGARESE:** Exactly. It's the average from 2008 to 2017,
5 because, for the stock assessment, we don't have a lot of
6 information for very young scamp, and so we didn't feel comfortable
7 estimating the recruitment deviations beyond 2017, and so there's
8 that three-year gap, and so right. It's a ten-year period,
9 basically.

10
11 **CHAIRMAN ALLEN:** Yes, and I just wanted to make that point, that,
12 if we did entertain going with the stock-recruit curve for the
13 long-term average recruitment, that would be a pretty major shift
14 in recruitment upward from what it's been over the last decade,
15 and so, Luiz, please.

16
17 **DR. SAGARESE:** Absolutely, yes, and you can see that in the tables.
18 You can compare that recruitment. The second -- Basically, the
19 second column for each of those projection scenarios, to see what
20 the difference in the projected recruits would have been, and it's,
21 yes, from about 900,000 to over a million, which is a big
22 difference.

23
24 **CHAIRMAN ALLEN:** Let's go down to that slide. Can we see that?
25 Is it 15? Yes. Thank you. Luiz.

26
27 **DR. BARBIERI:** Thank you, Mr. Chairman. I completely understand,
28 you know, the pickle that we're in here, right, for OFL, but, in
29 reality, without really looking carefully at the diagnostics of
30 that steepness estimate, right, and looking at the range of
31 observed SSB that we had, given the range of recruitment, I mean,
32 basically, the S-R curve is telling us that we have a reasonable
33 degree of knowledge, at least from a biological perspective, of
34 what future recruitment is going to be. It is predictable, right?

35
36 In this case, I'm not sure about that, right, and we have not been
37 able, like Skyler said, to find young fish, and so I don't know
38 what -- If we have actual data, right, to help inform those
39 recruitment estimates, and so I don't feel comfortable with this,
40 right?

41
42 I would even consider, for the time being, us saying that, for the
43 time being, OFL is unknown, right, because we don't really know
44 enough about the productivity of the stock to evaluate where that
45 would be. We can provide catch advice, right, that we believe is
46 sustainable over the short-term.

47
48 We have done this on the South Atlantic side several times, and we

1 had NOAA General Counsel in the room, and we asked them if is this
2 allowed, and they said, yes, and, if you don't know something, you
3 just acknowledge that you don't know.

4
5 **CHAIRMAN ALLEN:** So that would be -- Under that scenario, we would
6 be not -- We would say that OFL is unknown, but we would possibly
7 recommend an ABC.

8
9 **DR. BARBIERI:** Or we could consider that what we have as, you know,
10 the OFL that's estimated using that ten-year average recruitment
11 is a representation of the most recent reality that we're able to
12 witness, right, and that we don't know. Let's acknowledge that we
13 don't know what the true productivity of the stock going into the
14 future could be, and so we're going use it now to allow us to
15 develop an ABC, but let them know that, no, that part is not really
16 well known.

17
18 **CHAIRMAN ALLEN:** Okay. Thank you, Luiz. Steve.

19
20 **DR. SAUL:** Thank you, Mr. Chair. Yes, and I think I mostly agree,
21 Luiz. I think I would lean more towards using what we have to at
22 least provide something, right, that's bookended in scientific
23 analyses, and we can -- I mean, in reality, with any of these
24 stocks, we really don't know how productivity will change in the
25 future.

26
27 Look at red grouper having to, you know, under sort of -- It kind
28 of waxes and wanes, and it kind of goes through these cycles of
29 lower productivity and higher productivity, and then us kind of
30 constantly chasing that pattern, to try and optimize yield and
31 economic benefit, right, and so I don't think we're in too much of
32 a different situation here, other than the small detail of the
33 spawner-recruit function, but, I mean, I would be probably more
34 comfortable providing something for an OFL.

35
36 If it's going to be something, something based on, you know, our
37 best intuition of what reality is for recruitment at the time for
38 the species, which is probably that constant sort of lower amount,
39 and I'm trying to remember, and I can look it up in the report,
40 but like what the stock-recruit relationship looked like, and what
41 data points there were, and how much of that data fit across the
42 whole trajectory of the curve, blah, blah, blah.

43
44 Looking just at the recruitment signal over time, it looks kind of
45 two-way trippish, and so there might've been enough data points to
46 fit that, but, anyway, all that aside, yes, it makes sense, and
47 yes, I think, at least for me, bookending the OFL with something
48 I think is important.

1
2 **CHAIRMAN ALLEN:** Okay, and so we have got to deal with a lot of
3 other issues this afternoon. I think we've had a very good
4 discussion about this. There's a lot of nuances here that
5 definitely deserved some discussion. I would like to entertain a
6 motion on how we move forward with this.

7
8 It seems like what I'm hearing from the group is a consensus
9 towards using the most recent ten-year recruitment, rather than
10 the stock-recruit curve, and possibly not recommend an OFL, but do
11 an ABC. I don't know, and I'll entertain motions. Luiz, are you
12 crafting one for us? Okay.

13
14 **MR. RINDONE:** He's making a motion for Will to give.

15
16 **CHAIRMAN ALLEN:** Yes, and Luiz is making a motion for Will. Pay
17 attention, Will.

18
19 **DR. PATTERSON:** I believe Luiz is making a motion for Luiz.

20
21 **CHAIRMAN ALLEN:** Fair enough. We can help you with it, if you
22 want to get --

23
24 **DR. BARBIERI:** Okay, Jess. **The SSC accepts the updated projections**
25 **produced by the Southeast Fisheries Science Center for the SEDAR**
26 **68 Gulf of America scamp and yellowmouth grouper using -- Setting**
27 **an OFL equal to yield at F 40 percent SPR and ABC as the yield of**
28 **75 percent of F 40 percent SPR for the period -- Help me here.**
29 **This would be for the period 2027 to 2031.**

30
31 **CHAIRMAN ALLEN:** Is that correct?

32
33 **DR. BARBIERI:** Is that correct?

34
35 **CHAIRMAN ALLEN:** 2027 to 2031?

36
37 **MR. RINDONE:** For the interim years, yes.

38
39 **CHAIRMAN ALLEN:** Okay. Do I have a second for this motion? Okay.
40 John Mareksa seconds. Discussion? John Froeschke, please.

41
42 **DR. FROESCHKE:** Is that the yield stream or the average?

43
44 **DR. BARBIERI:** Well, usually, right -- I mean, here we are
45 presented with the yield stream, right, and did the council request
46 -- Usually, when the council requests a constant catch, we abide,
47 right, by that, and we provide a constant catch. I wasn't clear
48 here.

1
2 **CHAIRMAN ALLEN:** I had that same question.
3

4 **DR. FROESCHKE:** Last time you all did this, you provided a constant
5 catch. I'm just clarifying. That way, we get your intent correct.
6

7 **CHAIRMAN ALLEN:** So if we were -- If we could specify it in here,
8 and we were going to recommend a constant catch, what would that
9 be? Maybe Skyler could help us with that. John.
10

11 **MR. MARESKA:** Before we get too far in the weeds, scamp is scheduled
12 for an update assessment in 2028, and so we're doing projections
13 basically for two years, in reality.
14

15 **CHAIRMAN ALLEN:** Ideally.
16

17 **MR. RINDONE:** Well, scheduled for 2028, you know, depending on
18 when in 2028 results could be available, then or in 2029, and then
19 it takes time to implement the management.
20

21 **CHAIRMAN ALLEN:** Okay, and so, to get clarity, John, should we be
22 giving them a constant catch OFL?
23

24 **DR. FROESCHKE:** I mean, that's entirely up to you all, but, I mean
25 the --
26

27 **CHAIRMAN ALLEN:** If we did that, what value would we use?
28

29 **DR. FROESCHKE:** Well, for example, the other ones, we typically
30 either would do a three-year or a five-year, and you would just
31 average those three years.
32

33 **CHAIRMAN ALLEN:** Okay.
34

35 **DR. FROESCHKE:** 2027, 2028, and 2029, or you would do the 2027
36 through 2031 and just take the average of those, and that would be
37 the yield stream.
38

39 **CHAIRMAN ALLEN:** Okay.
40

41 **DR. BARBIERI:** Mr. Chairman, and not to put our council liaison
42 present here on the spot, right, and I know that he's not speaking
43 for the council as a whole, but he can perhaps provide us some
44 guidance on this.
45

46 **CHAIRMAN ALLEN:** Excellent suggestion. Mr. Anson. We are putting
47 you on the spot.
48

1 **MR. ANSON:** I agree with Dr. Froeschke's statement that you have
2 in the past, and we have accepted, when you have provided it in
3 the past, and I think it provides a little bit more transparency,
4 and not to the council, but -- And some guidance, if you will, but
5 also to the public too, to provide some assurance. Some members
6 of the stakeholders we deal with, you know, recognize your value
7 and input, and so it would be helpful, I think, in the end.

8
9 **CHAIRMAN ALLEN:** We would need -- Thank you for that, Mr. Anson,
10 and so we would need an average value over that. Skyler, please.

11
12 **DR. SAGARESE:** Yes, and so I just wanted to follow-up. The
13 executive summary had the OFL actually by year from last time, and
14 it had the average for the ABC, and so I provided, at least in the
15 executive summary, and, John, if that's -- If I'm incorrect in my
16 executive summary, just let me know, and I'll update that, but
17 your updated ABC, for the average of 2027 to 2031, would be 0.183.

18
19 **CHAIRMAN ALLEN:** 0.183?

20
21 **DR. SAGARESE:** 0.183 for the ABC, and that would be the average
22 yield from the 75 percent of 40 percent SPR.

23
24 **CHAIRMAN ALLEN:** Okay, and what about the OFL?

25
26 **DR. SAGARESE:** I'm doing that right now, but that should be very
27 simple, because they're basically -- That would be 0.233.

28
29 **CHAIRMAN ALLEN:** Any discussion on this motion? All right. I'm
30 hearing none. I'm also not sensing a lot of debate here, and so
31 I don't know if we need to do a roll call vote. **Is there any**
32 **opposition to this motion?** Okay. **I got a thumbs-up from Jessica,**
33 **and so the motion carries.**

34
35 Thanks everyone, and thank you, Skyler. There's a lot of nuances
36 to this one, and I'm glad we were able to come to a conclusion.
37 Thank you. Okay, and we will continue on, and our next item is
38 Item VII, and this is the CIE Independent Peer Review of Shrimp
39 Bycatch Estimation Methodology for Finfish Species, and Ryan will
40 give us the scope of work, and we will go from there.

41
42 **REVIEW: CENTER FOR INDEPENDENT EXPERTS (CIE) INDEPENDENT PEER**
43 **REVIEW OF THE SHRIMP BYCATCH ESTIMATION METHODOLOGY FOR FINFISH**
44 **SPECIES**

45
46 **MR. RINDONE:** Sure, and thank you, Mr. Chair, and so the trawl
47 fishery for shrimp in the Gulf is one of the most important
48 commercial fisheries in the U.S., in terms of landings and economic

1 value and number of vessels that participate, and it also captures
2 many non-target species that are discarded as bycatch.

3
4 Estimates of this bycatch are crucial for assessing many other
5 finfish species in the southeastern U.S. and determining what
6 annual quotas might be for species like red snapper. In 2021,
7 NMFS established a project team to update and quality assure the
8 bycatch estimation procedures and to assess any potential sources
9 of bias, and recent preliminary examinations have uncovered
10 substantial systematic bias in the previous method used for bycatch
11 estimation, and so this team overhauled that method, through the
12 work with the Southeast Fisheries Science Center.

13
14 Then this new updated method utilizes four main data sources,
15 effort data, observer data, a gear and landings survey, and then
16 the shrimp landings data, and so the team was formed in 2021, and
17 estimating annual brown shrimp landings and comparing them to fleet
18 landings resulted in a consistent 45 percent underestimation of
19 bycatch, which was a revelation of this systematic bias.

20
21 The purpose of this updated methodology combines the refined effort
22 estimates with CPUE estimates derived from the observer data with
23 spatial and temporal poststratification of those data, and so
24 effort scaling is conducted using this new survey design framework
25 that aggregates time, area, and depth, and the model-based approach
26 was employed to explore potential stratification variables for
27 these gear characteristics and diurnal periods, along with that
28 CPUE estimation.

29
30 This entire new method was peer reviewed by the Center for
31 Independent Experts, and there's two reports there, from those two
32 individuals, that are on the website for you guys, that are
33 included as background material, and so you guys should listen to
34 the presentation and review those materials, ask questions, and
35 make recommendations, as appropriate, and consider whether the new
36 methodology is considered consistent with BSIA.

37
38 **CHAIRMAN ALLEN:** Excellent. Thank you, Ryan. Okay, and I believe
39 Dr. Smith is going to make our presentation.

40
41 **DR. STEVE SMITH:** Yes. Can everyone hear me?

42
43 **CHAIRMAN ALLEN:** We do.

44
45 **DR. SMITH:** Okay, and I think someone is going to be running the
46 slides for me. Is that correct?

47
48 **CHAIRMAN ALLEN:** That is correct, Steve. Jessica.

1
2 **MS. MATOS:** I have your presentation up.

3
4 **CHAIRMAN ALLEN:** Steve, can you see our slides, or your slides?

5
6 **DR. SMITH:** I'm seeing the --

7
8 **MS. MATOS:** Is it the wrong presentation?

9
10 **CHAIRMAN ALLEN:** Hold on one second.

11
12 **DR. SMITH:** I'm seeing the something else, like the document itself
13 or something. There we go. Can you go up one slide to the start?

14
15 **CHAIRMAN ALLEN:** She's on the background slide now.

16
17 **DR. SMITH:** Yes, and can she go -- Did you all see the front side
18 already? I didn't see it.

19
20 **CHAIRMAN ALLEN:** We did.

21
22 **DR. SMITH:** Okay. Well, anyway, I'll introduce myself. I'm Steve
23 Smith. I'm at the University of Miami's Cooperative Institute for
24 Marine and Atmospheric Studies. I'm based in Miami. I work with
25 the Southeast Fisheries Science Center, mostly within the
26 Fisheries Statistics Division and the Sustainable Fisheries
27 Divisions.

28
29 The research team is comprised of both NOAA and CIMAS scientists,
30 and I'll be talking about the estimation of red snapper bycatch
31 from shrimp trawls in the Gulf, and so, as Ryan already mentioned,
32 the shrimp trawl is a pretty major -- That's okay, and go ahead to
33 the background. Sorry. Can you move the slide to the background?
34 I'm seeing that only the title right now.

35
36 **MS. MATOS:** I did. There might be a delay on your end.

37
38 **DR. SMITH:** Okay.

39
40 **MS. MATOS:** Do you want to take control of it and run it on your
41 side?

42
43 **DR. SMITH:** How do I do that?

44
45 **MS. MATOS:** I can give you control if you have the presentation
46 ready to go on your end.

47
48 **DR. SMITH:** You want me to -- Okay, and let me find it.

1
2 **MS. MATOS:** Or, if you just want to bring up the presentation on
3 your end, and we're looking at the background slide.
4

5 **DR. SMITH:** Okay. Okay, and I have it. I have it queued up on
6 mine, if you want to give me --
7

8 **MS. MATOS:** Hold on one second. You should be able to accept the
9 presenter mode.
10

11 **DR. SMITH:** Here we go. Can you see my presentation?
12

13 **MS. MATOS:** Yes.
14

15 **DR. SMITH:** Great. Okay, and I think he's already talked about
16 the background. Basically, we formed a project team back in 2021,
17 because there were concerns from the Science Center about
18 reliability of the bycatch estimates from these trawls, and so we
19 focused on coming up with a cross-check procedure to evaluate the
20 reliability. We focused on the 2014 to 2020 period that had the
21 most reliable input data sources.
22

23 In general, the approach has remained the same, the general
24 approach, as previous. Basically, there's an estimate of fleet
25 effort, which assumes a relationship between commercial, the fleet
26 catch and effort for vessels outfitted with a GPS track log device,
27 and we're assuming that's proportional to the total fleet catch
28 and effort.
29

30 Then, from that, you can estimate the total fleet effort from the
31 other components, and the same goes for the catch rate. We get a
32 catch rate from the observer program that we're assuming is
33 representative of the fleet's catch rate, and that's multiplied by
34 the total fleet effort to get the total bycatch, and so we tried
35 this with brown shrimp, as Ryan mentioned first, and so we ran the
36 -- We tried to run the exact same, you know, procedure that they
37 had been using, with all the same data processing, everything the
38 same, and to see what we would end up with.
39

40 We ended up with, you know, estimating about half of the landings
41 that were reported, and so that's when we realized there's some
42 sort of a problem here, and we thought it was probably due to input
43 data or processing procedures.
44

45 The main input data for this was the observer CPUE, the fleet
46 effort, and the trip ticket landings, and so what we were using
47 was a legacy code, I would call it, for processing. It was
48 developed in the 2000s for this whole -- For estimating all these

1 components and putting them together in a bycatch estimate, and so
2 it was developed in the 2000s.

3
4 It was passed on to subsequent analysts over time, and, by the
5 time we got to this problem, all the developers had retired or
6 were no longer with NOAA, and the people that were running the
7 code just learned how to run it, but didn't quite understand how
8 it was all put together.

9
10 The other issue that we uncovered was that the observer CPUE is
11 like catch per net, and so they were applying a single number
12 scaler for the average nets per vessel for the whole fleet, and
13 so, concurrently, the responsibility for the Gulf shrimp program
14 shifted from Galveston to the center, the Southeast Fisheries
15 Science Center, in 2021 or 2022, as part of this realignment, and
16 so there was a need by the Fisheries Statistics Division to gain
17 a better understanding of how all this worked, in addition to
18 trying to see if we could fix what was going on with the bycatch
19 estimates.

20
21 We formed an expanded project team, and with the goal of see if we
22 can improve this methodology, and so our objectives were to
23 undertake a comprehensive understanding of the fundamental data
24 sources and refining and modernizing all the data processing
25 procedures to investigate some potential additional stratification
26 variables, including gear characteristics, diurnal period, et
27 cetera, cross-check the refined methodology for the penaeid
28 shrimps with our verification method, and then have the methodology
29 reviewed by the CIE.

30
31 This resulted in two reports. One was about the bycatch
32 estimation, and there was a separate report focusing on the shrimp
33 fleet effort estimation, which is a major factor in the bycatch
34 estimates, and so we can boil this down to we had seven key sort
35 of findings, or improvements, that we identified or came up with
36 for the bycatch estimation.

37
38 Number one, we refined and modernized the observer data processing
39 to solve the code and everything. We cleaned up a lot of things,
40 like how they coded missing values and just lots of small, but
41 numerous, details. We built in some cross-checks to look at
42 observer effort and catch, and so here if the effort cross-check,
43 and so we've got matched trips.

44
45 We were able to match observer trips to vessels that had GPS track
46 logs on the vessel, and we compared our estimates of trip effort
47 from an observer trip to the GPS track log estimated effort for
48 that trip, and, for the most part, we got an unbiased -- You know,

1 pretty much an unbiased median.

2
3 However, you can see this tail of observations going in the
4 negative direction, and so those -- We investigated these, and
5 those were actually trips that the observers went on where the
6 track log was either malfunctioning or turned off, and so we
7 understood that that gave us some insight as to the track log data,
8 that it was probably not as complete as everyone thought.

9
10 Then we checked the observer trip catch versus a trip ticket trip
11 catch for matched trips, and I would point out that the way this
12 works onboard is that an observer subsamples at many different
13 levels on a shrimp trip.

14
15 They subsample the tows within a trip, and they subsample the
16 number of nets they sample within a tow, and they subsample the
17 catch within the net, and then they subset the species within the
18 catch, and so there's all these layers of sort of scaling up that
19 you need to do to get from observer data on a trip to the actual
20 total trip catch.

21
22 When we did that, it turned out that we pretty much have an unbiased
23 trip catch here. I mean, obviously, there's error going in both
24 directions, but it's pretty much not biased, and so that gave us
25 some insight as to it seemed like the observer data, at least at
26 the trip level, were not -- You know, the procedures that we had
27 done to come up with for processing and estimation at the trip
28 level were yielding unbiased, or were not biased. All right.

29
30 Then we used a new method for observer CPUE estimation, and so we
31 employed a Horvitz-Thompson ratio means estimator for a stratified
32 sample frame. The historical time-space strata for this
33 estimation, for this bycatch estimation, included regions, these
34 four regions here that are color-coded around the Gulf, three depth
35 strata, and three seasons, and so three four-month periods.

36
37 This ratio means estimator was a nice way to accommodate the
38 varying levels of fishing effort among observer samples, and so
39 the variation in essentially tow time between tows, among tows,
40 and then we investigated additional stratification variables.

41
42 We did this with some general linear models. The general form
43 catch is a function of effort with some additional covariates, and
44 so we focused in on trawl characteristics, various aspects of trawl
45 characteristics, and also diurnal period, whether the trawling was
46 done at day or night.

47
48 The net results of that is we created a new stratum that we call

1 Gear. It's a combination of net configuration and diurnal period,
2 and so D2 is a daytime two-net configuration, and D4 is a day net
3 four-net, and then a nighttime two, and a four.

4
5 Here is the -- From that modeling, here's the main effects for the
6 Gear, predicted catch rate by these categories, and so this is for
7 brown shrimp, and so on the bottom here are the four different
8 kind of gear categories.

9
10 With brown shrimp, the major difference is between a two-net and
11 a four-net configuration catch rate, and then, within there,
12 there's a minor difference of nighttime is a little higher than
13 daytime, okay, and the maximum difference here between catch rates,
14 from the smallest to the largest, and so that would be N2 peak,
15 versus D4, is about a 226 percent difference.

16
17 For white shrimp, the major component is daytime versus nighttime.
18 The minor, more minor, component is two nets versus four nets,
19 greater, and the maximum difference here was about 200 percent.

20
21 Then for red snapper, it's somewhat the reverse. The major was
22 nighttime, and it was higher catch rates than daytime, and the
23 four-net configuration was higher than two nets, and the maximum
24 difference here between a daytime two-net and a nighttime four-
25 net is 515 percent, and so these are fairly profound factors that
26 affect the catch rate that hadn't been incorporated previously.

27
28 Number five, we basically used data they hadn't used before. It
29 was this annual landings and gear survey that's run by the
30 Southeast Center, and that basically gets information on the full
31 fleet about what kind of nets they're using, and that's one part
32 of this information, and so we were able to use that to then
33 incorporate the two-net and four-net configuration into the effort
34 and also into the trip ticket landings.

35
36 There were definitely some issues with the observer data, in terms
37 of sparse sampling. Some time and space strata had kind of low
38 sampling, especially within a year, and so we had a couple of
39 strategies here.

40
41 We did -- Basically, we focused in on the specific stratum, which
42 is a combination of season, region, depth, and gear, and we pooled
43 groups of years within those. Our analysis of that showed that
44 the within-strata interannual variability was there. It does vary
45 a bit, but there's no systematic bias to that, and so we basically
46 could group some years together within those small strata, pool
47 the years together, to get a catch rate.

1 When we did that, we basically used the annual average stratum
2 size to avoid any inflation of precision resulting from that
3 procedure, meaning we didn't treat all the pooled years as coming
4 from a single survey, and so, essentially, we're getting the mean
5 catch -- Mean annual catch and mean annual variance for a time
6 period within a small -- One of these very specific strata.

7
8 There were still some remaining -- After that procedure was done,
9 there were still some remaining sparsely-sampled gear types within
10 strata, and so what we also found is that, you know, the nighttime
11 four-net was the most common gear that was sampled by observers,
12 and sometimes they didn't get a lot of sampling from these other
13 types, daytime, and especially the nighttime two and daytime two.

14
15 We came up with a GLM imputation procedure, kind of using those
16 catch rates by gear type that I showed you before, and so we were
17 able to then impute some of the effort data for that, and that
18 accounted for about 11 percent of the fleet effort, and so that
19 filled out the remaining strata, you know, so we could proceed
20 with the estimation.

21
22 Then we applied this again with our verification procedure, and
23 so, when we did it, after all those changes, we basically had
24 landings that were still a bit low, 10 to 20 percent, but it was
25 an improvement from the 45 to 50 percent difference from before,
26 but, obviously, some bias issues still remained.

27
28 Our conclusions were that our analyses indicated that we had
29 unbiased observer trip catch and effort, and the remaining bias
30 was likely due with issues with the total fleet effort, which is,
31 in turn, dependent on the total fleet landings, and so something
32 was still going on with those two, probably those two, aspects.

33
34 The CIE reviewers went through our methodology. They concluded
35 that it was a sound approach. They thought it was appropriate,
36 and they agreed with our conclusions about the remaining major
37 sources of bias.

38
39 They had a couple of major recommendations. Number one was to
40 outfit the entire fleet with a tamper-proof GPS device, and number
41 two was to do a complete overhaul of the shrimp observer program,
42 especially the statistical design and the allocation of observer
43 effort amongst strata. They had many numerous additional
44 suggestions about alleviating bias in the fleet effort estimation,
45 improving our estimation of uncertainty, refining the
46 stratification scheme, et cetera.

47
48 This recent round, we did some follow-up work in preparation for

1 SEDAR 98, which is underway for Gulf red snapper, and also
2 concurrently with SEDAR 87, which is Gulf penaeid shrimp, and so
3 we refined the bycatch methodology for some of the CIE suggestions,
4 especially the things that we could, you know, affect. We applied
5 this to the full observer time period, which runs from 2007 to
6 2023.

7
8 There is a SEDAR working paper to this effect, and I believe that
9 is included as a background document for you all on the bycatch
10 estimation, and there was concurrent research that focused on more
11 accurate commercial fleet shrimp landings and effort, and so
12 there's several working papers associated with that, one that was
13 part of the red snapper SEDAR and two that were part of the shrimp
14 SEDAR.

15
16 When we -- Basically, the main work here for this latest round, it
17 turned out most of the work was going back and working on the
18 actual shrimp effort and the trip and the landings, to get those
19 cleanup -- To clean up any kind of inconsistencies or strangeness
20 in how that was all being done.

21
22 When we did that, we actually got a pretty good verification here
23 between 2014 to 2021, almost pretty much not biased. There's
24 general underestimation still in the period before, and a couple
25 of the latter two years, and this turns out to be corresponding
26 with the different methodologies of how they collected data from
27 the track logs.

28
29 Here, they had a system where they would go and meet boats, and
30 get the chip off the unit, and then process it, and then give the
31 captains a new chip. This period here, where we had good, really
32 good, correspondence, a couple of things happened. The Southeast
33 Center took over the control -- Or took over this program with the
34 GPS units. They re-randomized who got them in the fleet, and they
35 had cellular transmission going on.

36
37 Essentially, when a vessel would be coming closer to port, and got
38 into cellphone range, the data would automatically upload from the
39 track log, and then -- The system they were using was based on the
40 3G technology, and that ended in 2021, and so now we're back to
41 physically getting the chips back, and, also, this has all been
42 done through the mail, and so we've got some definitely issues
43 going on with this track log stuff.

44
45 Then we also came up with a hindcasting procedure for the stock
46 assessment folks, who wanted estimates going back, you know, to
47 the Civil War, but we were able to get them back to 1984.

1 The majority of the work here, again, was really delving in and
2 cleaning up the time series of shrimp landings and effort for
3 season, region, depth and gear strata, and so this is based mostly
4 on port agent, dealer, and captain interviews during that period,
5 where they collected data on trip landings and effort by net
6 configuration and diurnal period.

7
8 They recorded species-specific shrimp catches by daytime, night -
9 - How much daytime and nighttime trawling went on, in terms of
10 hours trawled, and also by whether they were using a two net or a
11 four net configuration. That was very, very helpful here. This
12 work is detailed in some of the SEDAR working papers that I
13 mentioned.

14
15 This hindcasting procedure, we basically related strata catch
16 rates, and so it's at the stratum level, for catch rates of red
17 snapper and penaeid shrimp. We just created a ratio relationship
18 with those for the period of 2007 to 2013, which is the first sort
19 of observer set of years, thinking that that's probably more
20 representative, going backward, than the later years.

21
22 We applied this relationship to estimate the strata catch rates
23 for red snapper for three historical periods, and so 1984 to 1990
24 was a moderate fleet effort, with no bycatch reduction device
25 requirement. From 1991 to 1997, it was a period of very high fleet
26 effort, and they still had no bycatch reduction device requirement
27 at that time. Then, from 1998 to 2006, to when the observer program
28 picked up, there was basically a period of decreasing fleet effort,
29 and they also put in a BRD requirement.

30
31 The key assumption here is that you have a stable relationship
32 between the shrimp and the red snapper catch rates during a given
33 period within a stratum.

34
35 The BRD analysis, basically the observer program conducted a number
36 of experiments, especially in the early years, where they were
37 comparing paired tows, one net having a device and one net not.
38 Our analysis of that showed that the mean catch per tow was about
39 7.1 percent higher for nets without a BRD, and so we use that to
40 historically adjust the bycatch estimates pre-1998, and so here's
41 the results looking at the red snapper bycatch from 1984 to 2023
42 by three Gulf zones, and these were set up for the red snapper
43 assessment, these three zones, and so there's a central and east
44 and a west.

45
46 What you can see is that, essentially, the bycatch rates were much
47 higher historically, and they have come down to somewhere in the
48 five to ten-million range for a number of fish in the west, and

1 they've always been historically fairly lower, much lower, in the
2 central and the east zones. The west zone is basically Texas and
3 Louisiana combined.

4
5 We compared this overall, basically the bycatch of red snapper for
6 the whole Gulf, Gulf-wide, with the previous SEDAR that produced
7 these, which was SEDAR 52, and so SEDAR 52 is in the red dots, and
8 our new estimates for SEDAR 98 are these triangles, these blue
9 triangles.

10
11 What's interesting about this is that actually the pattern shows
12 sort of the same patterns between the two, meaning there's periods
13 of low, periods of increasing, decreasing, increasing, that kind
14 of a thing, and so the patterns are fundamentally similar.
15 However, there's a lot more volatility, as you can see in the older
16 methodology and the way that they were doing it.

17
18 Some of the key differences that I talked about before, but some
19 of the really key differences between these two is that we
20 incorporated that gear strata, that daytime, nighttime, two-net,
21 and four-net, and that was incorporated in both the observer data,
22 the previous port sampler data, the landings and the shrimp fleet
23 effort, all of it, and I think that probably is the reason this is
24 sort of just a lot more, I would say, stable over time.

25
26 Also, SEDAR 52 used SEAMAP trawl data as a proxy for commercial
27 trawls for this pre-observer time period, pre-2007. Given that
28 the catch rates of the commercial trawl gear types can differ by
29 over 500 percent, we thought that equating the SEAMAP trawl to a
30 commercial trawl is probably not scientifically valid, and that's
31 why we came up with this other hindcasting technique.

32
33 I'll conclude with the next steps that we have sort of underway
34 for improvement, and this is kind of a joint effort with the
35 Southeast Center and CIMAS scientists, is, basically, we're
36 evaluating strategies for deploying more modern GPS track log
37 devices on the commercial shrimp fleet, to get around this issue
38 of trying to get chips from them and, you know, physically get
39 chips off the units, and get them in the mail, and all that kind
40 of stuff, and it seems to be creating lots of issues here.

41
42 We have a new fisheries information system project funded by NOAA.
43 It's running for two years. We just started this in the fall of
44 2024. We expect to conclude this next summer, but we're basically
45 undertaking a major overhaul of the shrimp observer program, and
46 many different aspects of that, and, also, we're starting to do
47 some initial scoping of how we might conduct field experiments for
48 calibrating the SEAMAP and the commercial shrimp trawls. That's

1 the conclusion of my presentation, and, any questions, I'll be
2 happy to entertain.

3
4 **CHAIRMAN ALLEN:** Thank you very much, Steve, for that presentation.
5 All right. Okay, and we've got a couple of questions already.
6 We'll have some discussion. David, you're first.

7
8 **DR. GRIFFITH:** Thanks a lot for this presentation. I was wondering
9 -- You mentioned somewhere that that bycatch reduction device was
10 in place, I guess in 1998, and that was the first year, and is
11 that right?

12
13 **DR. SMITH:** To our understanding, that's when it became mandatory
14 for the --

15
16 **DR. GRIFFITH:** So is that reflected on this graph here, the second
17 to the last slide you have? It's kind of confusing to me. It
18 said there was a 7.1 percent reduction in bycatch for those with
19 the BRD, I think, and I can't really see that when you look at
20 1998 on. I guess there is some sort of reduction, but do you see
21 that?

22
23 **DR. SMITH:** Yes, and, well, you have to understand that's just
24 adjusting like the observations by 7 percent that we use for the
25 catch rate, okay, and so what I'm saying is that these -- These
26 numbers back here are 7 and -- Basically, if we didn't apply that
27 from 98 and before, this would be, these would be a little bit
28 lower because this is sort of upping the bycatch rate, adjusting
29 for, you know, if they didn't have a BRD. Essentially, that's
30 what we did.

31
32 So this is all being -- I would say, look, all of these trends and
33 things are highly driven by the effort, the fleet effort, in time
34 and space, and so that's really what's driving this stuff, and,
35 also, over time, there's been shifts in the configurations of the
36 fleet, in terms of trawls, predominantly from a two-net to a four-
37 net over time, and so there's a lot of things going on here, time
38 and space wise, that -- Then also just the sheer amount of fleet
39 effort.

40
41 This period, basically from the late 1990s, you know, to 2000 or
42 so, it was very, very high effort kind of period, and then, after
43 that, it really underwent a very steep decline in the early 2000s,
44 and now we're down to kind of came out with a -- You know, it kind
45 of came out with a -- You know, it was fairly stable for a while,
46 and then now it seems to be going down again.

47
48 **CHAIRMAN ALLEN:** Thank you for that. Trevor, did you have a

1 comment?

2
3 **MR. MONCRIEF:** Yes, and I was hoping just a little bit of
4 background. I know the -- Is the council not working on something
5 involving shrimp vessel location stuff, and how does that tie into
6 the discussion we're having on this subject?

7
8 **DR. SMITH:** Yes, and that's all part of this, and so the center is
9 involved, I believe, with the council, and with some consulting
10 firms, to figuring out how to get like the new generation of track
11 logs out on the vessels, and so that's an ongoing thing at the
12 moment.

13
14 **CHAIRMAN ALLEN:** Yes, and I know they are doing that, but I don't
15 have the details of the timeline. Trevor, other --

16
17 **DR. SMITH:** I don't either.

18
19 **MR. MONCRIEF:** Is that -- What the council is considering, does it
20 line up with the recommendation from the CIE to put on all vessels,
21 the track log?

22
23 **DR. SMITH:** I think that's still an open question. I think, right
24 now, they have instituted a volunteer program, to try out these
25 new devices, where NOAA will actually pay for the device to be
26 installed on your boat, and so that's, I know, the first -- Kind
27 of the first round of this, and I think there's probably others
28 that would know much more about this than me. I'm not directly
29 involved in that project.

30
31 **CHAIRMAN ALLEN:** Matt, some context?

32
33 **DR. FREEMAN:** Thanks, and so the council took final action on that
34 document regarding what Dr. Smith is referring to as track logs to
35 replace the cellular electronic logbooks. As he mentioned, LGL is
36 the company that's working on the Early Adopter Program with
37 federally-permitted shrimp vessels in the Gulf.

38
39 The plan is to install that on roughly 300 volunteer vessels, and
40 then, beyond that, the total number of vessels that will be
41 required to have those devices -- The way it's phrased is as
42 selected by the Science and Research Director, but there are
43 roughly about 1,300 permits, and so, like I said, the Early Adopter
44 Program alone is going to be providing devices and two years of
45 cellular transmission fees for those 300 vessels.

46
47 **CHAIRMAN ALLEN:** Okay. Thank you. Yes, sir.

1 **SSC MEMBER:** Matt, you said 1,300? Is that active or is that
2 total?

3
4 **DR. FREEMAN:** That's a total number, and that's a rough -- I don't
5 have the exact number right in front of me. I could pull the
6 document up and tell you a more recent number.

7
8 **SSC MEMBER:** I'm just wondering, and the active number is probably
9 a lot lower than the actual permit holder number, and that would
10 be a better -- It would give us a better idea of the percentage of
11 coverage we're looking at already with what's in place.

12
13 **DR. FREEMAN:** If you're interested, if nothing else, next time you
14 all take a break, I can check. I know there was a presentation to
15 the Shrimp AP, at its March meeting, that talked about -- I believe
16 it had some information on the number of active permits, but I can
17 double-check that for you.

18
19 **CHAIRMAN ALLEN:** Mr. Anson, context from the council?

20
21 **MR. ANSON:** Yes, and just more of a general information. Dr.
22 Freeman, Matt, you might be able to answer this question, but it
23 was based on a question, or a comment from David just now to Dr.
24 Smith, and that is that they have gone through, obviously, and
25 looked at a lot of the historical aspects of the shrimp fishery.

26
27 I'm looking at the working paper provided for SEDAR, and it didn't
28 provide a nice summary of those little kind of tidbits of
29 information, as to when things occurred, and for how long it
30 occurred, and that's something that we often discuss, you know,
31 for some of the amendments that we deal with.

32
33 I'm just wondering, and it may not have been in your terms of
34 reference, Dr. Smith, but do you have plans, or is there any
35 documentation that summarizes those findings, when you kind of
36 went in a deep dive to look at some of the changes in the shrimp
37 fleet, and the requirements, and even in as much as the observer
38 program and any changes in the observer program over time?

39
40 **DR. SMITH:** I think, if you look at the shrimp effort and shrimp
41 landings working papers that I provided, there's a lot of
42 information there about what they had to do to put all that
43 together, because there were a lot of -- There were changes in the
44 way data were collected from the states. There were all kinds of
45 things going on, and a lot of that is documented, I believe, in
46 those working papers.

47
48 For the observer program itself, it's basically been in running

1 the same way since 2007, when it started, and so there haven't
2 been any dramatic changes to the way they've been doing business.

3
4 We are in the process of investigating that right now, as I
5 mentioned, and we'll probably do a lot of refining to the way
6 they're collecting data onboard, and statistical design, you know,
7 all kinds of things, but, for the moment, for this study, the
8 observer program is pretty constant, and uniform, in the way it
9 was conducting business.

10
11 The changes are things to deal with how the landings are being
12 recorded, via trip ticket systems or port agent interviews, et
13 cetera, going back in time, and that varies in time by state, and
14 so it's quite complicated, and then the effort was collected by
15 the port agents as well, going back in time, and so the bycatch
16 estimation working paper really uses those effort and landings
17 data to do the estimate, to do our bycatch estimation, but the
18 details of that is in those other working papers.

19
20 **MR. ANSON:** Thank you.

21
22 **CHAIRMAN ALLEN:** Yes, and thank you, Steve. Will Patterson has a
23 question.

24
25 **DR. PATTERSON:** Thanks, Mike. Steve, I'm looking at your report,
26 Figure 3, and I don't know which figure that is in the
27 presentation.

28
29 **DR. SMITH:** Is it in the presentation?

30
31 **DR. PATTERSON:** It's shrimp landings.

32
33 **DR. SMITH:** Is it in the presentation?

34
35 **DR. PATTERSON:** It is. It is. I saw it later in this
36 presentation, and so it's the comparison of reported penaeid shrimp
37 landings with observer-predicted landings.

38
39 **DR. SMITH:** This one?

40
41 **DR. PATTERSON:** No, and it's not this one. It just has -- There
42 you go. This one. So, when you were presenting this, you said
43 like you thought that the trends were kind of lining up here, but
44 I don't really see it. You know, most of the estimates from --
45 Well, the reported landings are typically higher than the
46 predicted, and even, you know -- So, you know, most of the
47 residuals here for the predicted are negative.

1 Then you have the issue that, you know, the confidence limits don't
2 even overlap what you're seeing in the landings themselves, and
3 then, you know, in many years, you have underestimation of like 50
4 percent, and so I'm wondering, you know, as far as the bycatch,
5 like how you could have confidence that you're tracking the bycatch
6 very well if you're underestimating the landings to this extent.

7
8 **DR. SMITH:** Well, all I will say is that, compared to what we were
9 getting before, all right, from 2014 to 2021 looks pretty close,
10 okay, and, obviously, there's a couple of years where we're off,
11 but we're also over in a couple of years here.

12
13 It's these earlier periods, and the later period, where we
14 definitely still have some issues, okay, and the point is that
15 this is all dealing with -- This is really related to the effort
16 and the landings, and so the effort is driving all of this, and
17 the landings are driving the effort, and so that is where we still
18 have issues here, for sure.

19
20 The observer data itself, and I think the methodology, is what we
21 can do, but we still have some issues with the data inputs, and
22 I'm pretty sure we've isolated that it's something to do with the
23 landings and effort, and all I'll say is that it's a lot better
24 than when we started, and this is even the first check we did, or
25 the midterm check we did after we -- You know, that the CIE looked
26 at, and then this is what it looked like when we started.

27
28 **DR. PATTERSON:** Yes, and I guess I understand part of that. It's
29 just, I've never built a model and said, well, it predicts really
30 well half the time, and so I feel pretty good about it.

31
32 **DR. SMITH:** Well, I don't know if I feel good about it. This is
33 pretty much what -- You know, there's not really any way to change
34 it at this point. I mean, this is it, okay, and, obviously, we're
35 underestimating the last couple of years, and we've done a little
36 bit of bias adjustment stuff, dealing with this chip problem, but
37 it hasn't -- You know, and this got alleviated a little, and it
38 was even worse, right, and it's been alleviated a little bit, but
39 this is pretty much what we have, you know.

40
41 **DR. PATTERSON:** Okay, and could you go to the next one, that has
42 the red snapper bycatch time series?

43
44 **DR. SMITH:** That one or the other one?

45
46 **DR. PATTERSON:** The one that has the orange circles and the blue
47 triangles, SEDAR 52 versus 98.

1 **DR. SMITH:** Are you guys seeing this one?

2
3 **CHAIRMAN ALLEN:** No, not yet.

4
5 **DR. SMITH:** That one?

6
7 **DR. PATTERSON:** Next. This. So, in my mind, you know, it looks
8 like the SEDAR 98 estimation, which is this newer procedure, it
9 looks pretty -- It looks pretty hyper stable, and so it's not
10 picking up, you know, the big increases in the 1990s and then the
11 degree of decline.

12
13 I mean, the one place it does kind of overlap the trend, or have
14 a similar trend, is from the late 1990s until about 2010, but I'm
15 wondering, you know, and like is this a similar issue to the
16 underestimation we just saw? Like, what are the commonalities
17 there?

18
19 **DR. SMITH:** We're not sure. Basically, the landings and the effort
20 had to get, you know, kind of pieced back together, in various
21 ways, going back from pre-observer, you know, which is prior to
22 2007, and remember this -- From 2006 back, this is a hindcast.
23 Basically, we're making up data where it doesn't exist, okay, and
24 so you have to take that with a grain of salt.

25
26 Now, what I would say is that I think it's probably more realistic
27 than what was produced before using the SEAMAP data, okay, just
28 given what we know about trawl catch rates and the differences,
29 the extreme differences, we see just among the commercial gear
30 types.

31
32 This is all based on, you know, cleaning up those effort time
33 series, getting it all configured to day, night, two-net, four-
34 net, and all the time and space strata going back in time, and,
35 like I said, we did it for periods of years, and that might be
36 part of why, you know, some of this -- You know, like you get the
37 stable period here, and then you get kind of an increase going on
38 here.

39
40 Well, that's -- You know, those are where we had kind of
41 differences in our year periods, you know, but, basically, this is
42 catching that increase in effort here. It's just not as extreme
43 as what they were predicting before, all right?

44
45 Now, if we can get a calibration between the SEAMAP trawl and the
46 commercial trawls, the four types, we could probably then do this
47 much better going back in time, because then we'll have actually
48 empirical data, but, for the moment, for the part -- For right

1 now, the hindcast is kind of what it is, you know? I mean, we
2 thought it was a better, at least a little bit better, approach
3 than using data we don't trust at all.

4
5 **DR. PATTERSON:** Okay. Thanks. Yes, and, I mean, huge
6 implications, obviously, for this species, red snapper, that we're
7 talking about in this figure, given, you know, the estimates back
8 in the 1990s of how substantial an effect shrimp trawl bycatch was
9 in population and fishery dynamics. I mean, this new approach
10 would say that was totally overestimated.

11
12 **DR. SMITH:** Correct, but I would point out that, you know, the
13 peak here is still twenty-five million fish, back in the day, and
14 now it's down below ten, okay, and so it's still going to have an
15 effect. It just doesn't -- Just the magnitude difference isn't as
16 large.

17
18 **DR. PATTERSON:** Okay. Thanks.

19
20 **CHAIRMAN ALLEN:** Thank you, Will. Harry and Jim, I'm going to get
21 to you, but, Matt and Carrie, comments? Carrie, please.

22
23 **EXECUTIVE DIRECTOR SIMMONS:** Thank you, Mr. Chair. Thank you, Dr.
24 Smith, and so I had a question, just kind of going back to basics
25 again, on the bycatch estimated annual landings were consistently
26 below the reported annual landings by an average of 45 percent,
27 and so just, in a nutshell, that means, when you took the observer
28 reported data, and you compared that to the annual landings for
29 that trip, it was 45 percent off, and is that what that means?

30
31 **DR. SMITH:** No, no, no. The actual -- At the trip level, we got
32 zero bias, okay, and the observer predicted catch of the trip
33 matched the trip ticket landing. What you're referring to is the
34 initial application of the existing methodology back in 2021 to
35 estimate bycatch, and so we basically modified it so that we could
36 estimate brown shrimp.

37
38 We had never done shrimp before, and so we used the methodology to
39 estimate the catch rate of brown shrimp and then multiply that by
40 the fleet effort to get the total predicted annual landings, and,
41 when we compared that with the actual reported landings, that's
42 where we were 45 to 50 percent low.

43
44 **EXECUTIVE DIRECTOR SIMMONS:** Okay. I see. So then, in the observed
45 numbers that you have, can you give us a sample size on what that
46 represents in the graphs, in tows or trips?

47
48 **DR. SMITH:** What are we -- Which graph are you referring to?

1
2 **EXECUTIVE DIRECTOR SIMMONS:** In the observed -- If you go back,
3 Jess, to the beginning, where we're talking about observed versus
4 predicted. There. So what would be the sample size on the
5 observed there, in trips or tows?
6

7 **DR. SMITH:** I would have to look that up, but I believe it's
8 thousands of tows per year, for sure.
9

10 **EXECUTIVE DIRECTOR SIMMONS:** Okay. Thank you, because we have --
11 I think it's like 2 percent coverage of the fleet Gulf-wide.
12

13 **DR. SMITH:** Well, that's in terms of shrimp trips, but, in terms
14 of actual samples, which is a tow on a trip, it's thousands of
15 tows.
16

17 **EXECUTIVE DIRECTOR SIMMONS:** Okay. Thank you.
18

19 **DR. SMITH:** Okay.
20

21 **CHAIRMAN ALLEN:** Thank you. Matt.
22

23 **DR. FREEMAN:** I did want to offer to the SSC, just given some of
24 the presentations that the Shrimp AP received in March, if it's of
25 interest, and Jessica has got it geared up, but there's a slide
26 that Mr. Dettloff, from the Science Center, gave that shows total
27 offshore effort in the Gulf, since I believe the early 1980s to
28 relatively recent, and so I didn't know if that would also help
29 provide some context related to bycatch, since there's a function
30 there, and so I'll leave it to you all to see if you all would
31 like to look at that.
32

33 **CHAIRMAN ALLEN:** I see Trevor nodding to this. Harry,
34

35 **DR. FREEMAN:** Jess, it's slide 7.
36

37 **CHAIRMAN ALLEN:** Well, let's pull that up. Just a second, Harry.
38 Okay. All right. Okay. Thanks for that. Harry, please.
39

40 **MR. BLANCHET:** Thank you, and, yes, this is kind of pertinent to
41 my question as well. The original question I had was that I heard
42 Dr. Smith say both that he didn't think much of the SEAMAP trawls
43 and that they were still doing things to try to incorporate the
44 SEAMAP trawl information.
45

46 I am not at all concerned that the catch rates between the SEAMAP
47 and the commercial trawls vary by five-times. That's sample design
48 issues between randomly assigned and targeting a species. That

1 happens. If there is a relationship between the two, it could
2 still be scientifically valid, and so I just -- I don't like waving
3 off the usefulness of the index just based on a CPUE difference,
4 and so I am hopeful that this evaluation continues. Thank you.

5
6 **DR. SMITH:** Yes, and I didn't mean to imply that the SEAMAP data
7 aren't useful. The SEAMAP data we think are going to be extremely
8 useful. The problem is that they -- Well, as you mentioned, they
9 likely have a very different catch rate than the commercial trawls,
10 and we're not sure how that relationship works right now, meaning,
11 even within the commercial trawls, you know, there's a 500 percent
12 difference, and we're not sure how a SEAMAP trawl would even align
13 with even one of those.

14
15 You know, is it closer to a nighttime four, or a daytime two? You
16 know, I don't know, and so that's the problem, is that we need to
17 -- If we do these calibration experiments, then that's the whole
18 point. We can then relate and to have a quantitative estimate of
19 how to convert SEAMAP trawl effort to one of the other commercial
20 trawl efforts, and then we can incorporate it into the whole
21 bycatch procedure, which would be really ideal, I think, and so I
22 didn't mean to imply that it's not valid, or not correct. It's
23 not valid to use at the moment, because we don't know how -- What
24 that relationship is.

25
26 **MR. BLANCHET:** Okay. I just -- I mean, we have time of haul, or
27 haul-back, on the SEAMAP, and so we can allocate that to day or
28 night. We know it's a standardized gear, and we have an awful lot
29 of observer data. It seems like it is not -- To me, this is a
30 data exploration exercise, and not a field exercise.

31
32 **DR. SMITH:** The point is it doesn't help us to relate it to the
33 observer as much. We need to understand how it relates to
34 commercial trawl, in terms of a catch rate, okay, and so that's
35 the whole key here, is we need to know the catch rate as it relates
36 to a daytime four-net, a daytime two-net, a nighttime four-net,
37 and nighttime two-net, okay, and that's where we probably need to
38 do some controlled field experiments, where we hopefully can
39 recruit some shrimp fishers to go out into a similar area and time
40 as the SEAMAP vessel, and then we will -- We can get data and then
41 actually estimate those conversions. That's essentially what
42 we're thinking of doing here.

43
44 **MR. BLANCHET:** Okay. Well, just a note of caution. Even within
45 the SEAMAP program, trying to get intercalibration between two
46 vessels towing identical gear can be challenging. That's just --

47
48 **DR. SMITH:** Yes, and I understand. I've done these before, and I

1 know.

2
3 **MR. BLANCHET:** I get it, and I just --

4
5 **DR. SMITH:** It's definitely challenging, but, you know, we have to
6 go with, hey, they've been using the same net, as I understand it,
7 for a lot of years, and, you know, hopefully -- I think they've
8 been using the same vessel for a lot of years, and so hopefully we
9 can use that configuration and get some sort of relationship going
10 back in time here.

11
12 **CHAIRMAN ALLEN:** Thank you for that, Harry. Jim Nance, and then
13 Trevor.

14
15 **DR. NANCE:** Thanks, Steve, for those presentation. You know, Kyle
16 has done a really great job on the effort, and getting that, to be
17 able to look back and so forth, and I appreciate all the effort
18 that the Science Center has done.

19
20 There's still a little bit of work, I guess, on the bycatch stuff,
21 you know, trying to figure out a relationship between shrimp catch
22 and bycatch and those types of things, and so I'm looking forward
23 to, as you synthesize more, to be able to come to agreement on
24 some of the older data, but I appreciate your efforts.

25
26 **DR. SMITH:** Thank you, Jim.

27
28 **CHAIRMAN ALLEN:** Thank you, Jim. Trevor.

29
30 **MR. MONCRIEF:** Yes, and I was -- The reason why I wanted to bring
31 this up is, I mean, we're kind of going around in circles a little
32 bit, as far as when we talk about the SEAMAP stuff and everything
33 else, but we've reached a point in the fishery, in my mind, where
34 success, effort, and catch isn't predicated on the abundance of
35 shrimp offshore. It's based on how the market is doing, and this
36 fishery has had decreasing yields for the last few decades, and
37 it's decreasing in effort, as evidenced by this figure here.

38
39 So, to me, you know, in the large scale, when we're talking about
40 the magnitude of this issue, it is diminishing, right? The issue
41 here now is that the shrimp fishery is going down. Bycatch isn't
42 as much of an issue as it was in the early time series, and I
43 appreciate the efforts that have been taken over by Dr. Smith to
44 try to clarify what it was historically, based on the information
45 that was available.

46
47 When I first saw this, and I saw the recommendations from the CIE
48 reviewers, where, you know, they advised 100 percent coverage

1 across-the-board, that's what kind of took me aback a little bit,
2 right, because I kind of talked about this, in I think one of my
3 first couple of SSC meetings, is that, if we wanted to find -- If
4 it was all about data quality, or data quantity, our end result
5 would always be to require 100 percent coverage of everything, and
6 that's not the world we revolve in.

7
8 I think the evidence of all the reporting programs coming online
9 from the state side since, you know, before 2010, and after 2010,
10 have given us a lot of information on effort and catch, and so
11 that's fairly solidified.

12
13 You know, basically, looking at the observer program, redesigning
14 it is going to be beneficial, and, when it comes to coverage, to
15 try to get more detailed effort, I would stray against a 100
16 percent coverage requirement and lean more toward that you can
17 continue to subsample this fishery, and get the information that's
18 needed, because I don't know if the gains in precision, and gains
19 in accuracy, from having 100 percent coverage is truly going to
20 outweigh the problems that it will create by doing that to the
21 fishery.

22
23 **CHAIRMAN ALLEN:** Thank you, Trevor. Jason, please.

24
25 **MR. SAUCIER:** Yes, and I just had a couple of things that I jotted
26 down while Dr. Smith was going through the presentation. One of
27 the questions I had was what percentages of the fleet are two-net
28 boats versus the four-net, just because my experience of the
29 federal fishery is most of the fleet is a four-net, you know, the
30 big slabs that are running.

31
32 **DR. SMITH:** Yes, and I don't have the numbers at my fingertips,
33 and it's probably in one of my reports here, but, yes, right now,
34 it's probably -- You know, it's majority for sure, a four-net.
35 However, that changed back kind of in the 1990s. It used to be
36 mostly two nets back then, and then it has gradually sort of
37 shifted over to four.

38
39 The two-net is still quite common though in the -- I think in
40 Louisiana, and some of the sort of the Mississippi and Alabama,
41 that sort of stretch. It's still pretty common, but I think you're
42 right that definitely the four-net is the most common boat right
43 now.

44
45 **MR. SAUCIER:** Just in our jurisdiction, the folks that we -- That
46 hail-in and hail-out of Mississippi waters, we've got sort of two
47 sets of the fleet. We've got a bay fleet and the federal fleet,
48 and they -- There's not a whole lot of overlap.

1
2 They do -- You know, our bigger boats are working in the three-
3 mile zone south of the islands, but our regulations are set up to
4 allow them to pull quads in that area, and so we're not enforcing
5 the two-net limit, like we do in the sound, and so I was just
6 curious if that's sort of the way that it's done in most other
7 areas, in that -- You know, just talking to these operators of
8 these big boats, they don't switch out gear to come in and fish
9 inside.

10
11 They stick with the quads, because it's not efficient, and they're
12 not catching enough per trawl time to make it worth the switch to
13 come inside, and so that was a big question is, you know, if we're
14 looking at bycatch, are we estimating commensurate with what gear
15 is predominantly used by that fleet?

16
17 So, if it's mostly four nets, and it's most of the red snapper is
18 being caught in the west, are -- You know, are the results that
19 we're seeing based on that, that it's -- You know, it's four-net
20 boats, and I'm not familiar with the Texas area, if they're pulling
21 quads over there or what, but that was the first question.

22
23 The second one is were there correlations between the two-net boats
24 and -- I don't know if it was in this presentation or one of the
25 others, but some of these boats are ice boats, versus freezer boats
26 that you all are looking at, and I think there's very few ice boats
27 left in the federal fleet, but are there correlations between the
28 ice boats or two-net boats and certain target species?

29
30 So, if this is a minority of the fleet, that we have these double
31 rigs, and ice boats, are they just targeting white shrimp off
32 Louisiana, where we see lesser interactions with bycatch species
33 of concern, and then, also, habitat is a big thing here.

34
35 I mean, obviously, we're talking about reef fish. Most of our
36 trawlers avoid hardbottom, for a number of reasons, and so that
37 kind of goes back to that SEAMAP question of, you know, maybe
38 they're sampling in areas where trawlers, commercial trawlers,
39 aren't going to go, and so the bycatch rates, and the species
40 composition, is going to be different, based on where they're
41 dragging. I don't know if that was a question or just sort of
42 something I thought about there.

43
44 Then wouldn't resuming cellular, or cELB, improve the predicted -
45 - If we go back to slide 16, it would improve that observer
46 estimate, and so we saw it there from 2014 to 2020, when we had
47 cELB. Prior to that, it was -- You said port samplers were getting
48 the track logs, and now it's mail-in, but it sounds like we're

1 working on getting that back out to a portion of the fleet, and
2 maybe a decent sized portion of the fleet, and so some of the
3 problems, I think, might be taken care of when we go back to this
4 way of reporting, where it's automatically sent.

5
6 Then we see bycatch of red snapper to be higher in the west, and
7 so, if there's any changes to survey coverage with observers,
8 wouldn't it be more prudent to focus on that area where we see the
9 overlap, or we see the higher bycatch? Just one other comment.

10
11 **DR. SMITH:** Do you want me to address all of those, or what do you
12 want to do?

13
14 **MR. SAUCIER:** No, and I just kind of -- These are some things that
15 popped up. Go ahead on that one. I'm sorry.

16
17 **DR. SMITH:** Well, I can go back and go through your points, and so
18 the number one point is, yes, the whole point of a stratifying by
19 gear type is that we have an observer catch rate by time and space,
20 you know, depth, season, area, and by day and night, and then we
21 basically --

22
23 We multiply that through at that small stratum level by the effort
24 of that gear configuration, and so that was the whole trick of
25 getting it to work right, I think, and so that's completely
26 incorporated. That was sort of our main innovation here from what
27 they were doing before, I think. Now I can't remember all the
28 rest of your points. If you want to ask me a quick question on
29 those things, I can address each one, if you want.

30
31 **MR. SAUCIER:** I guess, the cellular, if we go back to that method
32 of reporting, wouldn't that improve our accuracy of prediction?

33
34 **DR. SMITH:** For sure.

35
36 **MR. SAUCIER:** Looking at that slide.

37
38 **DR. SMITH:** I think for sure, and the issue about, you know, total
39 fleet coverage or not is really not -- I mean, I would prefer that,
40 for a reason that maybe you haven't brought up, but the landings
41 are an issue, okay, and not every dealer -- Not every trip gets
42 reported to a dealer, and let's just be frank, okay?

43
44 If we had complete cellular coverage, like they do -- Or some sort
45 of coverage like that, like they do for all the other federally-
46 permitted fisheries in the Gulf -- If the shrimp was just like all
47 the others, then we could actually -- Our estimates of catch, of
48 landings, from using the observer data are probably going to be

1 more accurate than what they're getting through the trip ticket,
2 okay, and it would at least be one known, out of all these unknowns
3 that we have, you know, and so that's sort of my just personal
4 perspective here.

5
6 Now, yes, getting a representative sample and all that, that's
7 probably the way it's going to go for a while, and, yes, with the
8 cellular coverage, plus that, you know, I think we can probably do
9 a decent job, but we still have this issue with the effort
10 ultimately rests on the landings, okay, and, if the landings aren't
11 right, the effort is never going to be right, okay?

12
13 **MR. SAUCIER:** Just to comment on the effort, I think -- Or on trip
14 tickets, I think we have come a long way with the accuracy and the
15 compliance rates. At least in our state, since about probably
16 2015, or 2016, we've seen a lot higher compliance rate, and that's
17 including federal dealers, you know, the boats that are offloading
18 the slabs, because the folks that we've got there -- It's just a
19 lot more follow-up than we used to.

20
21 We do a lot more validation of tickets that look, you know,
22 obviously incorrect, or something was off. We verify and correct
23 stuff as it comes in, and so I think, since about 2015 or 2016, I
24 think we have a lot more confidence, at least in the stuff that's
25 reported to be landed in Mississippi.

26
27 **DR. SMITH:** Yes, and I would say that, you know, overall, those
28 kinds of efforts have improved across-the-board, but we still have
29 -- We still definitely have picked up some things, you know, where
30 we know an observer went on a trip, and then there's no trip
31 ticket, you know, that kind of thing, and so we know there's still
32 stuff happening out there, and we're not sure why.

33
34 **CHAIRMAN ALLEN:** All right. Thank you, Jason. Ralph.

35
36 **MR. TOWNSEND:** First of all, I just want to say the idea of going
37 to detailed strata to improve estimates, I think makes a lot of
38 sense, and I appreciate all the hard work that goes into it, but
39 I want to get at a basic assumption.

40
41 The basic assumption is that observed trips are the same as
42 unobserved trips, and my research at bars, talking to fishermen,
43 tells me, in every fishery in the world, with enough beers,
44 fishermen will admit that they fish differently on trips where
45 there's an observer as to where there isn't an observer, and the
46 strategy is, you know, if there are protected species, avoid the
47 areas where the protected species are.

1 My question is what steps can you take with this data to try to
2 detect the difference in behavior between observed and unobserved
3 trips, because it seems, to me, until you crack that nut, you can't
4 really solve the problem.

5
6 I mean, depending on the detail you have, details like are they
7 fishing on hard or soft bottom, and how long is the tow, and what
8 speed is the tow, those things, because fishermen are very good at
9 figuring out, when there's an observer onboard, how do I make my
10 BRD work as good as it can, and, when the observer isn't there,
11 I'm not nearly as worried, and so are there ways to use the data
12 you have to go looking for evidence of different behavior on
13 observed trips versus unobserved trips?

14
15 **DR. SMITH:** We haven't really delved into that too much, and part
16 of it is, you know, these shrimp trips are generally pretty long.
17 Like, when they take an observer, they're out there for weeks to
18 months to a couple months. If you're on a one-month trip, and
19 you're changing your behavior for every day, and trying to fish in
20 different places than you're normally used to, I just -- I don't
21 think that -- That doesn't make sense to me.

22
23 I think, over time, they get used to having an observer onboard,
24 and, you know, when we observe things, and maybe not in the shrimp
25 fishery, but in like the reef fish fishery, you know, there's
26 things that are -- You know, they're not supposed to be doing,
27 like using reef fish as bait and things, and they can just go ahead
28 and do it, and we record it.

29
30 You know, I would say there's some evidence to the contrary, that,
31 you know, after a while, they don't really change their behavior.
32 I think where it's a real issue is on -- You know, when they just
33 go out on day trips, or a really short trip.

34
35 Well, yes, and then they can go out and do something, but, when
36 you're out on these week-long reef fish trips, or two-week trips,
37 or these two-month shrimp trips, I just -- I find it -- I find
38 that that would be really tough on the captain to like -- To really
39 go, you know, change their behavior immensely, but we haven't
40 really delved into it, and I think we would have to -- You would
41 have to design some sort of auxiliary sampling thing to try to
42 really get at that, and, you know, we've been struggling with just
43 trying to deal with the data as it is.

44
45 **CHAIRMAN ALLEN:** Okay, Ralph, and one more follow-up.

46
47 **MR. TOWNSEND:** I'll disagree with your long-term assumption,
48 because probably the single most important thing that a harvester

1 can do to avoid unwanted bycatch is to stop fishing an area where
2 they get the bycatch, and, if they're out on a month-long trip,
3 and they hit a lot of bycatch, they say, oh, there's an observer,
4 and I've got to move.

5
6 Now, it may not be a big reduction in their directed catch, but it
7 can make a big difference in terms of what our data looks like,
8 and so I think the idea that, because it's a longer trip, there's
9 nothing they can do that doesn't dramatically affect their catches
10 at least ought to be empirically tested, because the decision --
11 Again, I think the most important bycatch decision, in almost every
12 fishery in the world, is, if you catch what you don't want, get
13 the hell out of there.

14
15 **DR. SMITH:** Yes, and I agree with you, I do, and, you know, that's
16 just something that's there. Obviously, you know, the observer -
17 - You know, it's like in physics, right? The observer changes the
18 properties, but it is the only method, at the moment, that we have
19 to get information on bycatch, and it is -- You know, the boats
20 are randomly selected, and they're put on trips, you know, every
21 -- I think every quarter.

22
23 You know, there's just -- I mean, we can control what we can
24 control in that regard, and I agree with you. I mean, if they,
25 you know, go out, and they're like, okay, I'm not going to go fish
26 this area, because there might be some sort of protected species
27 there. well, then that's what they do, you know, but you're right
28 that the fundamental assumption here is that an observer trip is
29 representative of the other trips in that. Actually, what it
30 really gets down to is the other trips in that sort of time-space
31 area.

32
33 **CHAIRMAN ALLEN:** All right, and we're going to have to wrap this
34 up because we're going to have to move on. I appreciate all the
35 discussion. I don't think we necessarily need a motion here. Do
36 we need a statement about best scientific information available,
37 Ryan? Thoughts about that?

38
39 **MR. RINDONE:** I am eyeballing Dr. Simmons and Dr. Freeman in the
40 back of the room. My inclination was that, yes, some sort of
41 recommendation about this revised approach would have been useful
42 for the council.

43
44 **CHAIRMAN ALLEN:** Dr. Simmons.

45
46 **EXECUTIVE DIRECTOR SIMMONS:** Thank you, Mr. Chair, and so, I mean,
47 I guess, if you all want to see this again with different things,
48 or maybe see it after we get the assessments, which are coming

1 here in June for the penaeid shrimp, and clearly we have some
2 landings issues, and I think those will be reconciled, hopefully,
3 in the assessments, and then that may play into this, and I don't
4 know how all those moving pieces are going right now. Maybe Dr.
5 Katie Siegfried could talk to that, Dr. Siegfried could talk to
6 that, but perhaps we want to pick that back up again after. I
7 don't know, and whatever the group feels comfortable with.

8
9 **CHAIRMAN ALLEN:** I mean, it seems to me, based on the discussion,
10 that there's, obviously -- This is -- Some good progress has been
11 made, right, that they've done a lot of good work, that gets us in
12 a better place than we were at the start. I don't know if we --
13 You know, what else we need to say at this point, but thoughts
14 about that. Any take-home messages the group wants to put out
15 there, as far as modifications or statement on best scientific
16 information available? Luiz, please.

17
18 **DR. BARBIERI:** Well, I think that, Steve, in the beginning, or
19 maybe at the end of your presentation, right, you mentioned that
20 this is a -- You know, this report, right, was finalized and
21 reviewed, but this process of continuous improvement of these
22 estimates, right, is still taking place going into the future, and
23 you're going to continue looking into this.

24
25 You received some recommendations from the CIE reviewers, right,
26 they're going to try to incorporate into future studies, and so I
27 think that, like you said, Mr. Chairman, moving into the right
28 direction, with an indication that all this input can be taken
29 into account moving forward.

30
31 **CHAIRMAN ALLEN:** Thank you, Luiz. All right. Excellent. So we
32 will -- Let's take a ten-minute restroom break, and we will come
33 back at just before 2:40 and continue the agenda. Thanks,
34 everybody. Thank you, Dr. Smith.

35
36 **DR. SMITH:** You're welcome.

37
38 (Whereupon, a brief recess was taken.)

39
40 **CHAIRMAN ALLEN:** Okay. Let's ahead and get started. Jessica, if
41 you would unmute Jenny, so she can give us the scope of work on
42 smalltooth sawfish and giant manta ray. We are at Number VIII.

43
44 **MR. RINDONE:** I'm messing up.

45
46 **CHAIRMAN ALLEN:** We still need to do triggerfish.

47
48 **MR. RINDONE:** Oh, gosh.

1
2 **CHAIRMAN ALLEN:** Okay, and we're not in as good shape as I thought
3 we were in. Sorry about that. It was listed as background to a
4 presentation, but there is a presentation here on gray triggerfish,
5 and so I think Jenny is going to give us the scope of work here.
6 Well, let's -- I'll turn it over to Cheston Peterson.

7
8 **MS. MATOS:** Cheston, you'll need to unmute.

9
10 **DR. CHESTON PETERSON:** Thanks. Sorry, and I didn't know if it was
11 me to do that or you. Can you hear me now?

12
13 **MS. MATOS:** Yes.

14
15 **DR. PETERSON:** Okay, and so this is -- This will be a brief
16 presentation just discussing our proposed plan as a stopgap
17 approach for estimating gray triggerfish shrimp trawl bycatch in
18 the Gulf.

19
20 Just our problem that we're dealing with here is, as Steve
21 mentioned, some species aren't quantified in the observer program,
22 including gray triggerfish, meaning that the improved shrimp
23 bycatch method that we've worked on, that uses observer data, that
24 Steve just presented, isn't a suitable approach.

25
26 As we've discussed, SEAMAP, for a couple of reasons, might be a
27 poor substitute for bycatch estimation, due to differences in the
28 gear, tow times, and the habitat sampled. We're really cueing in
29 on SEAMAP sampling in habitats where commercial shrimp trawlers
30 aren't operating.

31
32 With the forthcoming assessment of gray triggerfish, requiring an
33 alternative approach, we have a stopgap measure prior to a field
34 calibration experiment, where we're suggesting estimating bycatch
35 using a proxy species that is on the observer data, and determined
36 through a cooccurrence analysis of the SEAMAP trawl data, after
37 we've filtered that to samples with gear and habitat matching
38 commercial shrimp operations.

39
40 I borrowed some figures from Adam Pollack's recent paper presenting
41 some of the SEAMAP data, and the changes in the design of the
42 survey that occurred when they expanded east, just to show where
43 gray triggerfish are occurring, and you can see that big blotch in
44 the Western Gulf of Mexico, and another blotch south of Louisiana,
45 and then basically working down the West Florida Shelf, and so
46 we're expecting some overlap here with brown shrimp in the west
47 and then pink shrimp in the east.

1 Our first task is preparing a SEAMAP analysis-ready dataset, and
2 that's what we're working on now, filtering the SEAMAP data to
3 include only tows fishing in habitat representative of where the
4 commercial fleet operates, and so we've got a few datasets that
5 we're using here.

6
7 We, obviously, have the SEAMAP catch data, and we're working on
8 developing some indicator species of habitat, such as octocorals
9 or reef fishes, reef and hardbottom habitat, and then shrimp catch
10 rates and indicating soft bottom habitat. We've also got a dataset
11 of the vertical line observer program, associated with 500 square-
12 meter grid cells that can be cross-matched with SEAMAP tows, to
13 try to see where they're sampling.

14
15 Then we also have the shrimp VMS effort data, which is spatial,
16 and we can use that as a filter to compare with our dataset, and
17 so we're really just trying to whittle this down to a dataset where
18 we're confident we're looking at trawls that are matching the
19 habitat where we would expect the commercial fleet to be operating.

20
21 The second task is a cooccurrence analysis using that filtered
22 SEAMAP dataset to determine associations between gray triggerfish
23 and cooccurring species, trying to identify a proxy, and so a
24 suitable proxy would be positively associated and consistently
25 cooccur with gray triggerfish. Obviously, it's got to be among
26 those quantified on the observer trips.

27
28 This is a cooccurrence analysis that Steve and I have been working
29 on. It allows for blocking by location, or region, depth, and
30 season, and so we can account for differences in distribution, in
31 terms of time and space, to examine cooccurrence, and so meaning
32 that we can have proxy species at essentially different strata
33 levels, if that's what the data suggests, and so stratum-level
34 bycatch estimation allows for that, if those associations are
35 spatiotemporally variable. We're just cracking into this now, but
36 potential proxy species that are tracked by the observer program
37 include lane and vermilion snapper.

38
39 So this is just a -- This isn't from this fishery. This is not
40 related to the gray triggerfish right now, but this is just a
41 result of the cooccurrence analysis from a reef vertical line
42 fishery. This was a scamp project, and so we've got it stratified
43 by east and west, and then three different depth zones, and the
44 output looks something like this, where you're identifying
45 positively or non-associated species, and then the empty cells
46 usually are a pairing where there wasn't enough data to make a
47 comparison, and so we assume they're not associated.

1 You can just kind of click through this as I speak, if you don't
2 mind, because I'll just have some ellipses popping up, but, just
3 looking at those potential proxy species, and, obviously, this is
4 just an eye test, but, in the western Gulf, we're looking at
5 potential overlap with lane snapper, and then, in the eastern Gulf,
6 it's still -- It looks like vermilion snapper might be kind of
7 offshore relative to where that we expect the triggerfish to be
8 and lane snapper.

10 There is a little -- A blotch of abundance south of Louisiana, on
11 the eastern side of Louisiana, and so it looks like we may be
12 looking for a proxy species for that zone, but, again, this is --
13 We're still in the idea phase and working on filtering that SEAMAP
14 data, and so you can click through that, please.

16 The final task would be using bycatch estimation with the proxy
17 species, and so we would use the methods that we just presented,
18 and, if we end up in a situation where there aren't enough data
19 for gray triggerfish, then we could fall back on a method we're
20 using for data-limited species, which I'll talk about in the next
21 presentation.

23 The idea here is SEAMAP data would be used to calibrate a
24 calibration factor from gray triggerfish to proxy species, and so
25 we would be assuming that the catch rates between SEAMAP trawls
26 and commercial trawls are different, but the proportions of the
27 catch, if they're fishing in the same area, is the same. The
28 relationship between catch rates of two different species in the
29 same data, be it observer data or SEAMAP data, would be the same,
30 if that makes sense.

32 There's one more slide about the timeline, and so, like I said,
33 we're working on filtering the data. We're now working with Adam
34 Pollack and some colleagues at FWC, and we're hoping to complete
35 this entire analysis for the gray triggerfish data workshop,
36 obviously, at the end of August.

38 Task 1 is ongoing, and we expect to finish that in June, and then
39 we're hoping that Tasks 2 and 3 should take one to two months,
40 because we have the cooccurrence analysis ready, and everything is
41 pretty modular, and so, once we have the data in a state to be
42 analyzed, we should be able to move fairly swiftly, and I think
43 that's it for me. I'm open to discussion, and suggestions, or any
44 questions you have.

46 **CHAIRMAN ALLEN:** Thank you very much, Cheston. Any questions about
47 this gray triggerfish analysis? Trevor, please.

1 **MR. MONCRIEF:** Real quick, is it not quantified because the
2 prevalence is so low that it's not undertaken? Like, if there was
3 a top-ten species on it, is triggerfish on that list, or how does
4 it kind of fall out?

5
6 **DR. PETERSON:** I don't know, and, you know, it's not quantified
7 because it wasn't chosen. I haven't like looked back into the
8 history of it, and someone more knowledgeable than me on the
9 establishment of the observer program may be able to speak to that.

10
11 From internal conversations, and anecdotally, it seems like
12 they're out there, and getting caught, and it's hard to really pin
13 down how much of an issue, or how frequently they're caught, but
14 I don't think they weren't chosen because they're low in numbers,
15 but I really don't know the answer to that.

16
17 **MR. MONCRIEF:** All right.

18
19 **CHAIRMAN ALLEN:** Jason, please.

20
21 **MR. SAUCIER:** Just one question. If lane and vermilion, and I
22 know you mentioned those two species as potentials for proxies,
23 and wouldn't that bias by catch from the north-central Gulf, if
24 we're not seeing that species, if you look at that slide 8.

25
26 **DR. PETERSON:** So how do you mean that it --

27
28 **MR. SAUCIER:** So, if we're assigning a proxy, I'm assuming that's
29 for commercial catch.

30
31 **DR. PETERSON:** Yes, and so the proxy would be in the observer data,
32 and then we would calibrate the catch rate of the proxy, and so
33 the --

34
35 **MR. SAUCIER:** So, if we're -- These are from SEAMAP, these figures
36 here?

37
38 **DR. PETERSON:** Yes. Yes.

39
40 **MR. SAUCIER:** Okay and so, if they're not seeing lane snapper, for
41 instance, off of the central area, the east part of Louisiana,
42 Mississippi, Alabama, and, if we're not seeing lane snapper there,
43 but we are seeing triggerfish, particularly in the Panhandle of
44 Florida, if we're trying to correlate the two, and so, you know,
45 commercial vessels are not -- Our observers aren't seeing any lane
46 snapper off the Panhandle in the bycatch composition, and they're
47 assuming, or we're interpolating that to mean, there's no gray
48 triggerfish being caught in that area, and that may not be the

1 case.

2
3 **DR. PETERSON:** Yes, and I'm with you. I'm with you. No, and so
4 this is where the stratification and the cooccurrence analysis
5 becomes so important, and so that's where hopefully we could -- I
6 mean, we could divide this down spatially, and, you know, to even
7 stat zone or something, if there's enough data running the
8 comparisons at strata level, and so this is a great question, and
9 exactly what we're trying to avoid, or account for, if you will,
10 where we would want to break this out so that we're conscious of
11 differences in time and space with these associations, so we're
12 not biasing the estimation that way.

13
14 **MR. SAUCIER:** I had one more quick question. Species -- So,
15 typically with penaeids, they're being harvested regionally, and
16 so we know, in Florida, that's where most of the pink shrimp are
17 coming, and so are you all looking at that? Are you all stratifying
18 the results based on target species, too?

19
20 **DR. PETERSON:** We haven't talked about stratifying by target
21 species, because space kind of does that, but that's something we
22 -- I would have to kind of think about that, and wrap my head
23 around it, but, yes, that's something we could potentially
24 integrate.

25
26 **MR. SAUCIER:** Okay.

27
28 **CHAIRMAN ALLEN:** Thank you. Dr. Simmons had a comment.

29
30 **EXECUTIVE DIRECTOR SIMMONS:** Yes, and thank you. Thank you for
31 all your efforts on this. I guess I just have some general like
32 kind of ecological considerations for this effort, and I appreciate
33 all the work you guys have been doing on this. I just -- I'm
34 questioning whether the juice is worth the squeeze on this, with
35 everything we have going on with limited resources.

36
37 In just talking in general about life history of gray triggerfish,
38 I mean, the age-zero larvae, they go up in the plankton. We know
39 they spend four to seven months up in the pelagic environment, and
40 then they drop down to pretty much high-relief habitat. I mean,
41 I think SEAMAP is getting them occasionally, when they're going
42 over hard bottom, but I think that was more historical, and they've
43 changed the sampling process on that.

44
45 There is a paper that was recently published by Pollack et al.,
46 and I don't know, and I think you might be on that paper as well,
47 Cheston, but, if you look at the information there, if I'm reading
48 it correctly, on Table 4 of SEAMAP, it says the proportion positive

1 in the western and eastern Gulf for triggerfish is like 16 percent,
2 and so I'm a little confused where that blue is coming from for
3 triggers in the western Gulf.

4
5 I guess, in SEAMAP, if that's not usable, and, I mean, it's going
6 to be on the higher end, potentially, of what the shrimp fleet
7 would be harvesting, because they are required to carry the bycatch
8 reduction device, which is -- I've heard anywhere from seven to 20
9 percent reduction in finfish, I guess, depending on the newer
10 studies that are coming out, and so I guess, that being said, I
11 just question whether we should keep pursuing, you know, this
12 effort for triggerfish, or is it just minimal mortality by the
13 shrimp fleet for this particular species, and is there a threshold
14 that the Science Center has to make those types of considerations
15 and decisions on, because I'm not sure those proxy species that
16 were provided are really relevant.

17
18 I mean, that's based on the adults, and we're talking about
19 juveniles, susceptibility to the commercial shrimp fleet, and, if
20 we're saying we can't use SEAMAP, I just feel like we're making a
21 lot of assumptions, and we're spending a lot of time on it, and
22 just some suggestions and feedback from me on this effort.

23
24 **CHAIRMAN ALLEN:** Thank you, Carrie.

25
26 **DR. PETERSON:** Thanks, Carrie. I thought -- I'm aware of your
27 work with gray trigger, and so I'm glad you're weighing-in here.
28 So, personally, I think 16 percent -- I'm not on this paper, but
29 I've looked at it, and I've looked at the last -- Zhang's paper
30 for the last effort to estimate shrimp trawl bycatch for gray
31 triggerfish, and I can't say if the juice is worth the squeeze.

32
33 Really, I don't know that anybody knows that right now.
34 Anecdotally, like I said, from internal discussions, it seems like
35 some folks think it's worth the effort, from what they're seeing
36 in the field. Personally, I think 16 percent positive occurrence
37 is pretty good.

38
39 I would think, you know, common species are generally going to
40 show up in 10 to 20 percent of your samples in a fishery-
41 independent survey. I'm trying to think about some of your
42 questions here.

43
44 I know they settle on that high-relief habitat, but my impression
45 of what gray triggerfish do, and, like a lot of reef fish, is they
46 leave the reef at night, and they forage in the sand, eating sand
47 dollars and sea urchins, and so one of the things that we're
48 discussing is, you know, some of these reef fish are getting caught

1 at night, when they're not on the reef anymore, and so, you know,
2 this is an idea to try to tackle this that would be hopefully an
3 improvement from what Zhang had done in the past, which his
4 conclusion, from that SEDAR, was that this species should probably
5 be tracked by the observer program for shrimp trawl bycatch.

6
7 Then -- Sorry, and I'm just kind of going over some notes here. I
8 think, in terms of the BRD reduction, you know, I think what we're
9 trying to say about SEMAP is just that -- Not that the catch rate
10 is not good, but just that we're also aware that they might be
11 fishing in areas that aren't reflective of the shrimp fleet, and
12 so we would be trying to -- Really to avoid an overestimation of
13 bycatch, by excluding some of that data, or finding a way where we
14 can use the observer data.

15
16 As far as a threshold for the center, I'm not aware of some like
17 proportion positive threshold, you know, that would trigger
18 inclusion, or exclusion, but I defer to someone higher than me on
19 that.

20
21 One more thing, and sorry. You'll notice, in that Pollack paper,
22 he also notes that it's mostly triggerfish, like red snapper and
23 some of those other reef species, and so it's early life stages
24 that they're catching.

25
26 **EXECUTIVE DIRECTOR SIMMONS:** Right, and that makes sense, you know,
27 but red snapper are completely different. I mean, they're dropping
28 down. They're settling down to benthic habitat in like the first
29 month of life, and they're like, you know, age-zero fish, and
30 they're recruiting to like oyster shells, low-relief habitat, and
31 that's, you know, where the shrimpers are going to be prosecuting
32 the fishery.

33
34 I think the SEAMAP stuff -- I think we just need to look at it
35 closely, if we're going to keep pursuing it. I think a lot of
36 that was based on the hardbottom samples, and sampling around the
37 hardbottom reefs, when they're interacting with the triggers,
38 because I think it's pretty unusual, and I based those percentages
39 on this table here.

40
41 I just -- I think I would just bring it out. We have a lot of
42 things going on, and, you know, we have the assessment coming up.
43 Are there other things that we should focus on? Is G-FISHER --
44 Can we look at the videos from the Great Red Snapper Count and get
45 a better index? You know, are there some other things that could
46 perhaps give us some better information on a true index of
47 abundance or mortality for the species?

1 **DR. PETERSON:** Yes, and I can't speak to the G-FISHER. This isn't
2 my main line of work. I'm just involved with shrimp trawl bycatch,
3 and this came to our desk, and we had an idea to maybe make an
4 improvement, you know, and I can't -- I wouldn't bet the house on
5 it right now. I'm hoping it works out, but this is one of those
6 that we kind of have to -- We do have to do the due diligence in
7 trying to see how it plays out.

8
9 **CHAIRMAN ALLEN:** Okay, and we're going to have to move on shortly,
10 but Katie.

11
12 **DR. SIEGFRIED:** Thank you, Mr. Chair. I just wanted to comment,
13 because Carrie had specifically asked for it, and I know you're on
14 a time crunch. We don't have a strict cutoff for proportion
15 positives. We have operated with lower than 16 percent. I agree
16 with Cheston that, you know, 16 percent is not a poor proportion
17 positive, but it is a reason why there is a different methodology
18 for red snapper versus gray triggerfish.

19
20 This is coming about, and it's -- I think it's worth the squeeze
21 to at least figure out if a methodology can be developed for this.
22 It was incredibly influential, the shrimp bycatch estimates, for
23 the last gray triggerfish assessment. We know that the mortality
24 due to bycatch, because of what we're hearing, that Cheston
25 mentioned, is not zero, and we know that the previous methodology
26 doesn't work for gray triggerfish, based on what Steve just
27 presented to you all, and so we need to find something in between.

28
29 It can't be zero, and it can't be what it was before, and we wanted
30 to socialize this with the SSC, because we know it's new, and we
31 know that this is a work in progress, and that it's something
32 that's important to get your feedback on, how we can improve this
33 sort of methodology as we proceed, which is one of the things we
34 wanted to do with the SEDAR process, is to get more updates to the
35 SSC along the way, but, in short, we think it's important to
36 pursue, just to see if there's a way to account for the bycatch
37 mortality that we know is occurring. Thank you.

38
39 **CHAIRMAN ALLEN:** Thank you, Katie, and I think this will be
40 documented in our notes, and it's something we can revisit around
41 the gray triggerfish upcoming assessment as well, and so thanks
42 for that. Any final comments on this one? Okay, and we will move
43 on to the smalltooth sawfish and manta ray, the scope of work,
44 there we go.

45
46 **MR. RINDONE:** Jenny will give the scope of work, and then I think
47 Cheston is going from there.

1 **MS. JENNY LEE:** Good afternoon. Can everyone hear me?

2
3 **CHAIRMAN ALLEN:** We can.

4
5 **REVIEW: NEW BYCATCH ESTIMATES AND OTHER ANALYSES FOR SMALLTOOTH**
6 **SAWFISH AND GIANT MANTA RAY**
7

8 **MS. LEE:** Great. Okay. Yes, and I just thought it would help out
9 by providing a little context to why you're looking at this report
10 and the following report that Dr. John Carlson will give.

11
12 In June, and particularly I want to do this because I know the
13 councils, and committees, and APs, they've all been following that
14 we've been having an ongoing shrimp consultation, but I'm not sure
15 how much background the SSC is aware, and so I'm going to really
16 briefly just touch on sort of why this is in front of you.

17
18 Back in June, the Regional Office identified the need to reinitiate
19 Section 7 consultation on the southeastern shrimp trawl fisheries.
20 Reinitiation is required under the ESA statutes and regs to address
21 unanticipated observed lethal incidental take of giant manta rays,
22 and then new information revealing effects of southeast shrimp
23 fisheries on smalltooth sawfish and giant manta ray that wasn't
24 considered in that 2021 shrimp biological opinion, which is the
25 product of the last consultation that we completed on these
26 fisheries.

27
28 Since identifying the need to reinitiate back in -- Again, I think
29 it was June or August of 2023, the Southeast Regional Office has
30 been collaborating with the Southeast Fisheries Science Center,
31 and we've been working to develop the information that we need to
32 have a complete package, or, in other words, you know, to
33 adequately evaluate that potential effects of the shrimp fisheries
34 on these two species.

35
36 Over the last couple of years, we've been updating the council and
37 committees and constituents on the new data, as it's become
38 available, and our progress towards assembling all of that data
39 that then we're going to use to move forward in the consultation.

40
41 We've been also doing this per an Endangered Species Act and
42 Magnuson-Stevens Act integration policy, which I'll touch on in a
43 minute if you're not familiar with it, but so these two new
44 reports, the bycatch estimate report and PVA report you're going
45 to receive, they contain key information for conducting the
46 consultation, and this is really our first opportunity to share
47 this information.

1 It's brand new, and we're going to be asking for the Gulf Council,
2 at their August meeting, and then probably the South Atlantic
3 Council, at their September meeting, to review these new reports,
4 and we'll also be providing -- If we can, we would like to provide
5 a summary assessment of sort of key information that we've been
6 assembling, and I mentioned that Endangered Species Act and
7 Magnuson-Stevens Act integration policy.

8
9 The policy stresses the importance of early engagement between us
10 and the councils before the formal consultation process begins.
11 All the work we've been doing right now has been in sort of
12 basically pre-consultation, or technical assistance, working
13 towards having that information to basically start the clock on
14 the consultation.

15
16 The policy directive promotes early coordination with the councils
17 through that process, includes recommendations for council
18 involvement in designing fishery management measures needed to
19 minimize adverse effects on listed species, and articulates the
20 parameters of engagement, given the regulatory requirements and
21 timeframes.

22
23 The council may, in August, consider what, if any, action they
24 want to propose for consideration in the ongoing Section 7
25 consultation on southeastern shrimp fisheries and then the impacts
26 on giant manta ray and small tooth sawfish, and so this really
27 brings me to you, which is why it's in front of you.

28
29 The councils rely on your scientific advice, and the input of you,
30 and we want you to review the adequacy and sufficiency of the
31 science of these two new reports that will be used by the council,
32 and then considering the impacts of the fisheries, and what, if
33 any, MSA action they may want to consider that would minimize the
34 impacts of shrimp bycatch on smalltooth sawfish and be considered
35 in the consultation.

36
37 We're really looking to you for, you know, is this reliable, valid,
38 up-to-date information? Is it, you know, best available science?
39 We just -- We want, you know, to get your feedback, so that the
40 council, when they're looking at this information and thinking
41 about it, and as we continue to progress in the Section 7
42 consultation process, have that input from you to think about, and
43 I think maybe Dr. John Walter might want to say something here
44 too, or Katie, but I'll just pause, or I can go on.

45
46 **DR. JOHN WALTER:** Good afternoon. I just got unmuted. Thanks
47 everyone, and, Jenny, that was, I think, a really good introduction
48 as to why this is important, why it's critical for this SSC to

1 review this material, and why the -- What we're really trying to
2 achieve is a partnership in not just Magnuson, but also in ESA
3 here, in terms of sharing the responsibility for those two
4 mandates, and it's essential that the science that's going to
5 support any management that is required for ESA be integrated into
6 the council's scientific review process, which is why we're
7 bringing this early to you right now.

8
9 I think what we're hearing, in a lot of ways, is how connected all
10 of these different products are, and connected by the fact that
11 they come out of observer coverage, effort monitoring, and the
12 added activities that are part of shrimp management that support
13 the ESA needs.

14
15 A couple of themes that I think are key for this group to consider
16 is how to achieve the best scientific information that's going to
17 support all of these, in terms of the needed level of coverage for
18 effort monitoring, the needed level observer coverage in space and
19 time to be able to achieve these needs, and I think that's
20 certainly something we heard.

21
22 I heard a couple of SSC members noting the challenges with
23 extrapolating observed catch rates to unobserved areas, and what
24 we're going to really need to do there, when we have low observer
25 coverage, is use the best way we can do that.

26
27 We can either increase observer coverage, increase effort
28 coverage, or both, to be able to not have to extrapolate, or make
29 that extrapolation as limited as possible, but, as you review these
30 materials, these estimates, and then the results of the PVA, think
31 about how the science could be improved, particularly with
32 management actions that are before the council, such as the
33 improved effort monitoring that's going on right now within the
34 revision of the electronic logbook program. Thanks, and good luck
35 reviewing this material. Thanks.

36
37 **CHAIRMAN ALLEN:** Thank you, John. We appreciate you sharing that
38 with us, and okay, and we'll move forward. Cheston is going to
39 present.

40
41 **DR. PETERSON:** Thanks, guys. Me again. So we're talking now about
42 estimates of shrimp trawl bycatch of smalltooth sawfish and giant
43 manta ray in the Southeast U.S. I should mention this is work
44 done primarily with Elizabeth, Beth, Babcock, at Rosenstiel, in
45 collaboration with some folks at the center.

46
47 Our objective here is to estimate total annual bycatch with
48 uncertainty, and that's a big part of this, for smalltooth sawfish

1 and giant manta ray from the federal shrimp trawl fishery in the
2 Gulf and Southeast Atlantic, using both design and model-based
3 estimation methods, and so we kind of have a suite of analytical
4 methods here, beginning with unpooled and pooled ratio estimators.

5
6 This is using the bycatch estimator tool in R that was developed
7 by Beth, and then Bayesian models developed in STAN, now together
8 in another R application that I've been working on with her called
9 bycatchStan, and so I'll present kind of a suite of these design
10 and model-based methods in this talk.

11
12 Just to talk about some data limitations that you should be aware
13 of, the smalltooth sawfish time series basically is the entire
14 existence of the Gulf observer program from 2008 to 2023. We
15 limited our analysis to Stat Zones 1 through 4, which is their
16 primary range, where we were actually expecting interactions with
17 the shrimp trawl fishery.

18
19 For giant manta rays, the time series is limited to 2019 to 2023.
20 2019 was the first year that giant manta rays were tracked in the
21 observer program, and so there are not data from the observer
22 dataset prior to that, to 2019, and then we used all stat zones in
23 the Gulf, 1 through 21, because we expect giant manta rays to
24 potentially be there.

25
26 I'll just kind of go over this, and I'm happy to answer questions,
27 and it's pretty well-detailed in our report, I think, but the
28 design-based methods are using unpooled and pooled stratified
29 ratio estimators and the bycatch estimators, and so we're
30 stratifying by area, year, or -- I'm sorry. Stat zone, year, depth
31 zone, and season.

32
33 We used a few different pooling methods. Most of them come with
34 their pros and cons, and, in terms of their performance in the
35 model, none really stood out as better than another, but we decided
36 on a four-year pooling scheme for sawfish in the final models, and
37 then no pooling for manta rays, because manta rays have been
38 observed as bycatch in the program every year since 2019.

39
40 Model selection was conducted on a frequentist negative binomial
41 framework using BIC and AIC information criterion. Covariates
42 evaluated included year, stat zone, depth zone, and season, like
43 I mentioned, and then we built negative-binomial Bayesian models
44 in STAN. We used broad, relatively uninformative priors, and then
45 those were further developed in bycatchStan, and so I'm happy to
46 talk about what we used for priors or parameters for zero inflation
47 in the negative binomial model. I can answer any questions there.

1 Total bycatch was estimated with mean and standard error of total
2 effort at each stratum, meaning that the estimates of effort at
3 each stratum come with their own error, and so we multiplied that
4 by the predicted bycatch rate at that stratum. This is a method
5 that Beth used for protected species bycatch in the shrimp trawl
6 fishery of sea turtles in her tech memo from 2018, and so there's
7 further detail of that stratification method there.

8
9 These are some figures I created just to show you, and I have trawl
10 effort in that heat map cells, and then both species in the figure
11 on the left, with the stat zones. Mantas are in diamonds, and
12 you'll notice they're all up in Stat Zones 12 through 14, and then
13 sawfish are triangles, and they're down there right on the heart
14 of the pink shrimp fishery. There's one you'll notice that's up
15 in Stat Zone 4 off Tampa.

16
17 You can also see, on the right, and this is just offshore and
18 nearshore effort and bycatch broken down by stat zone, and so a
19 lot of that sawfish bycatch is actually occurring where we
20 considered in an offshore zone. Then, the manta bycatches, a lot
21 of that is nearshore, and some offshore as well, and you can see
22 the bycatch there broken down by stat zone for both species.

23
24 This is just another breakdown, and this includes data for the
25 South Atlantic, but bycatch rates through time, and the colors may
26 be a little hard to see on your screens, but, basically, just the
27 smalltooth sawfish have been picked up as bycatch since -- I think
28 2009 was their first occurrence. You see that giant manta rays
29 started showing up when they were counted in 2019, and that's been
30 increasing over the past few years, in terms of just the raw
31 numbers in the observer data.

32
33 Okay, and so getting into results here, and so these are pooled
34 and unpooled ratio estimators for Gulf sawfish. This is the
35 estimated bycatch, with the standard error around that, and so you
36 can see how that blocking -- When you use an unpooled year, in
37 years where bycatch is observed, you get generally high estimates
38 of bycatch, and a lot of error, and so, by using that four-year
39 block, we were able to reduce some of that noise in the estimates
40 and get a more steady time series and increase the precision of
41 the estimates in these ratio estimators.

42
43 Here I've got, on the left, the design-based estimate, and again
44 just kind of grayed out, and then our model-based estimates, with
45 the WAIC and LOOIC, and so these are the Bayesian model estimates.
46 Generally, adding depth, or stat zone, into the models didn't
47 greatly improve them.

1 They're all pretty comparable. You can see that in the information
2 criterion. There are some deviations when accounting for depth in
3 the actual estimates, but they're quite comparable.

4
5 Okay, and so now, on the left, you have the Bayesian model, with
6 the line and shading, and then with the 95 percent confidence
7 interval in the shading, and then the red dots are the ratio
8 estimate, with two standard errors around those, and then, on the
9 right, we just have our prior and posterior densities of the
10 parameters for the best Bayesian model.

11
12 Just some things to point out, and Phi, the Phi parameter, is our
13 zero-inflation parameter, and B0 is a broad prior we use for the
14 intercept, and then, here, because we have four stat zones, and I
15 think four four-year categories, there are -- Two levels of each
16 strata are taken out as your references, and so you've got six
17 other parameters for each level of those stratification variables.

18
19 Now, moving on to Gulf mantas, and, again, this is a shorter time
20 series, and so precision is a little tougher, because mantas were
21 -- Usually, for sawfish, they're only caught one at a time, and
22 that wasn't the case, and as many as three mantas were caught in
23 a tow, and so that introduces a lot more uncertainty into the
24 estimates.

25
26 On the left, you have the design-based estimates, and then on the
27 right are model-based estimates of the best Bayesian model, and
28 so, here in the Gulf, including the stat zone very much improved
29 the model estimates, as you can see, which makes sense, because we
30 used all twenty-one stat zones in the model, but that bycatch was
31 really only occurring in three of them, and so stat zone was a
32 really helpful stratification variable, and we also included that
33 in the best model.

34
35 So the same thing here, and we have the Bayesian model estimates
36 and 95 percent confidence intervals in the black and gray, ratio
37 estimates with standard error in red on the left, and then our
38 prior and posterior densities of the parameters for the best
39 Bayesian model for manta rays.

40
41 One thing I would like to point out, because this came up in some
42 internal review, is, because we used all twenty-one stat zones for
43 a lot of these B parameters, and they're not ordered properly in
44 this figure, but you'll notice that some of the prior and
45 posteriors aren't very different, and this is actually what we
46 would expect for the stat zone strata levels where we did not
47 observe bycatch.

1 This is an important piece to this method. Because we're taking
2 strata-level estimates of effort and bycatch, we're not predicting
3 bycatch in strata for which it wasn't observed, and so we're not
4 predicting bycatch in stat zones where we haven't seen it before,
5 if that makes sense, and so you'll notice that some of those prior
6 and posterior densities overlap very much, but those are going to
7 be on the strata for which we didn't have data, the all zeros.

8
9 I explained that here, and so parameters B1 through B4 correspond
10 to years, and then parameters B5 through 19 correspond to stat
11 zones, and so you'll see exactly what I'm talking about, and, for
12 some of those stat zones, you'll see no movement, and then I think
13 B14, B15, and B16 are your stat zones where there was observed
14 manta ray bycatch, and you can see them shifting away.

15
16
17 I just wanted to compare this with past estimates, and Carlson in
18 2020 used the bootstrapped unpooled ratio estimator with 95 percent
19 confidence intervals, and those are in black, and then I have the
20 best Bayesian model estimates from this analysis, with the 95
21 percent confidence interval in gray for Gulf and South Atlantic
22 smalltooth sawfish and giant manta ray.

23
24 An asterisk indicates that the upper bound of the interval is
25 greater than 500 for sawfish, or 3,000 for manta ray, and so it's
26 going well above our axis limits here, and we just have this
27 zoomed-in, if you will, so you can actually see some of the
28 differences, and so this is how our estimates compare to the past
29 work from John.

30
31 This is just our total estimates of bycatch with the uncertainty
32 by year in both regions, and I know we're talking about the Gulf
33 here, for both species, and so, you know, looking in between
34 somewhere between fifty to pushing 200, and potentially more, up
35 to 500 animals, and, again, there's a lot of uncertainty for the
36 sawfish, and then, the manta rays, that uncertainty gets really
37 out there, because there's not so many observations. We have a
38 limited time series, but, when they're catching multiple in a net,
39 that really throws the model with something like this.

40
41 I think that's going to be it for me, and so the rarity of
42 smalltooth sawfish and giant manta rays as bycatch and low observer
43 coverage make obtaining precise estimates of bycatch difficult,
44 and so we're hesitant to say that this is because they're rare,
45 for this exact conversation we're having with fisher behavior and
46 avoidance, and they don't show up often in the observer data. We
47 can't say for sure why that occurs, right?

1 Pulling by year and ratio estimators and model-based methods
2 improve precision, but the confidence intervals remain wide. We're
3 going to have to probably increase observer coverage to improve
4 those.

5
6 For sawfish, four-year pooling was useful for smoothing
7 interannual variation in bycatch estimates, while maintaining the
8 simplicity of the ratio estimator method. We find that that's a
9 little easier to communicate with some folks, but model-based
10 methods probably are best for scientific purposes, such as stock
11 assessments and management strategy evaluation, and so just more
12 flexible, and I think that is it for me. I'm happy to answer
13 questions.

14
15 **CHAIRMAN ALLEN:** Excellent. Thank you, Cheston. I had a simple
16 question, and maybe it's a silly question, but do we have any idea
17 of the survival of these animals from being caught in this gear?
18 Is that known?

19
20 **DR. PETERSON:** I think -- I'm going to defer to John on that,
21 because I think that's coming up for discussion. There is some
22 information in the observer data, just, you know, what they're
23 seeing onboard and everything, but I'll defer to John for that
24 question.

25
26 **CHAIRMAN ALLEN:** Okay. Thank you. Trevor, please.

27
28 **MR. MONCRIEF:** Yes, and quick question on the manta ray, and so it
29 looks like you've got, you know, at times in the Gulf, max, let's
30 just say nine observations, and you said they were catching them
31 three at a time.

32
33 **DR. PETERSON:** It happened, yes, and the point being that, when
34 you only have so few observations, but you get multiple animals,
35 that just increases the catch rate, right, and that really adds a
36 lot of uncertainty.

37
38 **MR. MONCRIEF:** Yes, and then the other question was did you all go
39 through the observed instances and notice that there was any
40 correlation between month, or anything else like that?

41
42 **DR. PETERSON:** We did include season, and there have been analyses,
43 a different analysis of month, and we haven't seen a major time
44 factor like fall through -- You know, some correlation to a
45 particular season, and so nothing has fallen out in that way. It's
46 mostly spatial, you know?

47
48 **MR. MONCRIEF:** Yes, and I ask that because, you know, there are

1 times, in the fall, especially around the area that you're talking,
2 that there are thousands of manta rays that form up on rip lines,
3 and, given how large they are, and their movement style, catching
4 three at a time, and that takes a surprising bit of luck to pull
5 that one off, which means they're likely in a very large group,
6 and so it seems like maybe the observations are geared around those
7 kind of instances, and maybe not a general or common practice
8 across the entire fishery.

9
10 **DR. PETERSON:** Right. I'm getting a little information here, and
11 we don't have a lot of information on mortality for sawfish. In
12 the last biological opinion, it was estimated to be 50 percent.
13 I'm not totally sure for manta rays, but, you know, with haul
14 times, as long as they are, and generally animals just getting
15 compacted, you know, and squished, I would expect survival to not
16 be very good, unless they're one of the last things to show up in
17 the net.

18
19 **CHAIRMAN ALLEN:** Thank you for that. Dr. Carlson had his hand up
20 online. I thought he might have some context here.

21
22 **DR. JOHN CARLSON:** Thank you. Cheston already answered the
23 question, and so I was just going to chime-in with exactly what he
24 said. Thank you.

25
26 **CHAIRMAN ALLEN:** Okay. Thank you, John. Jason, please.

27
28 **MR. ADRIANCE:** Thanks. I was just going to comment on the same
29 thing Trevor had mentioned about aggregations, and maybe -- You
30 know, the potential is maybe it is still rare, but during
31 aggregations, it's a little more common, and I think we had one
32 come up in a SEAMAP trawl, way back in the day when I did that,
33 and, when that ray wanted out of the net, it unfolded its wings,
34 and it went out of the net.

35
36 **CHAIRMAN ALLEN:** Thank you. Jason.

37
38 **MR. SAUCIER:** Do you know what gear they were using when they
39 encountered the manta rays off Louisiana?

40
41 **DR. PETERSON:** Not offhand, no. I would have to go back and dig
42 into that, and I don't have that readily available.

43
44 **MR. SAUCIER:** Okay, and do you know when they were listed? Is
45 that why we only have data starting in 2019? Is that when they
46 were federally listed?

47
48 **DR. PETERSON:** That's a great question. I don't remember off the

1 top of my head, and sorry, either.

2
3 **CHAIRMAN ALLEN:** Luiz, please.

4
5 **DR. PETERSON:** They were listed in 2018.

6
7 **DR. BARBIERI:** Hi, Cheston. Thank you for the presentation. I'm
8 just wondering, you know, for both the sawfish and the manta ray,
9 and more so for the manta ray I guess, but, for both analyses, you
10 have a lot of uncertainty around those estimates.

11
12 Did your team discuss some level, some criteria, right, for what
13 would be acceptable in terms of level of uncertainty, just for us
14 to have a -- You know, get a sense of which one of those we feel
15 like were estimated in a reliable way, and then we can sort of
16 take it home, versus some that are just so uncertain that I'm not
17 sure.

18
19 I mean, I'm looking at your slide 9, right, that you have the
20 pooled and the unpooled, and, of course, when you pool, which I
21 don't know what pooling method you did, but maybe you did a moving
22 average. or something like it, and, I mean, that masks, basically,
23 the high level of variability and uncertainty, and you'll get a
24 better result, but I don't know, right, how much confidence we
25 would have on those estimates. Can you give us an idea of the
26 feeling that you guys got at the end of this analysis?

27
28 **DR. PETERSON:** Yes, and those are fair questions, and I understand
29 what you mean. We didn't have a discussion of some, you know,
30 threshold of uncertainty, because we went into this expecting very
31 high uncertainty, you know, and we saw that from John's last go at
32 this, and so that's kind of what we -- That's what we expected
33 with what we're working with here.

34
35 In terms of how we felt about the analysis at the end, I personally,
36 and I think Beth did too, I felt pretty good about it. I think,
37 I think -- I truly think this is like the best available science.
38 We put a lot of time and effort into this, are there are many
39 iterations of these analyses, and, you know, so I understand the
40 uncertainty.

41
42 I think the point estimates are solid. I think that -- You know,
43 I don't think the uncertainty is so bad that that would disqualify
44 the science, so to speak. I think we're doing truly the best we
45 can with what we have available.

46
47 I would advocate for, you know, increased observer coverage. We
48 did some, you know, increased coverage of effort, a better handle

1 on effort, but especially increased observer coverage could help.
2 I don't know that you can improve precision without it, just by
3 the numbers, you know, but I think --

4
5 I don't think there's a better alternative for these species, and
6 I think we're doing the best we can with what's available, and,
7 again, I think those point estimates are solid. I think, you know,
8 the upper ends of those confidence intervals are high, sure, but
9 I don't think that any of this is, you know, is flawed, so to
10 speak.

11
12 **DR. BARBIERI:** Right. Thank you, Cheston. I mean, that's exactly
13 what I was trying to get, you know, and I feel like usually the
14 analytical team, right, at the end of the analysis, will have an
15 idea of the level of confidence. I mean, we can focus on the high
16 level of those interval, but we can also focus on the low levels,
17 right, and so you have to take those into account, and it just
18 gets complicated, but I completely understand. I think that your
19 explanation was spot on. Thank you.

20
21 **DR. PETERSON:** Thank you. I appreciate that.

22
23 **CHAIRMAN ALLEN:** Excellent. Thank you, Luiz. Harry Blanchet.

24
25 **MR. BLANCHET:** Thank you. In the -- I'm sorry, and my brain was
26 going too many different directions at once. In the observer data,
27 is there any information on the location or condition of the animal
28 in the net?

29
30 I'm thinking like a sawfish is -- It has a unique morphology, that
31 could be different than a lot of other things, but, also, a manta
32 might have a difficult time with a turtle excluder device. It may
33 not get all the way back. You're talking about being back in the
34 bag, and it may not get back there, and so I just -- I'm kind of
35 curious if there's any information that could give us more
36 information on, you know, possible condition, et cetera. Thank
37 you.

38
39 **DR. PETERSON:** Thanks Harry. There is -- The observers, as best,
40 you know, as they could describe it, and I think they make as much
41 effort as they can to record that information, you know, if it's
42 if it's hung or whatever, and I think you're right that they're
43 not making it to the bag, and they're tangled up in the wings.

44
45 Sawfish, obviously, that rostrum is, you know, trouble for any
46 kind of net, and then I think mantas get kind of compressed up
47 against the TED, you know, and mantas are pretty big animals, and
48 so I think you're dealing with some unfriendly morphology for

1 snags, especially in the case of the sawfish.

2
3 Then just, you know, they're big fish, right, and they're bigger
4 than what we typically think about trying to exclude. They're
5 even bigger than sea turtles, other than some, you know, huge
6 loggerheads or whatever, and so that information I think is --
7 It's in the observer data. I don't know that it's consistently
8 recorded. Probably the quality of that information varies by
9 observer, but it's in there.

10
11 **CHAIRMAN ALLEN:** Thank you, Harry. Excellent question.

12
13 **MR. BLANCHET:** It just seems that that might be useful, in terms
14 of trying -- You know, the question about mortality rates is
15 obviously out there, and so there may be some information, in terms
16 of condition or something related to that, that could give us more
17 information.

18
19 **DR. PETERSON:** Right. At least with sawfish, I think generally
20 their condition is not great after they've interacted with the
21 trawl nets.

22
23 **CHAIRMAN ALLEN:** Okay. Thank you. Trevor.

24
25 **MR. MONCRIEF:** I know we're going to have a presentation on sawfish
26 coming up next, but I was wondering, at least on the manta ray
27 side, and so we've got decreasing shrimp effort, as what was
28 observed in the last discussion, right, and it's going down
29 steadily.

30
31 If interactions are increasing with those species, is there any
32 side of the consultation process, or the discussion that's ongoing,
33 that kind of thinks about what is the population size of manta
34 rays in the area, and are interactions increasing because the
35 overall occurrence of them is increasing, and that side of things,
36 and I wasn't sure if you had any thought process to that.

37
38 **DR. PETERSON:** I think you're starting to drift into John Carlson's
39 territory, and so I might let him talk about that, and I suspect
40 you'll get a better answer on that from him.

41
42 **CHAIRMAN ALLEN:** John, a follow-up?

43
44 **DR. CARLSON:** Thank you, Chair. Just getting back to the post-
45 release mortality estimates for sawfish, as Cheston indicated, the
46 rostrum is their Achilles heel, because it gets stuck in the -- It
47 gets stuck anywhere in the net. I mean, we've had sawfish reported
48 mortalities that got caught on a dock line, and so it is their

1 Achilles heel, but, that being said, we did, several years ago,
2 receive funding to try to put post-release survivorship tags on
3 sawfish that were caught in the shrimp trawl fishery, to get a
4 better estimate of how well they were doing after being caught in
5 the trawl.

6
7 You know, as Murphy's Law goes, any observer you outfitted with a
8 satellite tag, we never caught a sawfish, and so this is, in my
9 view, where the industry would be very valuable, because, you know,
10 with the limited sawfish -- I mean, with the limited sawfish
11 occurrence rates, and the industry out there all the time, if we
12 could outfit more of just the industry with satellite tags, and
13 they could tag more for us, and, that way, we could get a better
14 estimate.

15
16 As far as manta population estimates go, Nick Farmer, at the
17 Southeast Regional Office, and I don't know if he's on the call,
18 has been working on developing population estimates based on tag
19 recapture information and on satellite information. I don't know
20 if he's on the call, or wants to chime-in on that. Thank you.

21
22 **CHAIRMAN ALLEN:** Thank you. Don Behringer.

23
24 **MR. BEHRINGER:** Thank you. I just had a quick question when it
25 comes to -- I'm not familiar with the training that observers go
26 through before they start, but is there -- What's the confidence
27 like when it comes to identifying all of these different bycatch
28 species?

29
30 Is that a question that comes up, whether an observer is correctly
31 identifying something like maybe a small manta ray, versus devil
32 rays, and that just came to my mind, as I'm thinking about catching
33 multiple giant manta rays in a single tow, and could it be that -
34 - You know, are these things, and I don't know, and the pace at
35 which they're having to identify these things, and what's the
36 confidence in that all these different species are being identified
37 correctly?

38
39 **DR. PETERSON:** So I'll probably defer to someone higher than me on
40 general confidence of fish IDs and training. My confidence is
41 higher on the smalltooth sawfish, and you can't mistake it, right,
42 and so they've got that one correct.

43
44 I think you've got a valid concern about three giant manta rays in
45 a net, and confusion with devil rays, and that was -- But that,
46 you know, I think there were three observed last year. I don't
47 know, and I think, now that they've had some time, that I would be
48 pretty confident in their ability to ID things. As far as the

1 rest of the fishes and everything, I would defer to someone else,
2 but I think they get pretty extensive training.

3
4 **CHAIRMAN ALLEN:** All right. I think we'll stop it there. Thank
5 you, Cheston, for the presentation and the good discussion.

6
7 **DR. PETERSON:** Thank you, Chairman.

8
9 **CHAIRMAN ALLEN:** We'll go on to Dr. Carlson's presentation next.

10
11 **DR. CARLSON:** Thank you, Chair. Just one thing on the
12 identification, to follow-up for everyone on the call, yes, there
13 is a possibility of misidentification, especially when mantas and
14 mobula are smaller, but we have started a program. All the mantas
15 and mobula are photographed extensively, to the best of the
16 observers capability, given sometimes they're at night, and the
17 safety issue.

18
19 We've also started a program where the observer is taking a tissue
20 sample, and the tissue sample is being validated for ID at our
21 Northwest Fisheries Science Center, using genetics to back all
22 that up, and so trying to -- I understand the person's concern
23 that, you know, three mantas seems unusual, but, like I said, we're
24 taking all precautions now to fully train the observers, and have
25 them take photographs, and then, as I said, we're even now backing
26 it up with genetic ID.

27
28 **CHAIRMAN ALLEN:** Excellent. Thank you, John. Okay. Ryan, do you
29 want to walk us through this scope for the PVA analysis?

30
31 **REVIEW: POPULATION VIABILITY ANALYSIS FOR ENDANGERED AND**
32 **THREATENED RESOURCES THAT INTERACT WITH THE SHRIMP FISHERY**
33

34 **MR. RINDONE:** Sure, and so John is going to present to you guys an
35 updated population viability analysis for endangered and
36 threatened species that may interact with the shrimp fishery. The
37 purpose is to consider the effects of the continued operation of
38 the shrimp fishery on the maintenance or rebuilding of some of
39 these key vulnerable stocks, like sawfish, and you guys should
40 consider the information presented, ask questions, and make
41 recommendations, as appropriate.

42
43 **CHAIRMAN ALLEN:** Excellent. Thank you, and, Dr. Carlson, the floor
44 is yours.

45
46 **DR. CARLSON:** Thank you, Chair. This actually falls into a nice
47 segue from what Cheston had recently presented on the new bycatch
48 estimates that we have for sawfish and how I incorporated them

1 into an update to the population viability model that I've already
2 published in two peer-reviewed journals, but I also want to mention
3 that we, as everyone probably knows on the call, we had a large-
4 scale mortality event in the lower Florida Keys last year, where
5 we had a large number of adult sawfish, and large juveniles, that
6 were that had suffered mortality due to what we consider a toxic
7 algal bloom.

8
9 We wanted to introduce that into the population viability model,
10 considering it might be cumulative with any new estimates of
11 bycatch estimates from the shrimp trawl fishery, and I just want
12 to acknowledge my coauthor on this, who we worked together, Nick
13 Farmer, at the Southeast Regional Office.

14
15 I may be preaching to the choir, and what we designed for this
16 analysis is that it was a basic population viability model. The
17 model basically predicts the probability of the population
18 persisting into the future, and it explores the consequences of
19 any potential management actions, in the light of the uncertain
20 data and ambiguous future that we have.

21
22 Now, there's a very wide range of modeling approaches that are
23 used in PVA. Some are very simplistic, based on abundance trends,
24 but, you know, as many of you know that are on the call, some are
25 more complex individually-based, and also take into account
26 habitat, and I'll show you now what I set up for this population
27 viability model.

28
29 Again, as I mentioned, this -- What I'm going to present to you
30 now builds on two previous publications that I had. One was
31 looking at -- The first publication, back in 2014, was more of
32 just examining, you know, what is the recovery potential of
33 smalltooth sawfish, because we had a lot of questions early on,
34 when we were developing the recovery plan, of how long would that
35 recovery take and what management access would we potentially need.

36
37 Then the next publication, that came out in 2023, looked at some
38 theoretical levels of removals, because the shrimp BiOp had just
39 been updated with some new bycatch estimates, based on a variety
40 of sources, and so I went back into the original model that I had
41 developed and updated some of the bycatch estimates, with these
42 new BiOp estimates that were developed, to project, you know, if
43 they reach the maximum of what is allowed under the take, you know,
44 what is that going to do to the population.

45
46 The models that I'm going to present to you now are based on what
47 was originally developed in these two publications, and so,
48 basically, it's an age structured Leslie matrix, using data in the

1 form of a post-breeding census, with inputs largely on fecundity
2 and survivorship.

3
4 Now, the model introduced three fishery mortality sources, because
5 it's not just, you know, the shrimp trawl fishery that's catching
6 sawfish. We do have bycatch from the commercial shark bottom
7 longline fishery, and we also have bycatch from the recreational
8 rod-and-reel fishery, and so those were also considered.

9
10 Now, the initial population size was somewhat of a challenge to
11 derive, because unlike -- You know, I'm always jealous of
12 botanists, that can go out in a forest and just count the number
13 of trees and say we have 10,000 trees. I had to do some creative
14 estimates, based on some density information from a previous
15 publication, and then also genetic information, based on the
16 effective population size.

17
18 Again, it's largely the Leslie matrix that I used. As I said,
19 it's an age-structured model, with inputs on fecundity and
20 survivorship.

21
22 One thing that we didn't know from the Leslie matrix is λ , or
23 population productivity, depending on what we assume for the life
24 history parameters, and, actually, sawfish do have moderate
25 productivity, versus other elasmobranchs, and this is based on a
26 sweeping study that was done by Enric Cortes, where he developed
27 values across I think it was twenty-six populations, and sawfish
28 seemed to fall in the middle. They're not extremely low
29 productivity, and they don't have extremely high productivity, but
30 they're somewhere in the middle.

31
32 Then what we did with the population matrix for this study is we
33 projected it forward this time for two generations, which was
34 approximately two years, based on their life history, and what we
35 did was the stochasticity was introduced into the model by randomly
36 drawing values in the Leslie matrix at each time step, and then a
37 random variable was drawn at each vital rate, based on what I
38 introduced for uncertainty, or the standard deviation, and it was
39 replicated over 500 times for each of the time steps.

40
41 This is what we did originally, and now we're getting into 2024,
42 with this updated PVA, based on the original model that I had
43 developed for those two publications.

44
45 As I said, and as Cheston just presented, we have updated shrimp
46 bycatch estimates. The original model was done using a model that
47 bootstrapped confidence limits, but, as Cheston presented, his
48 model estimates are more robust than what I had originally

1 developed.

2
3 Those models, or, I mean, those estimates were introduced in the
4 model from 2015 to 2023. Now, the population size, as I said, has
5 been somewhat of a challenge to come up with a good population
6 size estimate, and most of it has come from genetic information.

7
8 In the original paper that I published in 2023, I had population
9 estimates, and this is for females only. I should mention that,
10 that the population viability model was only done for females.
11 There's a -- We've been waiting with bated breath for this to start
12 for a long time, and, luckily, a postdoc and a colleague of ours
13 from Texas A&M University has been doing a close-kin-mark-
14 recapture study, and the preliminary evidence suggests that the
15 population size is on the smaller end of the size range.

16
17 I had run scenarios where the population size was up to 8,000
18 females. Well, according to the Swift and Portnoy, in preparation,
19 it's likely much lower than that, on the order of less than 2,000.

20
21 When I modeled it, I excluded some of the higher-end population
22 estimates, based on this new close-kin-mark-recapture study, and
23 then, finally, as I had mentioned, and as most of you know, we had
24 that winter and spring 2024 mortality event, where approximately
25 -- There was 230 reports of smalltooth sawfish exuding this
26 spinning behavior, and we had a documented mortality exceeding
27 fifty individuals, and I'll explain in the next slide how I
28 introduced that mortality event into the population viability
29 model.

30
31 This was the updated PVA inputs. The age of maturity, I mean,
32 there's still a lot of uncertainty around some of these life
33 history parameters, but we had to move forward with what we have
34 is the best available science, and then, as I just mentioned, only
35 two of the scenarios evaluated had the lower end of the number of
36 females, and you can see the initial population size was assumed
37 to be around 1,255 females, or 1,695 females, and, again, that was
38 based on previous genetic work, based on the number of breeders
39 from genetics and also on the effective population size, and that
40 was done by a graduate student at Louisiana State University.
41 These were the inputs that we used in the Leslie matrix.

42
43 This is the -- It gives you a list of the scenarios that I ran. I
44 went back and kind of did a forecasting, where, because we had
45 bycatch estimates now back to 2009 -- The previous studies, I just
46 projected into the future, but, for this particular exercise, I
47 went back in time, to 2009, and either assumed an initial
48 population size of 1,255 females or 1,695 females.

1
2 The recreational fishing mortality, based on an earlier
3 publication, was about eleven animals per year. The shark bottom
4 longline fishery was only one individual per year, and then the
5 shrimp trawl removals, again, as I mentioned, and these were based
6 on what Cheston and Beth had estimated using their Bayesian
7 approach, and so, for example, in 2009, I modeled sixty-five
8 removals, and then, all the way up to 2023, I modeled twenty-four
9 individuals.

10
11 Then, projecting into the future, what I did up to 2044, which,
12 again, would be two generations, I assumed two scenarios, one of
13 the mean of all of the shrimp trawl removals, and the other
14 scenario was the 75 percent quantiles of all those shrimp trawl
15 removals, and so I ran two scenarios. One was the mean, and one
16 was the most commonly observed mortality event.

17
18 Then, again, in 2024, I introduced the sawfish mortality event,
19 which was either thirty-eight or 182 females removed, and, if you
20 go to the next slide, I'll explain how I derived that.

21
22 What I did was I took all the data that -- Thank you, FWRI, for
23 providing this data, and so the mortality events were applied
24 primarily from the shrimp trawl fishery to the larger juveniles
25 and the adults, and that roughly is age-six to thirty. Based on
26 the observer data, all the individuals we're seeing in the shrimp
27 trawl fishery are the big guys.

28
29 However, the recreational fishery, they catch little guys, and
30 they catch medium-sized guys, and they catch big guys, and so the
31 recreational fishing mortality was applied to all ages, and then
32 the shark bottom longline bycatch was, again, applied to larger
33 individuals, based on what we see in the observer data.

34
35 Now, the spinning mortality event, when I looked at all the data,
36 interestingly, half of the ones that were caught, or were observed
37 spinning, or were necropsied, were males, and the other half are
38 females, and so what I did was I took the total numbers, and I
39 divided it in half, because, again, the model was developed for
40 females, and, then to get an age distribution, I took the numbers
41 that we had length information from, which were either estimated
42 or actually measured, and then applied, using a back-transformed
43 von Bertalanffy growth equation to apply the ages, and you can see
44 the ages primarily were six through greater than thirty.

45
46 Now, the total deaths, again, and I talked to you about those two
47 scenarios, and one scenario was the actual number that were
48 observed in necropsied individuals. The other scenario was the

1 necropsied individuals, plus we assumed that those animals that
2 were spinning, and showed very bad signs, were reported symptomatic
3 individuals, also died later, but were not recovered, and so there
4 was two scenarios, one at the high end, with the ones we know that
5 had died, that were necropsied by FWRI, and then the ones that
6 were reported to FWRI that were spinning, and, you know, we assumed
7 that had died later, and the individuals carcasses could not be
8 recovered, and so that's how I set up these mortality events.

10 What we had was some interesting and, in some cases, not very good
11 results. When I included the 2024 spinning mortality event, it
12 led to substantially more pessimistic PVM results than what I
13 originally published.

15 It did knock the population back, largely because, you know, it
16 impacted most of the adult population, which we assume were not
17 going to be able to reproduce before they died. In all of the
18 scenarios, at least it was a 25 percent probability of population
19 extinction.

21 In the Scenarios 1 through 4, where we had the lower population
22 estimate, in half of them, the predicted outcome was population
23 extinction, and Scenarios greater than 4, it was a 75 percent
24 likelihood of extinction, but, for Scenarios 5 through 8, the
25 population slowly recovered from the mortality event, and what we
26 would see was the population took a dip during 2024, when we had
27 that spinning mortality event, but there still was enough
28 individuals out there for the population to start to recover after
29 five years, only given if we had lower bycatch levels.

31 There's a lot of sources of uncertainty, and I freely admit that
32 we are still working on a lot of the uncertainties related to
33 sawfish life history, and some of these other factors, and we're
34 still trying, and we're doing our best.

36 We know a lot more, I should say, and I've been doing sawfish stuff
37 since 2008, and we know a heck of a lot more now than we did back
38 then, but we still need to get better information on survivorship,
39 age of maturity, and maximum age. That will definitely help give
40 us a better idea of their productivity.

42 The population size estimates we have, that I used, that were based
43 on genetic population size, number of breeders, but the close-kin-
44 mark-recapture study -- Once that information is finalized, I think
45 that's really going to give us a good handle, because we're working
46 in collaboration, as I said, with Texas A&M University, but FWRI,
47 FSU, and NOAA are collecting fin clip samples from out their range,
48 which is really going to improve the robustness of the close-kin-

1 mark-recapture estimates, which we're very excited about seeing
2 the final results.

3
4 Not surprisingly, as Cheston pointed out in his talk, the shrimp
5 bycatch mortality still has a lot of uncertainty in it. Industry
6 collaboration would be huge in trying to get us better information
7 on that, just because of the low observer coverage, and then the
8 mortality event, the 2024, did have a significant impact on the
9 population.

10
11 If we continue to have these, it's not good news. We already, in
12 2025, have seen at least three spinning reports, and six confirmed
13 dead, and so this was not modeled into the PVA yet, but, if we're
14 already starting to see some episodic mortality events, it's not
15 good news, and so hopefully we can find some sort of remedy for
16 this, but it does still seem to be located in the Lower Florida
17 Keys, and we're not exactly sure why that is.

18
19 I mean, I'm being optimistic, and I just returned from a sawfish
20 research field expedition, where we worked in the northern part of
21 Everglades National Park, from Key Largo all the way up to Marco
22 Island, and we captured more sawfish than we caught bull sharks or
23 lemon sharks, and so that was -- That's a good sign, and my
24 colleagues at FSU are still collecting a good number of adults.

25
26 Again, there's a lot of questions on how this episodic mortality
27 event is going to affect the smalltooth sawfish population, because
28 the PVA does suggest it does have a significant impact on them.

29
30 Again, the model output suggests the sawfish population, if we do
31 continue to have these mortality events, will be a significant
32 factor on their viability. We do see some positive, if the
33 mortality events are minimal and the shrimp bycatch remains at or
34 below the levels of 2023, and there is optimism that the population
35 can still have the capacity to recover, and so it's -- There's a
36 lot of bad news, but there's also some good news.

37
38 Then ways forward, and I always try to give a ways forward and how
39 we can work together to get better information, because, as I said,
40 there's still a lot of uncertainty. In some of the model runs
41 that I did, it looked like a giant spaghetti monster with the
42 uncertainty, where it just would project, and then it would turn
43 into, you know, lines going everywhere, just because of the
44 uncertainty that we have in the life history and in the bycatch.

45
46 There's the opportunity to definitely get refined bycatch
47 estimates, particularly in the size and age of the bycatch. As I
48 said, most of the observers take an estimate of the length, because

1 the animal is stuck in the net, and, when they bring it up, the
2 industry just basically tries to cut it out of the net as quickly
3 as possible.

4
5 Improving of our observer coverage and total effort, and I know
6 I'm preaching to the choir here, but there is this potential for
7 EM. For those of you that may be aware, we did a study here where
8 we had three shrimp trawl vessels that volunteer to use EM on their
9 boats. This really showed promise.

10
11 I mean, what I have here in the photograph, and you probably can't
12 see it very well on your computer screen or whatever, but what's
13 circled are sharks, and so, if we can see a shark that is only
14 about a meter long, in some cases, or even smaller, we can sure as
15 heck pick up a sawfish on EM, and so that has the potential to
16 really improve our observer coverage and fully document whether
17 the rarity that we're seeing in sawfish bycatch is an artifact of
18 the observer coverage or is it an artifact of that there's just
19 not a lot of them out there, and so this, again, presents
20 opportunity for industry involvement.

21
22 Then, as I said, to continue to improve the life history, the post-
23 mortality data, and the population size, and that close-kin-mark-
24 recapture study that I keep mentioning is going to be huge.

25
26 Can the industry help? Yes, and they can help by collecting more
27 tissue samples, especially throughout the animal's range, and so,
28 if we can get more tissue samples, this will improve the robustness
29 of the close-kin-mark-recapture study and eliminate any
30 uncertainty.

31
32 Now I'm happy to answer any questions, and I always like to end my
33 sawfish talks, because this was a drawing of a sawfish that was
34 done in the 1700s, by a Portuguese explorer, and so you can see
35 how much they've changed over time, and so I thank you for your
36 attention, and I'm happy to answer any questions.

37
38 **CHAIRMAN ALLEN:** Excellent. Thank you, Dr. Carlson. You got a
39 good chuckle out of your figure there.

40
41 **DR. CARLSON:** That was the idea.

42
43 **CHAIRMAN ALLEN:** I had a couple of questions, to get us started,
44 and where we're going for this is we would like to get a motion
45 here about considerations regarding this. You know, this is an
46 important issue, because it's a -- We're dealing with an ESA listed
47 species that's interacting with fisheries, and so big
48 implications.

1
2 My first question is if you -- This gets to Luiz's point earlier,
3 and, if you characterize the uncertainty around the bycatch, would
4 you be able to put extinction probability in a more probabilistic
5 framework, if you had, you know, uncertain -- If you looked at the
6 full uncertainty around the bycatch estimates, and so that's the
7 first question. T

8
9 he second question I had was thinking about a range expansion for
10 this species, because I know the occurrence of them is happening
11 much further north than it used to, and could that -- Could that
12 end up helping this situation in the long-term, and I don't know,
13 and I would welcome your thoughts on both of those.

14
15 **DR. CARLSON:** In fact, I've been, you know, thinking about
16 expanding, with conversations with John Walter, the next step,
17 and, you know, the PVA, for intents and purposes is, you know, the
18 most -- We can look at more robust models, that would look at more
19 uncertainty, as you said, with the shrimp bycatch estimates, but,
20 also, I would like to start moving forward with incorporating --

21
22 We have four surveys of relative abundance that could be
23 incorporated into the model to provide a more robust idea of what's
24 going on out there, and so, you know, both of those are possible.

25
26 Then, in terms of range expansion, we are seeing that. I mean, we
27 had -- I think it was two years ago, or three years ago, and it's
28 all a blur these days, but the first observations of the sawfish
29 giving birth in Tampa Bay, which is huge. We haven't seen that
30 since the 1950s, and we are seeing range expansions, and this is
31 one of the -- When we first put together the recovery plan for
32 sawfish, one of the recovery criteria was them starting to show
33 up, occurrences, in historically known areas.

34
35 We're starting to see that, and we've had some of the animals that
36 we have acoustically tagged, and thankfully the eye tag, and the
37 fact that it works, are all working together, and it's been a huge
38 bonus to us, because my colleagues at FSU, that have tagged sawfish
39 in the Lower Florida Keys, have shown up in acoustic arrays in
40 Georgia, and so we are starting to see that range expansion that
41 we would predict for sawfish recovery.

42
43 Then it's kind of this conflict, where some of the modeling
44 suggests that the population is in dire straits, because of this
45 combination of shrimp trawl bycatch and, you know, the mortality
46 event that occurred from the toxic algae.

47
48 **CHAIRMAN ALLEN:** Okay. Thank you.

1
2 **DR. CARLSON:** Did that answer your question?
3

4 **CHAIRMAN ALLEN:** Yes. Absolutely. Thank you very much. Will
5 Patterson, a comment.
6

7 **DR. PATTERSON:** Thanks, Mike, and thanks, John, for the
8 presentation. I wonder if we could put John's presentation file
9 back up on the screen and scroll up to the matrix model sort of
10 table.
11

12 I'm curious here, and I think I heard right, but maybe I missed
13 some of this, and so, in your columns here, the recreational
14 fishery, and that's 10.9 removals per year, and is that what that's
15 telling us?
16

17 **DR. CARLSON:** Yes.
18

19 **DR. PATTERSON:** Then one for the bottom longline, and sixty for
20 shrimp.
21

22 **DR. CARLSON:** These are mortalities, Will. I mean, they catch a
23 heck of a lot more, but, based on -- Like, for example, for observer
24 data, for the shark bottom longline, we've only ever had one
25 documented mortality.
26

27 It may be higher than that, but they seem to do okay, and then,
28 for the recreational fishery, it may be more than this, but, again,
29 I had to base it on mortality estimates that we use for a
30 conspecific species that we use in stock assessments, and so these
31 numbers are, obviously, rough, in terms of their mortality
32 estimates, and so, you know, again, there's no MRIP -- There's no
33 MRIP column, unfortunately, when they do the thing like you catch
34 a sawfish. Most of this comes from the National Parks Service and
35 what I derived using, like I said, proxy species from our stock
36 assessments, and so these numbers could be higher or lower.
37

38 **DR. PATTERSON:** So those are all annual removals, except for the
39 spinning fish, and that was just the one year.
40

41 **DR. CARLSON:** Right. That was a one-time event.
42

43 **DR. PATTERSON:** Okay. So, like for the recreational fishery
44 though, you know, the population density, and the amount of effort,
45 has changed over time, and so I'm just wondering -- I understand,
46 you know, the mortality itself, the risk mortality, might be
47 constant, but I'm wondering if it's a fair assumption that the
48 same number of fish are being -- You know, are being killed as

1 discards by the recreational fishery, year after year, if that --
2 You mentioned going to more complex models, and so that could
3 perhaps --
4

5 **DR. CARLSON:** That's a -- That's a very valid question, and, again,
6 it's the assumption that I had to move forward with, especially
7 considering, you know, if you go on YouTube, you'll find lots of
8 people that are out either fishing for red drum, or even fishing
9 for sharks off the beach, that catch sawfish, and then they -- Of
10 course, they want the YouTube video, or the Instagram post, and
11 they pull them up on shore, and stand on top of them with their
12 kids, and then release them, and so that's another, you know,
13 potential way to move forward, is try to get some more post-release
14 mortality from the recreational fishery, and so you definitely
15 have a valid question, that that assumption of constant likely is
16 changing over time.
17

18 **DR. PATTERSON:** Yes, and the other question I had was about just
19 like life stage. I know that these -- You know, if you have a
20 recreational fishery that's discarding a fish, you're not getting
21 an age from it, but I assume like most of those fish that are being
22 caught in the Everglades, or nearshore, are fairly small and young,
23 but what's being caught in a shrimp trawl and a bottom longline
24 might be much bigger fish, and do you have the size composition
25 data from the longline and the shrimp trawl samples?
26

27 **DR. CARLSON:** From the longline, but the shrimp trawl is estimated
28 and so that's why I applied it, and that's -- That was one of the,
29 you know, research recommendations that I had. In most cases, the
30 observer is getting an estimate of the length, you know, as the
31 animal is being cut out of the shrimp trawl itself.
32

33 The same thing with the shark bottom longline, and it's largely an
34 estimated length, and so that's why, when you looked at it, it was
35 applied over a broad range from age-six to age-thirty. If I had
36 more refined age, you know, more length information, you know,
37 then I could definitely apply it to those specific age classes.
38

39 In terms of the recreational fishery, yes, we do know that, in the
40 Everglades, they're probably catching the little guys, and the
41 medium-sized guys, but I think you know that Everglades National
42 Park has had a survey that's been going on for forty years, but,
43 again, it's just a dockside intercept, where someone would ask if
44 you caught a sawfish, and yes. You know, any idea of the size,
45 and it was -- You know, I'm holding my arms out, and it was this
46 big, and you know what I mean?
47

48 Then, off the beach, you know, like I said, going on YouTube or

1 Instagram, that's where they're getting the bigger ones, when
2 they're targeting -- You know, there's a very active, as you know,
3 shark fishery for beach fishermen off the east coast of Florida,
4 and we see a lot of them catching sawfish now.

5
6 **DR. PATTERSON:** Gotcha, and so, the age composition that you showed
7 for the dead spinning fish, those were all aged with Verts, and
8 then Portnoy has the tissue samples for those?

9
10 **DR. CARLSON:** Yes, and Portnoy has the tissue samples for those,
11 and the length information -- What I did is actually we did an
12 updated -- There's an updated age and growth model in the works
13 right now, from the work that you and I did with Rachel, that I
14 applied -- You know, I just basically back-transformed length at
15 age.

16
17 **DR. PATTERSON:** So like that thirty-eight-year-old fish, in that
18 you have the tissue to go with it, and then it's been aged with
19 the vert.

20
21 **DR. CARLSON:** Yes, and it's all -- Everything is going to Dave.

22
23 **DR. PATTERSON:** Gotcha. Okay. Cool. Thanks.

24
25 **DR. CARLSON:** You're welcome.

26
27 **CHAIRMAN ALLEN:** Andrew, please.

28
29 **DR. ROPICKI:** Thanks so much. That was a great presentation. I
30 just had one quick question on I think it's slide 11, and you
31 mentioned that 2024 had the lowest shrimp trawl bycatch. It was
32 the lowest on record, but, if I go to slide 8, you've got a low
33 number in 2023, and then it jumps back up in 2024 for shrimp trawl
34 removal. I don't --

35
36 **DR. CARLSON:** In 2023 it was twenty-four, but in -- In 2023, it
37 was twenty-four individuals. 2024 was when I started the
38 projections into the future.

39
40 **DR. ROPICKI:** Okay.

41
42 **DR. CARLSON:** That was -- The sixty is the mean, and then, as I
43 said, seventy-two is the 75 percent median, because, at the time,
44 when I did this model, I didn't have the 2024 estimates, and they
45 were not completed yet.

46
47 **DR. ROPICKI"** Yes, because I was going to say that you mentioned
48 hurricane Ian, and I was looking at pink shrimp landings, and it

1 was FWC data, and I was just pulling it up on my computer, but,
2 looking at Monroe, Lee, and Hillsborough, you know, 2023 is the
3 first year that you would have had the big decrease from Ian, and
4 it went down about 26 percent, and then, in 2024, it went down
5 another 26 or 27 percent.

6
7 **DR. CARLSON:** Yes, and, like I said, at the time when I was running
8 this model, I didn't have those updated estimates, and so, from
9 2023, or, actually, let's just say from 2024 on is when I used
10 either the mean estimate or the median, and this model is a work
11 in progress. This can easily be updated as we get better data on
12 shrimp bycatch.

13
14 **DR. ROPICKI:** Okay. Thanks.

15
16 **DR. CARLSON:** If that helps.

17
18 **CHAIRMAN ALLEN:** Okay. Trevor.

19
20 **MR. MONCRIEF:** A side note, and apparently there is some
21 information within the MRIP data query for smalltooth sawfish, and
22 so there might be something there, at least the amount of
23 interactions that has occurred for wherever else in the Gulf.

24
25 Another side note range is range expansion, and we actually had
26 one in our waters, a juvenile, all the way up, um, around
27 Chandeleur, that was videoed last year.

28
29 **DR. CARLSON:** Yes, and I know about that one.

30
31 **MR. MONCRIEF:** So all that kind of stuff, and then I will say that
32 I'm struggling a little bit here, right, because you want us to
33 have some definitive statement, or some motion, about the
34 information, but there's a lot of uncertainty.

35
36 There's a very small amount of observations that we're trying to
37 make assumptions off of those, and assumptions could very well
38 have an impact on fishermen in another fishery, and so, to me,
39 it's kind of hard for me to wrap my head around the aspects of
40 what we're trying to make a declarative statement on and what that
41 down-range impact will be, because I would hate to make a
42 definitive statement here on, you know, a fair amount of
43 uncertainty and have that yield negative impacts.

44
45 **DR. CARLSON:** Well, and that was my point on my point on my final
46 conclusion slide is, you know, industry cooperation will
47 definitely help us improve the uncertainty that I've demonstrated
48 through this simulation study.

1
2 **CHAIRMAN ALLEN:** I was going to say, Trevor, I also think that --
3 I think that's a really good point, and I don't think we can make
4 a definitive statement at this point, but we can say that this
5 approach represents best information available and that it needs
6 more refinement, more data sources, more incorporation of
7 uncertainty, some of those -- To those effects.

8
9 **DR. CARLSON:** Like I said, you know, one of the big take-home
10 messages is, you know, knock on wood, we don't have any more
11 significant mortality events, because that does -- That did seem
12 to have a significant impact on population recovery.

13
14 **CHAIRMAN ALLEN:** Okay. Adam, please.

15
16 **MR. ADAM BRAME:** I just wanted to bring it back to a couple points
17 here, and that's that, at the end of the day, based on what we
18 have available to us, you know, based on two different initial
19 population sizes, at least half of the scenarios are going to
20 extinction, or at least a 50 percent chance of extinction. I think
21 that's alarming, and that we as a group need to really consider as
22 we move forward here.

23
24 There's, obviously, a lot of uncertainty here, and we're trying to
25 account for that in different ways, but, until we can increase
26 some observer coverage, and get better effort data, very specific
27 to the areas where we know there is high habitat use by these large
28 sawfish, it's going to be hard to resolve that precision, and so
29 I want to highlight that.

30
31 I fully agree that there's uncertainty, and we need to resolve
32 that, but in the -- In the interim, you know, I think this does
33 represent the best information that we have available, and it's,
34 nevertheless, quite alarming, from a recovery standpoint. If the
35 industry can help us in regards to gathering some better
36 information, that will make a huge stride.

37
38 **CHAIRMAN ALLEN:** Thank you, Adam.

39
40 **DR. CARLSON:** Again, to follow -- I'm sorry for interrupting, but,
41 again, to follow on Adam's comments, you know, we are suffering
42 from low observer coverage, and, if we can get more industry
43 involvement in getting tissue samples, tagging animals, you know,
44 this will definitely improve our estimates as we move forward, and
45 so thank you for that.

46
47 **CHAIRMAN ALLEN:** Okay. To try to move us forward, because we have
48 two more major topics that we are going to deal with today for

1 sure, and some of the stuff at the bottom of the agenda we can
2 move, but we have two more we've got to do, and so I put up a
3 motion to Jessica, that she can put on, and we can discuss quickly
4 and see how the group feels about it. I'll read it out loud and
5 see if we get a second.

6
7 **The SSC recognizes the population viability analysis of smalltooth**
8 **sawfish represents the best scientific information available and**
9 **could be a useful analysis for understanding impacts of bycatch**
10 **and other mortality sources on population viability. The SSC**
11 **encourages evaluation of uncertainty around bycatch estimates,**
12 **potential impacts of range expansion, and continue refinement of**
13 **effective population size estimates. Ultimately, continued**
14 **development of this approach could be used to inform bycatch**
15 **mitigation measures for shrimp fisheries in the Gulf. I'm trying**
16 **to keep it, trying to keep it general here.**

17
18 **DR. BARBIERI:** I second your motion, Mr. Chairman.

19
20 **CHAIRMAN ALLEN:** We have a second from Luiz. Discussion on this
21 one? Jason.

22
23 **MR. SAUCIER:** I'm not sure I would support it, just because there's
24 so much uncertainty. There's three sectors here it looks like
25 that we're that we're trying to assess. There's the recreational
26 fishery, bottom longline, and the shrimp trawl, and we know we've
27 got uncertainty in all three, and then we've got this other
28 parameter, this unknown, that's outside the control of this group,
29 these events, and so, you know, there's a lot of uncertainty.

30
31 To say that it -- To make the statement that it's the best
32 scientific information available, I think I would have a hard time,
33 without seeing some additional information on those other two
34 fisheries, to make a determination, where the focus here looks
35 like it's just the shrimp trawl fishery.

36
37 **CHAIRMAN ALLEN:** I think that's I think that's a really good point,
38 Jason, and maybe an amendment to this could be take out shrimp
39 fisheries, and it could be commercial and recreational fisheries,
40 or it's more than one, or just "fisheries".

41
42 I understand you still may not be able to support it, but I'm just
43 trying to make it more general because it's more than just the
44 shrimp bottom trawl fishery, which is a good point. Luiz, please.

45
46 **DR. BARBIERI:** Thank you, Mr. Chairman, and, John, thank you for
47 this excellent presentation, and for doing all this work, and
48 working very closely with our team, and the FSU team, and putting

1 all this together in record time. It's a large accomplishment,
2 and we sure appreciate it.

3
4 I think that what some of us are struggling with here is the fact
5 that this is unusual for us, right, and so because this is really
6 outside of our usual lane, and we don't have in front of us most
7 of the things that we usually have to evaluate a stock assessment,
8 and so I don't know, and, John, understanding that you know this
9 well, and you have published this before, right, but I don't know,
10 looking at that table on slide 10, you know, whether -- Some of
11 those, and I don't know if you have model convergence, for example,
12 if it's an issue here, or how this is structured.

13
14 I'm just not familiar with the process enough to be able to
15 evaluate what sticks and what doesn't. Diagnostics around primary
16 estimates, and those kinds of things that we usually look at, are
17 lacking. Understandably so, John, and it's not your fault. It's
18 the nature of this kind of work, but just to explain our reticence
19 to jump into this feed first.

20
21 It's something new to us, using techniques that we are not really
22 that familiar with.

23
24 **CHAIRMAN ALLEN:** Thank you, Luiz, and I agree. This is something
25 we haven't come across in my time on the SSC. Other discussion of
26 this motion? Trevor. John, you may have some context for us, and
27 then I'll go to Trevor, and then Will.

28
29 **DR. CARLSON:** Thank you, Chair, and thank you, Luiz, for your
30 comments. As I said, this is a first step, based on the data that
31 we have available, and, as I suggested, the next step that I'm
32 moving towards is a more robust, quote, unquote, stock assessment
33 model that would address many of your concerns that you brought up
34 about, you know, diagnostics around the projections and matters of
35 that nature, and so, you know, this is, you know, stage one of
36 what we were trying to evaluate when I first started this
37 population viability analysis some time ago.

38
39 One thing, Chair, relative to what you had for recommendations,
40 and you had just for the Gulf of Mexico. I might suggest that you
41 have it for both the Atlantic and the Gulf, simply because there
42 has been interactions, in the recreational specifically, and in
43 the shrimp trawl fishery, and not as many as in the Gulf in the
44 Atlantic, and as we see the range expansions that some of the group
45 has brought up, I would predict that there would be more
46 interactions starting to occur in the Atlantic, especially in the
47 gillnet fisheries, which are, you know, reduced now, but, as the
48 population expands and moves forward, we would want to definitely

1 try to get more information from those fisheries as well, and so
2 that was just -- Luiz, I hope that answers your question. Thank
3 you.

4
5 **DR. BARBIERI:** Thank you, John. I don't know that we can make any
6 motions about the South Atlantic from this group, but it's a
7 discussion.

8
9 **DR. CARLSON:** I'm sorry. That's true. I forgot that we're the
10 Gulf Council and not the whole south council. I forgot about that.
11 My mistake.

12
13 **CHAIRMAN ALLEN:** Trevor, please.

14
15 **MR. MONCRIEF:** You might have to pull back up the motion, real
16 quick. All right, and so I know we've gone round and round, but
17 putting BSIA into that motion seems like a little bit of a step
18 too far here, right, and we've been told that the definition of is
19 a culmination of data products, and not a single data product, and
20 so that's one thing, right, but, just in general, right, in my
21 mind, ,to me, putting this data product as BSIA gives it a certain
22 connotation that I don't think is reflective of at least how I
23 feel about it.

24
25 I think it's a good start. It's relevant information to consider
26 when going through this process, but putting that label, or making
27 it consistent with that label, I think puts a title on it that I
28 don't think I would be willing to support here.

29
30 **CHAIRMAN ALLEN:** I would be happy to entertain a friendly amendment
31 to this if you can think of some wording you would use instead of
32 BSIA.

33
34 **MR. MONCRIEF:** I think relevant information for consideration,
35 something like that, and it represents -- Yes, and I would say
36 something to that nature.

37
38 **CHAIRMAN ALLEN:** Represents relevant information that could be
39 useful.

40
41 **DR. BARBIERI:** It could be represents a useful analysis.

42
43 **CHAIRMAN ALLEN:** **Represents a useful analysis, yes.** I'm happy
44 with that amendment. Luiz, are you good with that?

45
46 **DR. BARBIERI:** Yes, Mr. Chairman, I am.

47
48 **CHAIRMAN ALLEN:** Okay. Ralph, please.

1
2 **MR. TOWNSEND:** So my concern is that, when I listened to this
3 presentation and the data around it, I guess I agree with Adam
4 Brame's point. It's alarming results, right, and high
5 probabilities of extinction, and so that's an alarming event, and
6 that implies something more than sort of a milquetoast response,
7 and the reality is that the shrimp bycatch is, by this analysis,
8 a major issue.

9
10 Whether it's the only issue is not -- The analysis says it's a
11 major issue, and the shrimp bycatch is in quite a small area, and
12 so research targeted on those zones -- It doesn't have to be Gulf-
13 wide increases in observers, but focused research on those zones
14 seems to me like an important response, if you're going to say,
15 oh, we need a lot --

16
17 I mean, there's a very risky outcome here, it seems to me, and the
18 answer ought to be you need to do something about this, and, if
19 the answer is you need to do more precise research, then it's clear
20 where we need to do that research, and it seems to me this motion
21 should say that if we're going to say, well, it's interesting
22 information, and so that's just my take on listening to what's
23 going on here.

24
25 **CHAIRMAN ALLEN:** I don't disagree with your statement there, Ralph.
26 I mean, what I was trying to do with this motion is make that this
27 general approach is useful, and it needs more development, and
28 more data collection would be a good thing to add in here.

29
30 **MR. TOWNSEND:** It seems to me that it might be appropriate to say
31 targeted research on those specific statistical areas is very
32 important to resolving these issues. I mean, I don't see how --
33 Given that the bycatch is in a relatively small area, that kind of
34 targeted research is less expensive than Gulf-wide, then let's say
35 increasing observers Gulf-wide.

36
37 **CHAIRMAN ALLEN:** How about if we -- Go ahead, Dave. Do you have
38 an amendment?

39
40 **DR. CHAGARIS:** Sure, and I can add to that, but I agree completely.
41 I mean, I think we've seen a tool that's useful, and it has
42 highlighted uncertainties, and, you know, where we can collect the
43 data to resolve those uncertainties, we should.

44
45 I think you could probably add that somewhere in the second
46 sentence, where it says the SSC encourages targeted data collection
47 in areas of high bycatch evaluation, and then a comma, and then
48 continue the rest, because there is also -- You know, we need the

1 additional data, but we also need to still explicitly incorporate
2 the uncertainty, whether it's new or old information.

3
4 **CHAIRMAN ALLEN:** Thank you for that.

5
6 **DR. CHAGARIS:** Encourages targeted data collection in areas of
7 high bycatch.

8
9 **CHAIRMAN ALLEN:** There you go. Okay. Any more discussion?

10
11 **DR. PATTERSON:** Mike, you've got some folks online.

12
13 **CHAIRMAN ALLEN:** Will, thank you. Go ahead.

14
15 **DR. PATTERSON:** I would say -- So I really like the changes.
16 Several folks made comments that I was interested in making, and
17 I like where this stands now. **I would say the SSC reviewed the**
18 **population viability analysis and concluded it represents.**

19
20 **CHAIRMAN ALLEN:** Luiz, I'm coming back to you, for you and I to
21 agree on these friendly amendments that are underway.

22
23 **DR. PATTERSON:** To say "conclude it represents", and then the other
24 suggestion I would have is "encourages cooperative research for
25 targeted data collection", because it's been stressed, several
26 times, that if there was greater cooperation, or just involvement
27 of industry with collecting the data to inform some of these
28 parameters, that, you know, that would be quite useful.
29 Cooperative research for targeted data collection.

30
31 **CHAIRMAN ALLEN:** Cooperative research.

32
33 **DR. PATTERSON:** If you all accept those.

34
35 **CHAIRMAN ALLEN:** Okay. **I accept those friendly amendments.** Luiz?

36
37 **DR. BARBIERI:** Yes. Absolutely, and I think those are very
38 helpful. Will, thank you.

39
40 **CHAIRMAN ALLEN:** Okay. Thank you. One second. Let me go to the
41 online ones first. John, did you have your hand up, John Carlson?

42
43 **DR. CARLSON:** Just for a brief comment about the targeted data
44 collection. I mean, that was one of the conclusions of the paper
45 we published on using EM. We would need to -- You know, given the
46 limited budgets that we know we are experiencing, we wouldn't
47 necessarily need to outfit every shrimp trawl vessel in the Gulf
48 of Mexico. It would just be targeted in the areas where they're

1 fishing, where most of our interactions have occurred, and so I
2 support that targeted data collection as a way forward. Thank
3 you.

4
5 **CHAIRMAN ALLEN:** Thank you, John. Adam.

6
7 **MR. BRAME:** Thank you, Mr. Chair. Just I want to echo John's
8 statement there about the targeted research. I just would also
9 make people aware that there was a -- I think a 2022 paper, Graham
10 et al., that assessed the different fisheries and their impacts,
11 based on overlap with sawfish habitat use in southwest Florida,
12 and so some of that work has been done that shows, you know, that
13 this fishery in particular is a little bit more detrimental to the
14 species, in comparison to others, and so I think that can really
15 set the stage for, you know, for why we're here looking at this
16 particular fishery in relation to some of the others.

17
18 I just wanted to make folks aware that that was out there, and,
19 lastly, you know, I think that it's important to note that, if the
20 SSC doesn't think that this is the best available, that I
21 challenged SSC to help partner in resolving some of that
22 uncertainty.

23
24 It looks like, you know, under the new motion, some of that is
25 being refined in there, but, as we move forward, the more we can
26 get input from the SSC, the better this product is going to be,
27 which I think is important when we're talking about such an
28 imperiled population. Thank you.

29
30 **CHAIRMAN ALLEN:** Thank you, Adam, and I think hopefully you can
31 glean, from this discussion, that we're here to partner with you
32 on that and continue this investigation as we go. Harry, please.

33
34 **MR. BLANCHET:** Mine is not to the motion. I have a couple of brief
35 comments about the model, before we get off of the topic entirely.

36
37 **CHAIRMAN ALLEN:** Okay. I'll come back to you. Tiffany, please.

38
39 **DR. HOPPER:** I just had a small, picky amendment question, which
40 is can we make it "concluded", instead of "concludes" so that it's
41 parallel to "reviewed", since it's the second half of "and"
42 sentence?

43
44 **CHAIRMAN ALLEN:** Excellent. That's a good change. Thank you.
45 Okay. Harry, we'll take your comments, and then we'll put this up
46 for a vote.

47
48 **MR. BLANCHET:** Okay. I have two pieces to it. If you look at the

1 shrimp trawl removals table that was provided, if you look at the
2 values on average, the numbers before 2016 averaged about fifty
3 per year. The numbers between 2015 and 2022 averaged about
4 seventy-four per year.

5
6 That doesn't seem to jibe with what we have seen in terms of
7 overall shrimp trawl effort, and, to expand on that, this shrimp
8 trawl fishery in the southwest Gulf of Mexico, or southeast Gulf
9 of Mexico, has been around for a long time, and, if you look at
10 the landings from the pink shrimp fishery from the 1960s, 1970s
11 and 1980s, I don't know how a sawfish would have survived that, if
12 it can't survive what we've got today. Thank you.

13
14 **CHAIRMAN ALLEN:** Thank you, Harry.

15
16 **MR. BLANCHET:** That was four-times the amount of landings, in some
17 years, than what we've seen recently.

18
19 **CHAIRMAN ALLEN:** Thank you, Harry. I think those are good comments
20 for the research group to consider moving forward. Luiz.

21
22 **DR. BARBIERI:** Thank you, Mr. Chairman. **Just real quickly, what**
23 **I'm wondering, since we have, you know, the motion there on the**
24 **board, if we could add "the SSC encourages cooperative research**
25 **for targeted data collection and increased observer coverage",**
26 **just to be a little more explicit about what could be helpful if**
27 **they target that area.**

28
29 **CHAIRMAN ALLEN:** I'm good with that change. Okay. Let's put this
30 up for a vote. Let's start out and see -- **Is there any opposition**
31 **to this motion?** Any online, Jessica? Okay. **The motion carries**
32 **with no opposition.** Thanks, everyone, for engaging on this. John
33 and Cheston, thank you for your for your hard work on this, and we
34 appreciate you coming to the committee with this. We'll look for
35 updates in the future.

36
37 Okay and so our next topic, and, if you have to run to the bathroom,
38 please do, but we're going to press forward. Our next topic is
39 going to be the SEDAR process update, and Katie is going to give
40 us a presentation, and we'll have some discussion there.

41 42 **SEDAR PROCESS UPDATE**

43
44 **MR. RINDONE:** Dr. Siegfried is on with us, and she's going to talk
45 about a change to the SEDAR process, which is going to see a
46 proposal to take the assessment portion of the process under the
47 Science Center's hat, so to speak, and it be run more internally,
48 with presentations along the way to the SSC to try and update them

1 about how modeling is going, ask questions, kind of like what we
2 went through most recently with red grouper that you guys
3 experienced, where we got a presentation of some of the big
4 changes, and some of their anticipated effects, and you guys
5 provided some feedback, and then that feedback was then
6 operationalized before the final review of model, and so, Dr.
7 Siegfried, if you want to get into that.

8
9 **DR. SIEGFRIED:** Thanks, Ryan, and thanks, Mr. Chair, for allowing
10 us to go on. I know you all are behind the schedule, and so I'll
11 try to be quick about this. I have made you all aware that this
12 was coming, and so hopefully none of this is a surprise.

13
14 Just the quick background on this, and this was even before all of
15 the recent budget cuts to the Science Center, or, you know,
16 potential budget cuts coming. We also lost around 30 percent of
17 our staff already, and so there is a definite need to increase
18 timeliness and throughput of advice, while also streamlining
19 operations.

20
21 We're potentially still going to have decreasing resources, even
22 in light of what has already happened, and that just means that
23 project time must decrease to maintain or increase throughput.
24 The SEDAR project duration has increased substantially through
25 time, and I've shown you all plots of that in the past, and I'm
26 sure it's all archived in the SSC archive from previous meetings.

27
28 You've seen a little bit of this before, and apologies for the
29 checkmarks going nuts, but we've done a number of things already,
30 with your help, and with council staff's help. Those are all
31 already checked, and so the next thing is to potentially assess
32 our remaining stocks with less time-consuming approaches.

33
34 Now, there's different ways to do that, either right-size the
35 assessments with different model types, update projections, do
36 interim analyses, management procedures, but we can also do things
37 extra-SEDAR, or within the SEDAR process, but in a streamlined
38 fashion. If I'm going too fast, just let me know, and I can slow
39 down, but I'm just trying to speed up for you all's schedule.

40
41 What we're proposing is to take responsibility for the assessment
42 component of the SEDAR process, as Ryan alluded to, and I mentioned
43 last time as well. We just don't think that our assessment
44 webinars are very efficient. They don't often produce much
45 scientific advice, let alone consistent scientific advice.

46
47 Our technical insights are uncommon during those webinars. The
48 logistical workload often comes at the cost of model work. We

1 could probably get a lot more model work done if we had to produce
2 the nice presentations on a monthly basis during the process, and,
3 also, waiting for the Federal Register notices sort of keeps us
4 stuck along the way.

5
6 We also have heard, or have gotten feedback, that we are not very
7 effective in engaging stakeholders during webinars. You all are
8 probably fishing, and you have other things going on, and the one
9 date, trying to get everybody to one of these webinars, is pretty
10 difficult.

11
12 Like I mentioned, we just have a changing and uncertain future for
13 our Southeast Fisheries Science Center workforce, and that goes
14 for our assessment group. We did lose some people, and not in the
15 Gulf assessment group, but we did lose some assessment folks.
16 We've lost data collection people, data analysis people, but we've
17 lost half of our port samplers. We really have been hit hard.

18
19 If we're trying to do this, the first thing that comes up in our
20 brain is we need to maintain the transparency. That's actually a
21 really good part, potentially, of what SEDAR was meant to do, and
22 so how can we get transparency during the assessment portion or,
23 you know, outside of that?

24
25 The data workshop is a really good place for public interactions.
26 The plenaries are streamed, and there's lots of discussion there.
27 All the stakeholders are welcome, and all the state and academic
28 scientists are welcome, and we have robust discussions at those
29 meetings.

30
31 If there's no data workshop, we do propose holding a data webinar,
32 where those types of conversations can still be had. Now, I'm not
33 talking about data scoping. It would be a data webinar, or data
34 webinars, that are being offered there, if they're needed, or
35 requested, for just some substantial data changes.

36
37 We also think we can get transparency at SSC meetings. There's a
38 public comment period, and they're also streamed as well, and so
39 we can provide the transparency via SSC meetings, and then the
40 review workshop is also open to the public, and the plenary
41 portions of those are streamed, as well as usually a public comment
42 period.

43
44 We do still want technical input, obviously, and specifically from
45 SSC members, and so we do propose to provide progress reports. The
46 analytical team will provide progress reports and seek input along
47 the way of the SSC, and you saw that, as Ryan mentioned, with
48 yellowedge. We provided that during red grouper, and we would

1 like to do that for gray triggerfish as well.

2
3 If we know that we're going to be doing that, we can get on the
4 schedule and make sure that you all are updated as we move along,
5 and then also ask the technical questions, to make sure that, you
6 know, we're not missing anything, and we get socialization of new
7 methodology, and we get buy-in of the process, because you all are
8 informed along the way.

9
10 Things to keep in mind, and though we don't want to lose
11 transparency, and we've put a lot of thought into maintaining that,
12 transparency is not the same as participation.

13
14 The transparency that we're proposing does meet our requirements
15 of being transparent, and also maintaining the administrative
16 record, without extending the assessment schedule. We would argue,
17 or ask, you know, our cooperators, is it worth a longer schedule
18 to continue with the way it's been done in the past, with these
19 webinars that we've received lots of feedback that they're just
20 not efficient or effective in really improving our assessments?

21
22 Then, even from SEDAR itself, that there's been a declining
23 participation of our assessment panels, or our topical working
24 groups, or, when we had the research tracks, our assessment
25 development team, and that panel contributions to our assessment
26 process can be limited, or limiting, and it depends on the
27 assessment.

28
29 Increased transparency, in the way that it's been executed, does
30 decrease our throughput, and so we would like to move to
31 transparency as we described, rather than maintaining this
32 participation that decreases our throughput.

33
34 How would we go about that? Our proposal would be the following.
35 The SEDAR process is limited to assessments with sufficient new
36 information to require external participation and review in the
37 first place, and so things like updated assessments, or update
38 assessments, and interim assessments, or similar approaches, could
39 be conducted internally to the Science Center and reviewed by the
40 SSC.

41
42 Now, you all are very familiar with that for interims. If we're
43 able to start doing update assessments, that would also go through
44 just the SSC, and then the Science Center would run the assessment
45 component of the SEDAR process internally.

46
47 The data and review components would remain unchanged, for the
48 reasons we have discussed in the past, and that I illustrated

1 earlier, and specifics for SEDAR assessments would be negotiated
2 between the Science Center and council staff, with input from the
3 SSC, and you'll see that with the SEDAR 100 terms of reference, if
4 we get to that discussion, and I hope we do.

5
6 Then the council may establish a standing technical team with
7 appropriate expertise and experience and expectations for
8 logistics, and so an idea there is, if we need to talk to
9 stakeholders about how they fish, so that we understand better the
10 selectivity of each sector, or each fleet, we would like to refer
11 to that technical team to ask them questions about, you know, their
12 practices and their experience on the water. We would get our
13 technical expertise and technical questions answered from
14 scientists, and other folks like that, at the SSC meetings.

15
16 For all SEDAR projects, the SEDAR would host our data scoping call
17 and data workshops or webinars, and the public would be encouraged
18 to participate, as always. Our folks internally would develop the
19 assessments. We would coordinate the ad hoc meetings with members
20 of the technical team, or any other expertise that we needed while
21 documenting that in the report.

22
23 Now, we would focus on technical issues. Our stakeholder input
24 and outreach would be something that we would focus on during those
25 ad hoc meetings, and we would provide a communications record for
26 inclusion in the assessment report. That's a really important
27 component, to make sure that we're maintaining the administrative
28 record.

29
30 The SSC role in model development will be expanded, and so, rather
31 than just seeing the final versions of each of the models, you
32 would be given a progress report and asked for feedback along the
33 way.

34
35 Council staff will schedule a pre-decisional meeting with the SSC,
36 basically get a time slot on your existing meetings, and we will
37 take your feedback and revise the assessment as appropriate, and,
38 just like we did with red grouper, where we came back, and I think
39 a good example is the platoon approach for the growth models. We
40 presented that, and we revised and came back without the platoon
41 approach, and it's helpful to get that technical advice along the
42 way.

43
44 Then the SEDAR process would maintain the review workshop. They
45 would coordinate that when needed, as usual, using the CIE
46 reviewers, as we have in the past.

47
48 There are optional components for this proposal. The in-person

1 data workshop is optional, but it would be negotiated, and I think
2 we've always really taken into account what the council has
3 anticipated that the request would be. If they think a data
4 workshop is necessary, it probably is. I don't think we've ever
5 deviated from that opinion. It would always be for new
6 assessments, and then it could be when there's many new data inputs
7 being considered or we need to substantially modify an existing
8 assessment.

10 The data webinars could be when there's just limited new
11 information available, and it would function similarly to a topical
12 working group. Our external CIE review we anticipate would always
13 be needed for new assessments, and then when new data inputs are
14 considered, particularly when there's several or a substantial
15 modification to an existing assessment.

17 We also have the potential, if we have to take a more streamlined
18 approach to do something, and we're calling it update lites, which
19 is to provide the most up-to-date management advice. The center
20 would then update a recent assessment, using all the available
21 information. Although some time series may not be available, it
22 would be better than just landings. For instance, if we were able
23 to do landings and an index or, I don't know, something like length
24 comps, if they're available. Age comps are usually the thing
25 that's available last.

27 Another example is when the MRIP data are revised, say in 2026,
28 when we would probably want to redo about five or six assessments
29 with the new MRIP data, and that would be a good time to do update
30 lites.

32 We can also just do updated projections. We can rerun those
33 projections for as long as we find them useful, replacing the
34 assumed removals with observed information, the final versions,
35 like you saw earlier. We would retain the status determination
36 criteria, but we would update OFL and ABC there.

38 The interim assessment approaches would generally be a data-
39 limited method approach to adjust the existing ABC. We've done
40 that for lane snapper, with the data-limited toolbox, and we've
41 also used a straight interim analysis with an index, and then
42 something we haven't really gotten going with yet in the Gulf is
43 the management procedure approach, which would be an approved --
44 Basically an MSE simulation tested approach to manage the stock,
45 based on a model-based or empirical harvest control rule or
46 strategy.

48 It may not provide -- It won't provide status determination

1 criteria. It often provides short-term catch advice, or at least
2 a way to go about getting short-term catch advice. The use of any
3 of these approaches to inform management would be subject to your
4 review and feedback.

5
6 So when do we make the changes? That's really why I wanted to
7 make sure we got to present this today. We would like to begin
8 with SEDAR 100, which is the Gulf gray triggerfish assessment.
9 Data scoping is set for next week. That's just the call where we
10 make sure everybody is ready to provide the data. The CIE review
11 would be run by SEDAR, and we will be having a data workshop for
12 that.

13
14 It will reduce the time allocation on the assessment calendar. It
15 would be especially helpful if we do need to delay the data
16 workshop, due to data provision issues that are caused by our
17 recent departures. We're proposing this because our assessment
18 schedule would be compacted for that species, and we could
19 potentially do that for that species. Upcoming assessments would
20 include king mackerel, gag, the tilefish complex that's on the
21 books, and then our MRIP data updates, that we would really like
22 to crank those out as soon as we get the results of that study
23 from S&T.

24
25 What is your idea about this? I presented this verbally before,
26 this idea of taking the assessment process internally, but a lot
27 of the things that I've presented today is a reminder of previous
28 presentations, and so I would like to hear your feedback and I'm
29 happy to answer any questions. Thank you.

30
31 **CHAIRMAN ALLEN:** Thank you so much, Katie. I really appreciate
32 that summary, and knowing kind of where we've been, and where we're
33 going, this is really one of the most important topics that we'll
34 discuss today, and so I look forward to feedback from the
35 committee. I've got Jim Nance's hand up. Jim.

36
37 **DR. NANCE:** Thank you. For some reason I was muted, but, Katie,
38 you and I have talked about this quite a bit, and I really support
39 this progress feedback that we've done. Red grouper was a good
40 one, and yellowedge grouper. I think it works very well, and so
41 I'm very supportive of this. My only question is do both councils
42 need to agree to this for it to work?

43
44 **MR. RINDONE:** No.

45
46 **DR. NANCE:** Okay. Thank you.

47
48 **CHAIRMAN ALLEN:** Thank you, Ryan.

1
2 **DR. SIEGFRIED:** I don't think I need to say anything else.
3

4 **DR. NANCE:** I didn't know if that was you with the deep voice,
5 Katie, or Ryan, and so anyway.
6

7 **CHAIRMAN ALLEN:** Thank you, Ryan, for the very abbreviated
8 feedback. Trevor, please.
9

10 **MR. MONCRIEF:** I hate that you all are having to go through
11 situations like this to be able to figure out how to maintain
12 throughput. I don't really disagree with anything that's been
13 presented here, as far as, you know, trying to move forward in
14 somewhat of a pragmatic manner.
15

16 I will say I think the thing that interests me most, and I've
17 brought it up here a couple times, and, I mean, I really feel like
18 there's a pretty good amount of species that we assess that can
19 really be put on cruise control, especially for what we've observed
20 over the last decade-and-a-half, if not more.
21

22 I mean, those kind of things can certainly go through something
23 like a harvest control rule, have some sort of trigger that sits
24 in the background, that essentially that fishery can operate for
25 a while, and you basically prioritize those species that need to
26 be assessed more regularly.
27

28 Now, I wish on your list there was one I could point to that would
29 be like, oh, that's one, but no, and, every upcoming assessment,
30 that's not on my list of things that can be kind of washed over,
31 but I think, as time goes on, and as species get prioritized, and
32 as things get discussed, I think there are certainly a fair number
33 of them that can really be -- We can find some efficiencies in
34 changing up our process a little bit.
35

36 **CHAIRMAN ALLEN:** Thank you, Trevor. Will is online.
37

38 **DR. PATTERSON:** Thanks, Mike, and thanks for the presentation,
39 Katie. You know, it really stinks that the impetus for all this
40 has been the 30 percent loss in personnel at the Southeast
41 Fisheries Science Center, and some of whom I think, you know, were
42 happy to retire maybe a little earlier than they expected.
43

44 Others weren't happy to be losing their jobs, and we've all lost
45 a lot of colleagues in this process, that have moved on to other
46 things, and clearly this is most challenging for folks and
47 administrators within the Science Center, in trying to figure out
48 how to move forward with congressional mandates, like Magnuson,

1 and how to actually accomplish the tasks that Congress intended
2 the agency to accomplish, or all the tasks, and so I know it's a
3 really challenging time.

4
5 As far as the presentation, and the proposed approaches, I think,
6 you know, this will probably be a work in progress. Some things
7 may work better than others.

8
9 Overall, I endorse the approach. I actually think we could have
10 done this three or four years ago, and help, you know, provide
11 some efficiencies in the process, and been perfectly fine, and
12 actually improve the situation, and so the impetus for this now I
13 think really stinks, but I do support it. Again, I think I'm not
14 going to get too caught up in all the various details, because I
15 think some of that will evolve over time, but I do think this is
16 a smart way to move forward.

17
18 **CHAIRMAN ALLEN:** Thank you, Will. Julie, please, and then Luiz.

19
20 **DR. JULIE NEER:** Hi, and this is Julie Neer from SEDAR. I
21 respectfully disagree with Ryan saying that the South Atlantic
22 doesn't need to agree with this. The answer right now is possibly
23 we will have different tracks. We do not currently have different
24 tracks.

25
26 Right now, SEDAR is one program for everyone, with minor tweaks by
27 cooperator, and SEDAR supports this process, this change. I think
28 it will be a good move, but there's a different level of trust
29 between the Science Center and the Gulf Council and the Gulf
30 Council SSC and the Science Center and the South Atlantic and South
31 Atlantic SSC, and so we're having some stumbling blocks.

32
33 We will have a discussion, at our August meeting, and hopefully,
34 at the very least, triggerfish can be put forward as a pilot of
35 this new approach, to see how it goes while we work out some of
36 the other details. I appreciate that you guys are interested in
37 taking this approach on. I think it's a really good idea. We've
38 been working on it for over a year, but now it's more important
39 than ever, given what has happened to our colleagues in the federal
40 government.

41
42 Jim, to your question, maybe. Maybe everyone needs to agree, but
43 I hope not. I think we have flexibility if -- We might have to
44 have slightly different processes, and that's okay. Thanks. Bye.

45
46 **CHAIRMAN ALLEN:** Thank you, Julie. Luiz.

47
48 **DR. BARBIERI:** Thank you, Mr. Chairman. I mean, a lot of what I

1 was going to say has already been said, and so I'm also very
2 supportive of this proposed approach. I actually think that it's
3 going to be a substantial improvement to the process. I think
4 it's going to increase actually our participation in the process.

5
6 Right now, having one, two, or occasionally three SSC members, you
7 know, present through the process at different stages, is not
8 really properly integrating SSC input in the process, and I think
9 that this is going to be faster, right, and it's going to be more
10 efficient, and it's going to allow more input from us.

11
12 Now, the one thing that I want us to really think about, you know,
13 regarding this implementation of this plan is that we're going to
14 have to think about what this entails, right, and sometimes we
15 want to get too much into the weeds into something, and
16 prioritizing how far we want to go, on what topics, for what stocks
17 is necessary. To maintain this level of efficiency, I think we're
18 going to have to be respectful of that aspect of this. Overall,
19 I'm in total support.

20
21 **CHAIRMAN ALLEN:** Thank you, Luiz. Dave.

22
23 **DR. CHAGARIS:** I think, most of what I was going to say, folks
24 have already said. I do agree completely that we can maintain, or
25 even increase, transparency without losing efficiency. It's the
26 participation, you know, that folks might miss out on, and I'm not
27 really sure what the participation level is, but I would also ask
28 those that have been regularly participating in this process,
29 outside of the SSC, how they feel about this too, because, you
30 know, if they still want to be able to contribute, we need to
31 accommodate that.

32
33 Then, as far as the SEDAR process, and making that more efficient,
34 has there been any -- It doesn't sound like there's been much
35 discussion about making the data workshop phase more efficient,
36 and I feel like, some of the data workshops that I've been to, it
37 seems very redundant, and inefficient, and I think there's probably
38 a lot of ways that that could be improved, potentially maybe like
39 a single data workshop for all the species that are going to be
40 assessed that year.

41
42 You know, why come one week and present the SEAMAP index, or the
43 bottom longline index, and come back three months later and present
44 the same thing for a different species, and it seems like that
45 analysis could all be done at once, and so has there been any
46 discussion about improving the SEDAR process efficiency on the
47 data side in that first phase? That could be either for Julie or
48 Katie. Thank you.

1
2 **DR. SIEGFRIED:** I would be happy to have Julie weigh-in for
3 whatever people have spoken to her about. We have talked about
4 having multispecies data workshops. I've been part of that, and
5 what my initial inclination is, to respond, is sometimes different
6 stakeholders sort of need their own time to provide their
7 interventions, to provide their scenarios, their situations, and
8 often there's even a difference in the way that the states
9 participate from species to species.

10
11 I haven't heard the states necessarily say, gosh, I'm tired of
12 coming to these, and, oftentimes, it's different stakeholders that
13 I've seen, let's say if it's red snapper versus if it's tilefish
14 or if it's red grouper, and so it definitely could be made more
15 efficient, as far as the data provision side of it. As far as the
16 industry and council participation, I'm not sure how they would
17 feel about it. I would encourage them to weigh-in. Thanks.

18
19 **CHAIRMAN ALLEN:** Thank you. Julie, you want to add to that, and
20 then we're going to wrap this up.

21
22 **DR. NEER:** We have, in the past, had multispecies data workshops.
23 That was years ago, before the data got quite so complex, with so
24 many different pieces. Additionally, our data providers have told
25 us that they need roughly two to three months to produce whatever
26 they need to produce for each species on the schedule, and so I
27 would love to go back to that. Species complexes perhaps might be
28 good, and like we're looking at a meeting, a SEDAR process, that
29 will have the tilefish complex, and we would look at all of them.

30
31 I do agree that some of the data is quite repetitive, especially
32 perhaps in the index group in particular, because it is the same
33 survey, and just different species, but I agree with Katie. With
34 the stakeholders in particular, those recreational data
35 information, we get different things from different people. If we
36 could go back to that, that would be amazing, but I honestly don't
37 see that that's going to happen in our future anytime soon,
38 unfortunately, and that's my perception. Thanks.

39
40 **CHAIRMAN ALLEN:** All right. Thank you, Julie. So I think, just
41 to summarize the comments from the committee, it's unanimously
42 supportive of this process, and we're happy to work with the
43 center, and the SEDAR process, to try to improve these efficiencies
44 as we go forward, and so I think we'll leave that for there, but
45 appreciate the feedback, and thank you, Katie, for giving the
46 presentation.

47
48 **DR. SIEGFRIED:** Thank you, all. I really appreciate the time.

1
2 **CHAIRMAN ALLEN:** All right. Okay. Next is gray triggerfish. Ryan
3 will lead us through this one, participants for the review phase.
4

5 **SEDAR 100: GULF GRAY TRIGGERFISH**
6

7 **MR. RINDONE:** So it will be Katie, and then we're going to also
8 talk about the assessment workshop and review workshop terms of
9 reference. The review workshop terms of reference are very cookie
10 cutter. They're just the same ones that we generally use for all
11 of our SEDAR assessments, and then we'll ask for volunteers after
12 that, and so, Katie, if you want to start.
13

14 **DR. SIEGFRIED:** Sure.
15

16 **MR. RINDONE:** The reason why we waited to this point to do this is
17 because we wanted to get the SSC's nod on the change to the way
18 that we were going to do the assessment process, because that
19 change is being implied to take effect for gray triggerfish.
20

21 **CHAIRMAN ALLEN:** Excellent.
22

23 **DR. SIEGFRIED:** Did you want me to go through the draft TORs that
24 I sent over to you? Do you want to just --
25

26 **MR. RINDONE:** They should be up, and so if you want to scroll on
27 down, and you guys have already approved the data workshop side of
28 things, and so we'll just go to the assessment workshop process.
29

30 **DR. SIEGFRIED:** Yes, and so, just because we're doing it
31 internally, it doesn't mean we won't have TORs. These look very
32 similar to if it was an assessment workshop terms of reference,
33 and the main issues here are to cover things like G-FISHING,
34 ageing, make sure that we're incorporating the new ages, but I can
35 go through piece-by-piece.
36

37 So, first, on Number 2, Bullet 1, the east-west issue with gray
38 triggerfish, and there's been a separation historically in the
39 assessments, at least east-west, and we do want to review that
40 separation, see if it's justified with the data, and what it would
41 look like without a separation, and so then all the available data,
42 landings, discards, indices, and compositions, would be both east-
43 west and Gulf-wide. During the assessment process, we would
44 explore the change there.
45

46 We would make sure to incorporate, as possible, the uncertainty,
47 the second bullet, of the estimates of uncertainty around our
48 landings and discard estimates.

1
2 We want to make sure that we incorporate the ageing validation and
3 ageing structure study data and consider their appropriateness and
4 the fits to those pieces of information. The fourth bullet is the
5 G-FISHER data-set, which was not incorporated as-is into the last
6 assessment. If you recall, the last assessment was stopped, due
7 to data issues.

8
9 Then we want to evaluate the start year and initial Fs used in the
10 assessment model. The sixth bullet is to explore the shrimp
11 bycatch magnitude, if there's any information about age structure
12 in the data, and then using either shrimp observer data or SEAMAP
13 summer and fall groundfish trawl proxies for that bycatch, and you
14 saw a presentation on that earlier.

15
16 We would want to look at fleet-specific length composition
17 information and any remote sensing data for sargassum coverage as
18 a potential index of recruitment. There was a RESTORE project
19 that produced a sargassum index that we would like to take a look
20 at, and then consider recent discard mortality studies, and
21 analytical results, and then what the model looks like when we
22 incorporate those updated rates. Any question about that first
23 set of terms? If not, we can scroll down to Number 3.

24
25 **CHAIRMAN ALLEN:** I'm not hearing any, Katie.

26
27 **DR. SIEGFRIED:** Okay. This is sort of standard, to incorporate,
28 or document, any revisions or corrections made to the input
29 datasets and provide updated input data tables, and, as usual,
30 commercial and recreational landings and discards, in numbers and
31 weight, that then provide cumulative plots of catch by fleet that's
32 discarded.

33
34 Then 4, and you've actually already seen this, when we looked at
35 the scope of work at the February meeting. This is standard
36 boilerplate language for generating the model parameters and their
37 variants, and then all those bullet points below come from -- You
38 know, Ryan has checked that our MSST is 50 percent of SSB MSY.
39 Our current proxy is F 30 percent. If we were recommending a
40 different one, we would need to provide justification for different
41 proxies.

42
43 The second main bullet is to use the geo mean of the fishing
44 mortality, and that's standard, and then the last major bullet is
45 to provide yield and spawning stock biomass streams for the OFL
46 and ABC for five years, and under a constant catch scenario, as
47 well as for equilibrium yield at FMSY, or its proxy. I don't think
48 there's issues with that, because you all have seen that language

1 before, but let me know.

2
3 Then the last one is, of course, to develop the stock assessment
4 report to address these TORs fully and then document all the input
5 data results of the stock assessment model, and so, just like with
6 an assessment workshop, we've got these TORs that are pretty
7 similar, and so I welcome your feedback.

8
9 **CHAIRMAN ALLEN:** Carrie has a comment.

10
11 **EXECUTIVE DIRECTOR SIMMONS:** A quick question, and it may be too
12 late, but, on the Great Red Snapper Count video processing, it
13 seems like there was quite a few triggers in there, and we talked
14 about amberjack as well. Is there any index that could be pulled
15 and considered for the assessment from that effort?

16
17 **DR. SIEGFRIED:** I don't know. I haven't -- I have not looked into
18 that. I don't know if I have information to answer that. Is
19 anybody on the call familiar with the snapper count video data?

20
21 **EXECUTIVE DIRECTOR SIMMONS:** Dr. Patterson, have you guys processed
22 that?

23
24 **DR. PATTERSON:** The issue is that, in the eastern Gulf, you have
25 optical data, that could potentially be examined to estimate gray
26 triggerfish population size. However, in the west, where most of
27 the sampling was done with sonar, you would have to develop the
28 calibrations to estimate the percentage of targets that are gray
29 triggerfish size, or great triggerfish gas bladder size, that
30 actually are gray triggerfish, and so I don't think it's a very
31 simple process to accomplish what's being asked.

32
33 **CHAIRMAN ALLEN:** Thank you, Will. Carrie.

34
35 **EXECUTIVE DIRECTOR SIMMONS:** That makes sense. Okay. I guess,
36 Katie, a question for you. On the assessment, on the current
37 schedule, is that, and Julie maybe, is that going to change,
38 because it looks like it's not going to be finalized until early
39 2027. Are we expecting some changes in the schedule based on this
40 new process?

41
42 **DR. SIEGFRIED:** Before Julie goes, I can answer some of that.
43 First, we have to figure out the data step and make sure that we
44 meet that timeline. We do have -- Because of losses at the center,
45 I'm not entirely sure that we're going to be able to keep that
46 schedule and get G-FISHER nailed down. I've talked with Ted
47 Switzer from Florida, and they're, you know, a few months behind,
48 and so the first part of it would -- Is potentially going to be

1 subject to delay.

2
3 The assessment portion, however, can be reduced by quite a bit,
4 and so, even if there's a delay in the data step, we don't
5 anticipate any change, or delay, in the final product being
6 available. If the data step stays in time, then we could talk
7 about adjusting the schedule in order to reflect the shorter time
8 it takes to do the assessment.

9
10 I'm not sure yet, until we know what happens with data, but we've
11 talked about it being, you know, half as long as it takes to do an
12 assessment, the assessment step, instead of with all the webinars.

13
14 **CHAIRMAN ALLEN:** Okay. Julie.

15
16 **DR. NEER:** Ditto what Katie said. We'll figure it out as we go.

17
18 **DR. SIEGFRIED:** Thanks, Julie. I did want to bring up that I added
19 more language to the data section than you've previously seen.
20 It's boilerplate that we've used for other TORs, if you do want to
21 take a look at that, to make sure that there's nothing there that
22 you disagree with, but it's just a slight expansion from what
23 you've seen before. I know Ryan had mentioned that it was the
24 same, and I just didn't want anything to slide by.

25
26 **CHAIRMAN ALLEN:** Yes, and let's look at it, real quick.

27
28 **DR. SIEGFRIED:** Do you want me to talk you through it, really
29 quick?

30
31 **CHAIRMAN ALLEN:** Sure, if you don't mind, and I think that would
32 be great.

33
34 **DR. SIEGFRIED:** Sure, and so the first one is just taking a look
35 at what we have with ages, lengths, and a hybrid approach to our
36 fleet and survey selectivity. The second is -- We've had lots of
37 discussion about this, just with respect to triggerfish, as far as
38 what we're using for recreational data, and we came on this
39 language. I did not change it. You know, whether we're taking a
40 look at the state surveys, or using MRIP, that's all the same
41 language. Then, also, describing any difference that's more than
42 10 percent we will do.

43
44 The life history data, I expanded only in the bullet sections,
45 where I did things like develop age and length keys, and
46 conditional age at length, as appropriate. If it's possible, we
47 would do that at the data step.

1 Exploring the differences in growth parameters, I added that, since
2 we're going to have the new ageing studies. I think the rest of
3 it is the same. The providing fishery-independent measures of
4 population abundance, I just expanded the G-FISHER section, to
5 make sure we take a look at the compositions through time of each
6 of the different survey components of G-FISHER. That's pretty
7 consistent with what we did for red snapper.

8
9 The provide commercial catch statistics for both east and west,
10 including both landings and discards, and then those can be
11 combined if we do a Gulf-wide model, and then I think -- Then I
12 included utilize the new estimates of shrimp fishery effort and
13 bycatch, as appropriate, based on the peer review of such data,
14 the CIE that you just saw, any review that you all have, and then
15 what we're doing for effort in SEDAR 87. There's no bycatch in
16 87, and it's just a shrimp fishery effort.

17
18 The rest of it, I think, is the same, except for the prepared data
19 workshop report, which we didn't have written there before, but
20 that's boiler plate. That's it. Thanks, Mr. Chair.

21
22 **CHAIRMAN ALLEN:** Okay. Thank you, Katie. John Mareska has a
23 comment.

24
25 **MR. MARESKA:** Hi, Katie. A quick question. In the triggerfish,
26 are we using a fecundity at age or fecundity at length, because,
27 if we're updating all the age information, we probably need to
28 update all that fecundity vector in the stock-recruitment curve.

29
30 **DR. SIEGFRIED:** Good question. Hello to you too, and let me take
31 a look, really quick. We could note that, and, if it's age or
32 length, I can make sure to update that as a statement, if you all
33 need to keep going, but yes, definitely, if that's -- We'll make
34 sure to incorporate whichever was used in the previous assessment.

35
36 **CHAIRMAN ALLEN:** Perfect. Thank you, Katie. Other comments here?
37 Okay. I'm not hearing any, or seeing any online, and so are we to
38 the point of looking for volunteers?

39
40 **MR. RINDONE:** So I'm good for asking for volunteers, and I guess,
41 with respect to this, based on what Katie had presented previously
42 about having like a focus group of sorts for the assessment
43 process, for people who, you know, could be reached out to if
44 needed, and, if there's anybody that wants to volunteer for that,
45 that would be helpful. There's not really a limit to that, because
46 it would be virtual.

47
48 Then, for the review panel -- Are you raising your hand at me?

1 That's great. For the review panel, that's an in-person workshop,
2 and that's scheduled to be held February 9 to the 11, and we would
3 need two SSC members for that, and that's 9th to 11th of 2027, and
4 so it's a long way off. I think we can probably just wait on that
5 one for now. I don't think we've got to worry about that at this
6 moment, unless Julie's hand shoots up. It did?

7
8 **CHAIRMAN ALLEN:** It did.

9
10 **DR. NEER:** No, and we can wait. I just want to remind everyone
11 that, if you participate in that subgroup, then you can't serve as
12 a reviewer. You still have to maintain that bit of an independent
13 peer review. We're going to be walking the line enough when the
14 SSC is giving comments as the process is developing, but we don't
15 want you to be in that technical group answering questions while
16 it's being developed on that section. Thanks.

17
18 **MR. RINDONE:** I mean, you could serve as a chair, but you can't be
19 an actual panelist that's weighing-in on the report.

20
21 **DR. NEER:** Correct.

22
23 **MR. RINDONE:** So, for the assessment process, if there's anybody
24 that would like to volunteer to help out with that, that would be
25 appreciated. You're on the data side already, and I think so is
26 Will and a couple other folks.

27
28 **CHAIRMAN ALLEN:** Carrie, please.

29
30 **MR. RINDONE:** Carrie is volunteering.

31
32 **EXECUTIVE DIRECTOR SIMMONS:** For the assessment process, I thought
33 we were bringing the items we needed to bring to the whole SSC.

34
35 **MR. RINDONE:** Yes, and we just have to have people that the Science
36 Center can reach out to, like known volunteers that the Science
37 Center can reach out to, if they need to, about specific things,
38 but, ultimately, there will still be the planned checkups, if you
39 will, with the SSC as a whole along the way.

40
41 **EXECUTIVE DIRECTOR SIMMONS:** I would like us to think about that
42 a little bit more, with Katie and her team, this technical group,
43 and trying to get fishermen involved in that. I mean, we've really
44 struggled with this data workshop, the way it's timed in August,
45 to get people to come and participate in the data workshop, and so
46 I think we've got some work to do there to keep folks involved in
47 this on the fishing side of it, and I think, on the technical side
48 of it, we don't want to have people on retainer and not use them,

1 and then not know what's going on, and so I think we need to think
2 about that a little bit more, would be my thought on that.

3
4 **MR. RINDONE:** Okay.

5
6 **CHAIRMAN ALLEN:** Thank you, Carrie. Jim.

7
8 **DR. NANCE:** I would volunteer for the data workshop.

9
10 **MR. RINDONE:** We already have -- The data workshop volunteers
11 situation has already been set up, but thank you.

12
13 **DR. NANCE:** Thanks, Ryan.

14
15 **DR. PATTERSON:** Ryan, any idea where the data workshop is going to
16 be held?

17
18 **MR. RINDONE:** Where? Tampa.

19
20 **DR. PATTERSON:** Thank you.

21
22 **CHAIRMAN ALLEN:** Anything else here?

23
24 **MR. RINDONE:** Not here, but we do need to go back to scamp.

25
26 **CHAIRMAN ALLEN:** Okay, and so, after we put passed our motion on
27 scamp, I realized that the council had asked us for the OFL and
28 ABC at 30 percent SPR, and I understand we didn't support that
29 value, but they did ask for that, and so I sent a short motion to
30 Jessica that we can consider.

31
32 I don' -- Based on our discussions, it's kind of implied that we
33 advocate for 40 percent, but feel free to modify this. I'm just
34 trying to move us forward. Let's see.

35
36 **MR. MONCRIEF:** Just like an order of operation here, and wouldn't
37 we have to -- Didn't we make a motion and approve a motion for
38 scamp already?

39
40 **CHAIRMAN ALLEN:** We did. We made one at 40 percent.

41
42 **MR. MONCRIEF:** So do we need to -- We're going in a different
43 direction?

44
45 **CHAIRMAN ALLEN:** No, we're not, and so let's read this. Let me
46 read this out loud and see what you all think. The council
47 requested us to provide 30. What's that, Trevor?

1 **MR. MONCRIEF:** We need to rescind that motion.

2
3 **CHAIRMAN ALLEN:** I don't think so, the way this is written. What's
4 that, Steve?

5
6 **DR. SAUL:** (Dr. Saul's comment is not audible on the recording.)
7

8 **CHAIRMAN ALLEN:** Yes, and this would -- I would propose this as an
9 additional motion. It says the SEC recognizes that scamp OFL at
10 30 percent SPR would be 0.311 million pounds gutted weight, and
11 the ABC would be 0.25 million pounds gutted weight at 75 percent
12 of 30 percent SPR, but the SSC does not recommend the F 30 percent
13 SPR values for scamp, based on life history and biological
14 attribute to the species. We're basically giving them what they
15 asked for, but we're weighing-in on it.
16

17 **DR. BARBIERI:** Second.
18

19 **CHAIRMAN ALLEN:** Luiz seconded. I'm happy to have any discussion.
20 I just want to be sure that we give them what they asked us to do,
21 and so any discussion here, and thank you, Skyler, for running
22 those -- For getting those numbers for us. John, please.
23

24 **MR. MARESKA:** You don't have the time period. Is this a three
25 year, or is this a five year?
26

27 **CHAIRMAN ALLEN:** Thank you. I intended it to be just like the
28 other one, but I was kind of going off the fly, and so could we go
29 to the -- Can we pull up the previous motion? I think we can do
30 that, just to add the years, for the period 2027 to 2031, after
31 "SPR", after the second one there. Ralph, please.
32

33 **MR. TOWNSEND:** I thought, this morning, we ended up with the motion
34 that was 2025 to 2027, and I thought that was the whole nature of
35 -- I'm confused at the end of the day. Excuse me.
36

37 **CHAIRMAN ALLEN:** No problem. Understood. It's been a long day.
38 Any other comments here? Okay. Jim, please.
39

40 **DR. NANCE:** Thank you, Chair. Yes, and I support this motion. I
41 think, with the "but" in there, and it's just here's the values,
42 but we're not -- We're not proposing it, and we want the 40 percent
43 SPR values, but I think this will do it.
44

45 **CHAIRMAN ALLEN:** Okay. Thank you, Jim. Any other comments? Is
46 there any opposition to this motion? Hearing none, the motion
47 carries.
48

1 All right, and so we have accomplished everything that we
2 absolutely had to do today. I appreciate the engagement from
3 everyone, but I think, at this point, I would entertain a motion
4 to adjourn.

5
6 **MR. RINDONE:** We still have public comment.

7
8 **CHAIRMAN ALLEN:** Yes, and we've got public comment.

9
10 **MR. RINDONE:** We have to do public comment. The other two items
11 we can push to the July meeting.

12
13 **CHAIRMAN ALLEN:** Thank you, Ryan. Public comment, and we have
14 time for public comment, and so anyone here or online? Any hands
15 raised online, Jessica? Is it fair to assume no public comment?
16 Okay. All right, and so we are we are adjourned. Thanks, everyone,
17 for the hard work today.

18
19 **OTHER BUSINESS**

20
21 **MR. RINDONE:** Well, I had one more point for other business.

22
23 **CHAIRMAN ALLEN:** Please do.

24
25 **MR. RINDONE:** It's about the July SSC meeting.

26
27 **CHAIRMAN ALLEN:** Thank you.

28
29 **MR. RINDONE:** So, as it stands right now, we do not have an awful
30 lot on that particular schedule, and the council is still awaiting
31 funding for the remainder of the fiscal year, and so holding that
32 meeting is contention on, you know, that funding coming in, and
33 so, until we know more about that, you know, keep that in pencil.
34 Don't write that one in pen yet.

35
36 **DR. PATTERSON:** What are the dates for that, Ryan?

37
38 **DR. NANCE:** Yes, and what are the dates?

39
40 **MR. RINDONE:** For the July meeting, had the 22nd to the 24th blocked
41 off, and, again, right now, it would -- If it were to be an in-
42 person meeting, it would only be one day, based on the things that
43 we currently have scheduled, but, of course, that can change in
44 that time, and so --

45
46 **CHAIRMAN ALLEN:** So hold your schedule for now, but --

47
48 **MR. RINDONE:** Just kind of circle the 22nd to the 24th as possible

1 days, but, again, if we don't receive funding in a timely fashion
2 to be able to do the Federal Register notice for it, and hotel
3 situations and all that, it's going to make that a little bit more
4 -- Require that to be a little bit more flexible.
5

6 **CHAIRMAN ALLEN:** Okay. Harry, I see your hand up. Did you have
7 a comment?
8

9 **MR. BLANCHET:** I did. While we're piling onto future agendas, we
10 had some discussion earlier today about IFQ economics, which is a
11 kind of -- I guess it's a component of commercial landing benefits,
12 as it stands right now.
13

14 I think that we should have some discussion, because what it seems
15 like is that it is a throwing a hook in and saying that, basically,
16 responsive management has negative consequences, because people
17 don't get their best value for their shares, or whatever, and so
18 I think that, as a consideration of the economics of the fisheries,
19 we probably should address that and try to come up with some sort
20 of process to try to maximize those benefits. It's something for
21 the socioeconomic guys to chew on.
22

23 **CHAIRMAN ALLEN:** I certainly don't disagree, Harry. I'm trying to
24 think of the mechanism. It may be more of a -- It may be an agenda
25 item of more of a detailed discussion about that, with this example
26 that came up with the red grouper this year, and how we could
27 better do that in the future.
28

29 **MR. BLANCHET:** Yes.
30

31 **CHAIRMAN ALLEN:** I see nods from colleagues. We will get that in
32 the notes and see if we can get added to a future agenda.
33

34 **MR. BLANCHET:** It just seems like this is something we're going to
35 trip over again.
36

37 **CHAIRMAN ALLEN:** Agreed. Agreed. Okay. Thank you, Harry. All
38 right. Thanks everyone. We're adjourned.
39

40 (Whereupon, the meeting adjourned on May 8, 2025.)
41

42 - - -
43