

1 GULF OF MEXICO FISHERY MANAGEMENT COUNCIL

2
3 HABITAT PROTECTION AND RESTORATION COMMITTEE

4
5 Opal Key Resort & Marina and Virtual Key West, Florida

6
7 June 22, 2021

8
9 **VOTING MEMBERS**

10 Patrick Banks.....Louisiana
11 Leann Bosarge.....Mississippi
12 Dale Diaz.....Mississippi
13 Phil Dyskow.....Florida
14 Tom Frazer.....Florida
15 Bob Shipp.....Alabama
16 Joe Spraggins.....Mississippi
17 Greg Stunz.....Texas
18 Ed Swindell.....Louisiana

19
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22 Susan Boggs.....Alabama
23 Dave Donaldson.....GSMFC
24 Jonathan Dugas.....Louisiana
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26 Robin Riechers.....Texas
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1 The Habitat Protection and Restoration Committee of the Gulf of
2 Mexico Fishery Management Council convened on Tuesday afternoon,
3 June 22, 2021, and was called to order by Chairman Patrick
4 Banks.

5
6 **ADOPTION OF AGENDA**
7 **APPROVAL OF MINUTES**
8 **ACTION GUIDE AND NEXT STEPS**
9

10 **CHAIRMAN PATRICK BANKS:** I am going to call the Habitat
11 Committee order. I will remind you guys that the members
12 include myself, General Spraggins as the Vice Chair, Ms.
13 Bosarge, Mr. Diaz, Mr. Dyskow, Glenn Constant, Dr. Shipp, Dr.
14 Stunz, and Mr. Swindell.

15
16 The first item is Adoption of the Agenda, and it's on the
17 screen. Does anybody have any changes, requested changes, to
18 the agenda? Does anybody have any opposition to the agenda?
19

20 **DR. BOB SHIPP:** I move that we adopt the agenda.
21

22 **CHAIRMAN BANKS:** Thank you, Dr. Shipp. Can I get a second?
23

24 **MR. ED SWINDELL:** Second.
25

26 **CHAIRMAN BANKS:** Second by Mr. Swindell. Any opposition?
27 Seeing none, the agenda is hereby adopted. The next item is the
28 Approval of the April 2021 Minutes. If you recall, we had a
29 meeting at this last council meeting, and I have reviewed the
30 minutes, and I didn't see any need for any changes, but does
31 anybody have any changes to those minutes? Seeing none, can I
32 get a motion to approve those minutes, please?
33

34 **MR. PHIL DYSKOW:** So moved.
35

36 **CHAIRMAN BANKS:** So moved by Mr. Dyskow, and it's seconded by
37 Mr. Swindell. Any opposition to that motion? Seeing none, the
38 minutes are adopted. The next item on our agenda is the Action
39 Guide and Dr. Steps. Dr. Hollensead.
40

41 **DR. LISA HOLLENSEAD:** Thank you, Mr. Chair. First on the docket
42 today, I will be giving a presentation outlining the Generic
43 Essential Fish Habitat, or EFH, Amendment. There is a number of
44 things that I'm going to touch on, mostly, that we'll actually
45 have six objectives, and so it's going to be kind of a hard
46 presentation, but I'm going to introduce the definition and
47 concept of EFH, and I'll give a brief overview of EFH management

1 history in the Gulf, and I will explain how EFH is currently
2 identified and described by the council, and I will introduce
3 two new modeling approaches that the committee could use to
4 update the current descriptions of EFH for data-rich species.

5
6 I will review the action alternatives in the draft document, and
7 I will touch on the proposed timeline and next steps for the
8 amendment. Mr. Chair, would you like to me to continue through
9 the action guide, or do you want me to stop there and jump into
10 the presentation?

11
12 **CHAIRMAN BANKS:** I wouldn't mind you going ahead and continuing
13 the action guide.

14
15 **DR. HOLLENSEAD:** Okay. Sure thing. If we scroll down, once
16 that's completed, we're going to have a presentation from NOAA
17 leadership regarding President Biden's Executive Order 14008:
18 Tackling the Climate Crisis at Home and Abroad. Specifically,
19 NOAA leadership is going to be talking about a preliminary
20 report, Thirty-by-Thirty, and so the goal is to conserve at
21 least 30 percent of lands and water by 2030. During that
22 presentation, the committee should feel free to ask questions of
23 NOAA leadership and discuss the Executive Order.

24
25 Then the final item on our agenda is going to be a presentation,
26 discussion, and feedback of the draft letter, again regarding
27 the Executive Order, and the council was able to solicit comment
28 from the public using the Something's Fishy tool, and council
29 staff has put together a draft letter looking at some points
30 that were brought up at our April meeting discussing this topic,
31 as well as looking at some other letters that other agencies and
32 regional councils have drafted, to help sort of springboard the
33 discussion, so the committee can begin building that letter for
34 submission. Then any other business that would come before the
35 committee would happen after that. Thank you, Mr. Chair.

36
37 **CHAIRMAN BANKS:** Thank you, Dr. Hollensead. Any questions,
38 before we jump into the presentation? Seeing none, please go
39 ahead.

40
41 **DRAFT OPTIONS: GENERIC ESSENTIAL FISH HABITAT AMENDMENT**

42
43 **DR. HOLLENSEAD:** Great. Again, I have sort of a number of
44 objectives to try to get through for this presentation, and so I
45 will just go ahead and jump right in. A little bit of
46 background, and so what is EFH? During the reauthorization of
47 Magnuson and the Sustainable Fisheries Act in 1996, a

1 definition, and so this is a very specific definition, for EFH
2 was created. It is those waters and substrate necessary to fish
3 for spawning, breeding, feeding, or growth to maturity.

4
5 Now, the council does have a Generic EFH Amendment already on
6 the books, and this was completed in 2004. Also, part of the
7 stipulations for the Sustainable Fisheries Act is this mandatory
8 five-year review of EFH policy, and so the council has completed
9 that twice, once in 2010 and also in 2016.

10
11 Whenever these reviews are completed by the council, the Habitat
12 Division of the SERO Office writes back a recommendation letter
13 and says -- Basically, it's sort of a ten-point list and says
14 here are some things that you either must or should consider for
15 your EFH policy, and so those two letters from 2010 and 2016 are
16 available in the background materials.

17
18 Descriptions of EFH is a small part of that, and so, today, I
19 will mostly be focusing on EFH, because that's sort of an
20 actionable item to sort of get this amendment kicked off, but
21 please keep in mind there will be numerous considerations that
22 will be involved in the amendment as well, and we're just sort
23 of tip of the iceberg here, touching on these.

24
25 A couple of highlights from the latest five-year review that was
26 completed in 2016 by the Habitat Division of the SERO Office was
27 to update the habitat protection policy. The current policy is
28 also available as background in the materials of the meeting
29 today. Then identify and prioritize research needs as well as
30 amend the council's FMPs with updated habitat information as
31 soon as possible, and so that's sort of what is driving the
32 committee convening here today and discussing the progress on
33 this amendment, is to update our descriptions and
34 identifications of EFH in an amendment, a generic amendment.

35
36 With that, the committee has been tasked with a few things, and
37 so the council must have definitions of EFH for all managed
38 species and, within those species, their various life stages,
39 and so we're required to complete these five-year reviews, and
40 the last one was done in 2016, and so we're now in 2021, and so
41 we're now up again for another five-year review.

42
43 However, after speaking with members of the Habitat Office at
44 SERO, they are amenable to, instead of having a five-year review
45 and an amendment together, to sort of pull these together and
46 combine the two efforts into one task, which would be this
47 broader amendment. Keeping that in mind though, ideally, we

1 would try to stay as close as we can to that five-year review
2 timeline, which means the goal of this larger amendment would be
3 completion by 2022, and that's just something to keep in mind.

4
5 There is a couple of different ways that we could go about
6 updating our descriptions and identifications of EFH, and so,
7 throughout the rest of the presentation, I'm going to use these
8 images to sort of help hopefully organize which method I'm
9 talking about, and so, on the top left, you'll see just this
10 nice picture of some habitat on its own, and that's going to
11 represent our current method, which is very heavy on looking at
12 habitat associations, and I will go into that a little bit
13 better, but that's what that is going to indicate.

14
15 One of the first other approaches that we could use that would
16 be a little novel for the Gulf is just looking at species
17 presence, and so that's going to be indicated by just the
18 picture of the gag grouper here, and then I'm going to go into a
19 third approach that uses some more sophisticated modeling
20 techniques, which will actually take species presence and link
21 them with some habitat attribute information and make a little
22 bit more complete model, and so that's going to be indicated by
23 the picture below with the gag grouper in its habitat there.

24
25 Another thing, overarching thing, that I want the committee to
26 consider throughout the presentation is that, okay, as we sort
27 of refine our methodologies, perhaps, for describing EFH, things
28 get a little more complicated, and so that takes up a little bit
29 more time, talking about our timeline, and so there's some other
30 checks and balances that we would have to do, and so just things
31 to have to juggle, unfortunately, and there's a lot of
32 considerations that could do for our approaches for describing
33 EFH, but, at the same time, being cognizant of this timeline,
34 and so that's something just to keep in mind.

35
36 How we currently describe EFH in the Gulf, we look at habitat
37 use, as reported in the scientific literature, and so we would
38 do a big literature review and construct life history tables for
39 each species and life stage, and so, for example, it's fairly
40 well documented that juvenile red drum associate with seagrass
41 habitats, and so you get some body of evidence for that, and
42 then you would take maps of the benthic habitat characteristics.

43
44 Right now, they are mapped as the NOAA Gulf of Mexico Data
45 Atlas, and they have twelve categories, but it's very heavy
46 benthic characteristics, and so what's on the bottom, and then
47 to spatially divide this out in some sort of digestible pieces.

1 The Gulf is divided into five ecoregions and three habitat
2 zones.

3
4 These ecoregions sort of follow these biological bounds, and so
5 we've got a South Florida, a North Florida, an East Louisiana
6 and Mississippi and Alabama, East Texas and West Louisiana, and
7 West Texas. They generally follow the NOAA Statistical Grids as
8 well, to sort of help mark those.

9
10 Here they are visually laid out, and so here is our five
11 ecoregions, and, within those ecoregions, we have these twelve
12 habitat characteristics, and so anything from submerged aquatic
13 vegetation, which is water column associated, but most of these
14 are benthic, and so bottom habitat attributes, and a few water-
15 column-associated things, but that is primarily what they are.

16
17 Then there's also some consideration for depth, and so looking
18 at some depth boundaries and assigning sort of offshore,
19 nearshore, and estuarine boundaries helps give a little bit of
20 consideration for depth for this different habitat
21 characteristics within these ecoregions, and so knowing sort of
22 something about the life history of the critter we're interested
23 in, and something known about the habitat, we can then sort of
24 pull these resources together, and we'll get something that
25 looks like this.

26
27 This is the EFH for gag grouper in all life stages, and so
28 juveniles, eggs, all the way up to spawning adults, and so we
29 get these maps here constructed based on that information, and
30 it's fairly straightforward.

31
32 After each method I go through, I'm going to give a little bit
33 of pros and cons for each of the methods, as well as an
34 associated policy, and so, for what we're currently doing now,
35 which is very habitat focused, some of the pros are it's already
36 established, and this is what we did in 2004, and, for the
37 subsequent five-year reviews, this is what we've done, and,
38 actually, this is what I was working on in the summer of 2020,
39 and so we have actually updated these life history tables and
40 things like that up to 2020, and so much of this work has
41 already been completed.

42
43 Some of the cons though is that data atlas, and so the
44 information that we're using for that benthic, to inform our
45 benthic maps, is outdated, and it's from 1985, and I would think
46 some things have changed since then, and so that would be
47 something that we would have to look up again, and there are

1 some more refined methods available, and so this was first
2 implemented in 2004, but, obviously, with the computer
3 technology and things like that, we've got some more tools in
4 the toolbox that we could use to refine EFH.

5
6 For the policy, some of the pros, and so the South Atlantic,
7 Caribbean, and Western Pacific Fishery Management Councils use a
8 similar approach, and so we're not the only ones doing this, and
9 some of the other fishery management councils also implement
10 something similar, and it's very quick to update, and it's going
11 to work for most species, and so one of the big caveats, I guess
12 for this whole presentation, is I'm going to give some
13 descriptions of some different approaches, but we don't have
14 enough data, for most of our species, to do those, and so what
15 we have now is going to mostly work, for most of our species,
16 and we've got no choices of what we're going to have to probably
17 have to use, if you would like to update something, and we just
18 don't have the information.

19
20 Some of the cons is it's very broad, and so you can get this
21 really overreaching descriptions of EFH, such that, for some
22 species and life histories, the entire EEZ is considered EFH,
23 and so, if we can refine that, that would be nice.

24
25 There is a little bit of indirect linkage for species and
26 habitat, and so it's a little more qualitative, and we're
27 looking at some of the literature that's been published, and
28 it's saying, okay, this is the habitat that's here, but we don't
29 necessarily have anything to link us to -- As many people that
30 may go fishing know, this mangrove stand had all the fish, and,
31 if you go over here, this mangrove stand does not, and what's
32 the difference? What's going on? This would instead
33 incorporate all that as EFH.

34
35 What do some draft options look like, and so this is coming from
36 the draft that we currently have, and so Alternative 1 would say
37 let's go ahead and retain the descriptions and identifications
38 of EFH that were originally reported in General Amendment 3, and
39 so that was the amendment that was published in 2004.

40
41 Alternative 2 says let's continue to use that same methodology
42 of the life history tables and a lot of benthic habitat
43 association, but we're going to update that information. We're
44 going to update these life history tables and some of these
45 benthic maps with more contemporary data sources, and so that's
46 what Alternative 1 and 2 would do, and it would use more of just
47 this habitat-heavy-based methodology. Any questions, before I

1 move on?
2

3 **CHAIRMAN BANKS:** Thank you, Dr. Hollensead. The question I have
4 is, for Alternative 2, you had mentioned earlier that you have
5 done most of that work, correct?
6

7 **DR. HOLLENSEAD:** Yes, and I've done most of the work for
8 collecting the life history tables. Now, in terms of what we
9 might use to replace the NOAA Data Atlas, the IPT hasn't kind of
10 gone into those details yet, but that's what we would
11 investigate next and begin constructing it.
12

13 **CHAIRMAN BANKS:** Thank you. Any other questions? Ms. Bosarge.
14

15 **MS. LEANN BOSARGE:** Sorry if I missed this, but did you give us
16 an idea of what the more contemporary source would be?
17

18 **DR. HOLLENSEAD:** For the benthic habitat information, we, as an
19 IPT, have not sat down and decided what that might be just yet.
20 For the life history tables, it would be more recently-published
21 literature, and so the Generic Amendment 3 only has information
22 from 2004, published in 2004, and this would now have
23 information published in 2020.
24

25 **MS. BOSARGE:** Then the benthic habitat was, I guess, my biggest
26 concern, and I would want to see some more information as to
27 what you might choose to use there.
28

29 **DR. HOLLENSEAD:** Yes, ma'am. That would be something that we
30 would discuss at the IPT level and then we would bring back to
31 you. The purpose, mostly, of this presentation is to give you
32 guys an idea of where we're going and what is behind the
33 alternatives, so that, when we come back again at a future
34 meeting, hopefully some of that would start to be familiar.
35 Some of these terms I am about to go into for some of these
36 models, you might not be quite as familiar with, and so I just
37 wanted to put that on your radar.
38

39 **CHAIRMAN BANKS:** Any other questions? Go ahead.
40

41 **DR. HOLLENSEAD:** Okay. Now we're going to get into some other
42 methods that we would potentially use to describe and identify
43 EFH, and, now, this is going to come from a fishery-independent
44 dataset, or it's actually not a dataset, but it's a collection
45 of fishery-independent surveys throughout the Gulf.
46

47 It was put together here by Gruss et al. in 2018, and so this

1 comes from a research paper, and so they collected all the data
2 from all these surveys, and they looked at presence and habitat
3 attributes from these various surveys and put together some
4 models, and so we have some of this data.

5
6 Unfortunately though, the handful of species that you see in
7 front of you on this table broken up by FMPs, Reef Fish, Shrimp,
8 and CMP, this is all we have, and so the methods that I am going
9 to go through for potentially describing EFH are only going to
10 be available for these species here, and so all of the other
11 species will probably have to have the same methodology that
12 we're using, but with updated data.

13
14 The first approach I'm going to discuss is a presence only, and
15 so this approach says that I have some indication of where the
16 fish are, and I don't know a lot about the habitat linkage, or
17 the functionality of the habitat, and so it says there may be
18 something there that I haven't measured yet, or thought to
19 measure, or something these fish are cueing in on, but I know
20 that they're there.

21
22 Conceptually, what you can do is let's say this is your
23 hypothetical population of gag grouper here, and you can draw a
24 convex polygon around this and say, okay, this area represents
25 100 percent of the species presence, for this thought exercise
26 here, or you can get a little more refined, and so you can say I
27 had this really large polygon here that encompassed 100 percent
28 of the occurrence, but it was a really big space, and it was
29 sort of like the idea of let's just assign EFH to the EEZ, and
30 so let's try to get that down a little bit.

31
32 You can create these other polygons, or what we call kernel
33 density estimators, and say, okay, well, actually, I'm really
34 interested in the core area, and there's a lot of research in
35 the literature to say that the core area represents about 50
36 percent occurrence, and so that's where you might start. That's
37 represented by this solid line here, and so I'm only interested
38 in where this 50 percent of occurrence is, this sort of core
39 habitat use area, for my designation of EFH, or you could be a
40 little more conservative and start to move out from that.

41
42 You could say, well, I would actually like to have some
43 concentration information for an area that encompasses 75
44 percent of the occurrence, and so on and so on, moving out to 95
45 percent, for example, and so you can get a little more
46 conservative as you move out.

47

1 With this method, you get this idea of, okay, this is what we're
2 going to do, and we're going to do put these convex polygons
3 around these areas, but you also have to give an idea of sort of
4 the magnitude with which you want to assign that.

5
6 When you do that, you get something that looks a little bit like
7 this, and so this is for adult gag grouper, and so this is where
8 this methodology has been applied here. The light shaded red
9 areas is that 95 percent occurrence, and so you can see here
10 that you get this sort of like pink area, and you get these
11 areas of pink here off of like Texas and Louisiana, but, if
12 you're really interested in just sort of the focus core, where
13 do we mostly see the fish, you'll see it's mostly off the West
14 Florida Shelf, and those are the dark-red areas there that are
15 indicated.

16
17 One of the things that I guess that I just wanted to note to the
18 committee is sort of, whatever method you use, your math is
19 going to be a little bit different, and so this map here, just
20 looking at presence, is very focused, like I said, here off of
21 Florida.

22
23 Just as your memory, to go back with what is currently on the
24 books now, you will see that it's a lot broader in definition.
25 If we're just looking at your life species tables and our
26 habitat attributes and where they are on the NOAA Atlas or that
27 sort of thing, you get some much broader areas that we would
28 consider EFH, whereas that presence-only model would give you
29 something a little bit more refined, and so they are going to
30 look quite different.

31
32 Some pros and cons here, some pros for the method is it's fairly
33 simple, and it's a little bit more complicated than what I just
34 did for drawing on the PowerPoint, but it's relatively simple.
35 The data comes from independent fishery sources, and so we've
36 got some good data there.

37
38 Some cons, again, is it's not going to be available for all
39 species in all life stages, and so you're starting to tease out
40 some of the species that we just have a lot of data information
41 for, but you're not going to be able to cover all of the species
42 that are managed.

43
44 In terms of pros for the policy, the Northeast, Mid-Atlantic,
45 and Atlantic HMS do something very similar. As you can imagine,
46 for species managed with Atlantic HMS, these are mostly water-
47 column-associated pelagic species that move quite a bit, and so

1 having some presence-only information and not a lot of benthic
2 information, and they can draw these polygons around and get an
3 idea of essential fish habitat for these species. By the way,
4 they have done this, and they use a 95 percent, and so they are
5 fairly conservative.

6
7 Again, you sort of get this better refined EFH, and this method
8 could also be used to inform areas, habitat areas, of particular
9 concern, or HAPCs, down at the bottom. If the committee decides
10 to go that route, this is perhaps -- And include something about
11 HAPCs about finfish species in the document, this is a method,
12 or an approach, that could be used as well.

13
14 In terms of the cons, and so now we're getting a little bit more
15 complicated, in terms of what our actions might look like, and
16 we're going to have some options, and I will kind of go through
17 those. There is a species habitat linkage tradeoff, and so it
18 says I know the critter is here, and I know it's a lot of adults
19 of the critter, and so it might be spawning, but I don't know
20 for sure, and so it doesn't take into a lot of the habitat, and
21 it says there's a lot of unknowns that I don't know about the
22 habitat, but I do know that the fish is here, and so that's one
23 of the tradeoffs of it.

24
25 This methodology would have to be reviewed by the SSC, and so
26 this is not a con in itself, necessarily, but other than the
27 timeline, right, and so it's going to take a little bit longer
28 to vet some of these things and make sure that the methods are
29 sort of up to snuff and passed by the SSC, and so that's just
30 going to take a little bit more time for the document.

31
32 This would be an Alternative 3 for the draft options, and so it
33 says it's going to use this kernel density estimates, and this
34 is this presence-only approach. Again, it's using the various
35 fishery-independent sources from the Gruss et al. paper to
36 describe and identify EFH, and then this alternative could only
37 be used for those few species that I mentioned on Slide 14. Any
38 other questions before I move on to the last method?

39
40 **CHAIRMAN BANKS:** Any questions from the committee, or really
41 anybody? Ms. Bosarge.

42
43 **MS. BOSARGE:** Will you back up one slide for me? I had a
44 question. When you say -- You tell us what the method is, and
45 then you say the policy, and so, if you use the presence of that
46 gag grouper, with your red areas on the map, versus your pink
47 areas on the map, but then you say used to inform HAPC, and so I

1 guess I am trying to figure out how that comes out in practice.

2
3 So we know where a lot of gag grouper are, based on using that
4 method, and so then we then draw circles around that area, or
5 I'm confused. How do those two relate?

6
7 **DR. HOLLENSEAD:** What you could do, for looking at a habitat
8 area of particular concern, you could look at it a couple of
9 different ways. We've got some information, for example, of
10 various species, but let's say we have all of the juvenile life
11 stages for various species, and you could put your lines, or
12 your red areas, around that area and say this is very important
13 for juveniles, and it might say something about the potential
14 function as a nursery habitat, or something like that, and so
15 it's an area of very particular concern.

16
17 You could also look at just the aggregated, and so of species,
18 and we see areas here where a lot of species congregate, and so
19 you could break it out in a number of different ways, either by
20 a life stage or by how many species overlap in a certain area,
21 if that makes sense.

22
23 **CHAIRMAN BANKS:** Any other questions? Okay. Seeing none, go
24 ahead, Dr. Hollensead.

25
26 **DR. HOLLENSEAD:** This would be those options that we talked
27 about, and so this is how they appear in the document, and so,
28 when you look at Option 3a, like 50 percent KDE, what does that
29 mean, and this is how we visualized -- This slide tries to give
30 some visualization to what those options are in the draft
31 document.

32
33 50 percent would be that smaller solid black line, and that
34 would tell you something about perhaps the core area. Then, as
35 you got a little bit larger in that area, you could be a little
36 bit more conservative, and so Alternative 3 says I'm selecting
37 this methodology, and I would like to use this presence-only
38 one, and then the options within that would say, to this extent,
39 this is what I feel would represent a good description of EFH.

40
41 **CHAIRMAN BANKS:** I have a question on this. Are the 50 percent,
42 75 percent, and 95 percent, are those options that are regularly
43 used when this method is used?

44
45 **DR. HOLLENSEAD:** Yes, and so 50 percent, generally, in the
46 literature, is considered the core area, and the 95 would be the
47 larger extent, and, like I said, there is -- HMS used the 95

1 percent, and so it has been used before, and then 75 would be
2 included there, yes, but 50 percent -- Usually, for a habitat
3 study, most of the time, they're going to report a 50 percent
4 and a 95 percent, in general, would be used in this method.

5
6 This is the last model type, and this sort of represents the
7 Cadillac of models here, in that we can get some good
8 information, in that we know something about the location of the
9 fish and the habitat type, and we can put that together in the
10 model, using what's called the boosted regression tree model.

11
12 Conceptually, what this does is this model can handle some
13 pretty complex interactions, and so let's say you know your
14 critter is here, and you caught it, and you measured a whole
15 suite of environmental attributes.

16
17 You run it through the model, and the model says, okay, water
18 temperature is very important to explain the spatial variability
19 and where I am finding this fish, the water temperature, and so
20 the model can then you a water temperature between this range
21 seems to be sort of when the fish is found, and, within that,
22 the next most important, and so it's like this hierarchical
23 categorization of these habitat attributes.

24
25 Then next is dissolved oxygen, and so, within this range of
26 dissolved oxygen, we seem to have lots of explanatory power in
27 why we're finding the fish where we are, and then it might be
28 salinity and so on, and so we can get these little construction
29 of trees here, and so that's what is indicated by the figure
30 there, that Figure 1 from a paper that sort of set the tone for
31 all of this back in 2008.

32
33 You get these associations here, and these linkages, and then
34 that allows you to construct some probability maps, and so you
35 can say, you know, based on the conditions here of these things,
36 and I know these environmental attributes are important, I can
37 start to construct where might I find fish with a higher
38 probability and certain lower probabilities, depending on those
39 conditions.

40
41 Here is a visualization of what those results look like, and,
42 again, this is for adult gag grouper, and so the purple areas
43 are going to be areas of low probability, based on this
44 attributes, and those warmer colors, the greens and the yellows,
45 are where you're going to start to see a higher probability of
46 capturing adult gag grouper, and, again, it shows some
47 indication that you are likely to have a higher probability of

1 occurrence on the West Florida Shelf, which is similar to what
2 we saw in the presence-only.

3
4 Then it's hard to read, but the legend there on the upper right
5 gives those probabilities, and so your 0.1 would be 10 percent
6 and that sort of thing, moving along, and so, as you get higher
7 probability, those warmer colors begin, and so that's what that
8 indicates.

9
10 In terms of the method pros and cons here, the pros are these
11 are very refined. Again, we're using that fishery-independent
12 data. The cons are that it's not available for all species and
13 life stages, similar to the other model, and this one is very
14 complex, and so we may even have some data on this one, but we
15 may run some models, and they may just not work, unfortunately,
16 and so it's probably going to be a very select number of species
17 that we would be able to use this for.

18
19 In terms of pros for the policy, again, there are some other
20 fishery management councils that use some very similar
21 approaches. The North Pacific and the Pacific are able to do
22 some of these types of models, and what's really great is we can
23 now have some idea of habitat functionality here. We can get a
24 little bit more to that question of the direct links between why
25 the species is there and why they're selecting these habitats
26 and those sort of things, and, again, it could be used to inform
27 some sort of HAPCs in the future.

28
29 Again, it can only be used for a few species, and it's going to
30 make a little bit more of a complex document, in terms of how
31 it's written up, and sort of wrapping your brain around it a
32 little bit, and then this would also need to be reviewed by the
33 SSC, and so, again, that's not a con, necessarily, for anything
34 other than the timeline, and so it would take a little bit
35 longer, and the SSC would definitely want to look at this, and
36 so we may have to go back -- As much as we did this summer, and
37 we went back, and we looked at the data, and we tried to look at
38 any anomalies and look through, and so just enough to see if we
39 could actually do this.

40
41 If we're going to put it in the document, John and I are going
42 to have to go back and really sort of start reviewing some of
43 these things, and so it might take a little bit longer.

44
45 This would be Alternative 4 in the draft document, and that just
46 says that's where the boosted regression tree -- That's where
47 that comes from, that modeling approach outlined from Gruss et

1 al. 2018, and to describe and identify EFH, and this
2 alternative, again, can only be used to describe those species
3 in that Slide 14.

4
5 Similar to what we did with that presence-only model, and so you
6 can say, okay, I want to select this model as my approach, but
7 then you have to assign what you want for your designation of
8 EFH, sort of the magnitude of the model. Here, 30 percent of
9 the boosted regression tree is going to be sort of that darker-
10 purple area, and so that lighter purple might fall out, but
11 you're going to have the larger extent, and then various options
12 up to 95 percent or 70 percent, 50, 95, whatever you would want
13 those warmer colors to be indicating, and that's what those
14 options would indicate.

15
16 In terms of the timeline for potentially working through this
17 document, we're in June, and so we've got the presentation of
18 draft options and sort of introduce some of these concepts. In
19 July, or more likely early August, the SSC could take a look at
20 some of these methods and provide comment.

21
22 August and October would be revised drafts, and then, getting
23 into 2022, perhaps having a public hearing draft by January, and
24 then April and May and through the summer, do some public
25 hearings. We would need to go to the SSC for a final review in
26 August, and then, ideally, we would take final action at the end
27 of 2022, to try to keep things on the timeline for that five-
28 year review, and this would also be encompassed in that larger
29 amendment.

30
31 Just some things to consider is not all managed species have the
32 same data, and these methodologies would need to be presented to
33 the SSC and looked over, and so that's going to take some time,
34 and, again, just that timeline of completion by 2022, and then,
35 again, like I said, this is just touching on EFH, and there's a
36 lot of other things that could be considered that would also
37 need to go into the amendment, but this is just an actionable
38 item that we have. I would be happy to take any questions that
39 anybody has on the presentation.

40
41 **CHAIRMAN BANKS:** Thank you, Dr. Hollensead. Any questions on
42 the presentation? Ms. Bosarge.

43
44 **MS. BOSARGE:** Of course, right? Just one more question. On
45 that Slide Number 8, for those -- Where you talk about the
46 ecoregions, I'm sure that came from some literature somewhere,
47 but it just seems strange, to me, that the habitat -- I think

1 you said this was based off of benthic habitat, but that the
2 habitat off of Mississippi and a portion of Louisiana is
3 considered to be similar to the habitat east of Mobile Bay, and
4 so that Panhandle of Florida and the very easternmost part of
5 Alabama.

6
7 I mean, I don't know, and I guess, in my mind, that line goes
8 more pretty much straight up Mobile Bay right there, and
9 anything west of Mobile Bay through Louisiana, that's kind of a
10 similar type of habitat, and it's a lot muddier, brown water,
11 and not a lot of marsh areas. Then, once you get east of Mobile
12 Bay, that's a lot more similar to a Florida-type habitat, and
13 it's much more conducive to reef fish and structure and things
14 like that, but I don't know. I just thought it was strange, and
15 I thought it was something I would point out.

16
17 **CHAIRMAN BANKS:** Dr. Froeschke.

18
19 **DR. JOHN FROESCHKE:** Well, just to kind of follow that thread,
20 Leann, these are ecoregions, and I can't remember exactly, but I
21 think they are based on the biogeography, and so if you could
22 think about these areas perhaps more similar in terms of
23 prevailing sea surface temperatures and currents and things like
24 that. Then, within each of these, there are specific habitat
25 types, for example submerged aquatic vegetation, mangroves,
26 reefs, all of those habitats that are each in there.

27
28 The reason that it's done that way is that it allows for EFH
29 identification and description such that a seagrass habitat in
30 Louisiana may not function the same way as a seagrass bed in
31 south Florida, and so different species use them because of some
32 of these other factors, and so it allows us to partition the
33 functions of the particular habitat types in different
34 ecoregions of the Gulf.

35
36 **CHAIRMAN BANKS:** Thank you, Dr. Froeschke. Any other questions
37 on this topic? Leann, I will say that I have trouble calling
38 these ecoregions as well, because it doesn't appear to me that
39 "eco" should be part of that term, because I agree with you that
40 they don't seem to -- I understand what Dr. Froeschke was
41 saying, but it doesn't seem like, to me, that the ecology of
42 that region that you mentioned is the same, but, anyway, maybe
43 it's only what's in a name. Mr. Strelcheck.

44
45 **MR. ANDY STRELCHECK:** Thanks, Patrick, and great presentation.
46 I guess I am curious, in terms of the alternatives, if there is
47 truly a need to investigate kind of all of these options or if

1 that's potentially kind of overkill with regard to looking at
2 kind of multiple modeling approaches, and so I'm curious, from a
3 staff perspective of workload, time, and effort spent on that,
4 the benefits of doing that.

5
6 Ultimately, it does go through SSC review and council
7 consideration, and we have to determine best available science,
8 but it seems like there is some duplication of effort,
9 potentially, and some additional work that's being built into
10 the process, given the kind of overlapping of some of the
11 alternatives.

12
13 **DR. HOLLENSHAD:** Sure, and so I think Dr. Froeschke and I had
14 looked at what other regions had done, and we wanted to put
15 something together for the committee to consider. This is what
16 some of the other regional councils have done, and we've got
17 some information to do it for some of our species here in the
18 Gulf, and we would be willing to do that, should the committee
19 want to progress down that avenue.

20
21 It is true that we already have something that's on the books,
22 and we've been updating it through the five-year review, and it
23 just hasn't been implemented into the FMPs, and that is also
24 something we could do. I guess staff just wanted to present
25 that to the committee and allow them to make that decision for
26 how they wanted to move forward.

27
28 **CHAIRMAN BANKS:** While we may always want a Cadillac, I just
29 don't know if we time to build a Cadillac. Dr. Froeschke.

30
31 **DR. FROESCHKE:** Just a couple more thoughts to add to this. One
32 thing is just how EFH information is used, and so, as you know,
33 it's linked to Magnuson and an effort to, I guess, protect
34 ecosystems from, for example, development or something that
35 happens that may disturb the ecosystems, and this allows NMFS to
36 comment on that and perhaps mitigation efforts or things to
37 ensure that ecosystems remain productive and things.

38
39 Some of this, the usage of this falls outside of just the
40 fishery management council and our traditional fishery
41 management applications as we see them, and so, thinking in that
42 context, I guess my thinking, at least, are what are the pros
43 and cons of using a modeling approach for a handful and perhaps
44 something more general, and it kind of comes down to a decision
45 point on the value of how we would do it.

46
47 Currently, now, for example for reef fish, the EFH

1 identification description is really a composite, for example,
2 of all the reef fish and life stages, and so it's a very big
3 area that is not really partitioned, as we typically visualize
4 it, for particular species and life stages. If it's a reef
5 fish, it's a reef fish.

6
7 The advantage of the modeling is you could get more specific,
8 perhaps, but it wouldn't necessarily lend itself to stacking in
9 that way, and, if that's more valuable to the agency and the way
10 it serves in the consultation process, perhaps that is a better
11 approach, whereas the modeling perhaps accounts for more
12 scientific innovation and things, and so I think we, the staff,
13 would benefit from some discussion about how this information
14 would be used and what the tradeoffs are.

15
16 **CHAIRMAN BANKS:** Mr. Strelcheck, do you have anything to add on
17 that?

18
19 **MR. STRELCHECK:** Certainly we conduct essential fish habitat
20 consultations for a whole host of projects, and so I guess the
21 way I was looking at this is there's multiple alternatives that
22 are going to have to be used, or could be used, to define EFH,
23 and I am certainly not against innovating and using modeling and
24 more kind of scientific rigorous information in order to do
25 that, especially if it comes to kind of a better kind of defined
26 EFH solution.

27
28 My concern is more broadly just -- You know, we have a whole
29 host of alternatives, and we know some of them kind of have to
30 be used, because the data isn't there for certain species, but
31 does staff have a recommendation, for that matter, in terms of
32 pursuing all of these as alternatives at this point, kind of an
33 exploratory effort, versus us talking about narrowing the range
34 right out of the gate, and so I don't know if you have any
35 thoughts on that, and I would be interested, kind of from the
36 perspective of staff, where we want to head with this.

37
38 I certainly appreciate you looking at other councils and how
39 they do business, and, if those are kind of valid kind of
40 standard methods, maybe we need to explore them, but it also
41 comes down to a lot of extra work and time that would be spent
42 on this.

43
44 **CHAIRMAN BANKS:** Thanks, Andy. Any other questions or comments?
45 Dr. Froeschke.

46
47 **DR. FROESCHKE:** Well, I guess just a staff comment from that

1 perspective, and what perhaps might make sense is the first
2 option, essentially, where you have to have maps of habitat and
3 habitat type, and perhaps we could start there, for two reasons.
4

5 One, it does seem that that's sort of consistent with how it's
6 done now, and so it seems likely that we would need to do that,
7 and, two, it would allow us to make sure that we have all the
8 right habitat data, and we could get that sort of reviewed by
9 the SSC and things, as appropriate, and, if we feel like there
10 are opportunities to do better, for particular species or life
11 stages, or gaps that we might need to try to fill, then perhaps
12 we could progress to some of these other ones, but, if we get to
13 that first stage, and you all feel comfortable with that, maybe
14 we wouldn't go so far down these other ones, and it would
15 expedite the process a bit.

16
17 **CHAIRMAN BANKS:** I am fine with that suggestion. Andy.

18
19 **MR. STRELCHECK:** Just in response, regarding your question
20 earlier, I think it would be helpful for you to continue to talk
21 with my Habitat Conservation Division team, and I think the
22 discussion to focus on kind of the added value of kind of these
23 new and innovative approaches that you're looking at and how
24 they would apply that for an EFH consultation process, and I
25 think they can weigh-in more effectively than I would, in terms
26 of how this information would be used and where the benefits
27 might be relative to some of these species that could be used in
28 the model approach.

29
30 **CHAIRMAN BANKS:** Dr. Hollensead.

31
32 **DR. HOLLENSEAD:** I was going to let you know that I believe that
33 David Dale is on the line, and he could help answer some of
34 these, and I think he wanted to speak to some of the HAPC
35 questions, and maybe answer some of Ms. Bosarge's questions as
36 well, but I also saw that Mr. Anson had his hand up, and so I
37 just wanted to let you know that he was available and online as
38 well.

39
40 **CHAIRMAN BANKS:** Kevin.

41
42 **MR. KEVIN ANSON:** Thank you, Mr. Chair. I'm not on your
43 committee, but this is an interesting conversation that ties in,
44 obviously, with a few things that we do, not only just dealing
45 with essential fish habitat, but the question of resources of
46 staff time and such, to try to develop these tools, or the
47 decision-type analyses, is interesting, but I think it could be

1 beneficial, particularly if we want to position ourselves with
2 being a little bit more proactive, I guess, in trying to address
3 how we manage these fisheries, relative to climate change
4 particularly, because, as Dr. Hollensead said earlier, some of
5 the environmental parameters can be used to kind of do at least
6 one of the kernel density estimate things.

7
8 It may not be as much of a case here in the Gulf, but certainly
9 along the eastern seaboard there is some rapid changes occurring
10 with some species, and it appears to be related to climate
11 change, and so that might be something too that, as our database
12 of fishery-independent information grows, not only in number of
13 species, samples of species, that might be something too that is
14 -- At least as far as beneficial to putting the effort in on the
15 front side, because there might be some back-side benefits down
16 the road, as, again, we get five years down the road, and we've
17 got more data, but yet we have a little bit longer time series
18 to look at some of these trends that might be occurring.

19
20 **CHAIRMAN BANKS:** Thanks, Kevin. We can hear from the NOAA
21 representative on the line, if they're ready. Can you remind us
22 who that is, again?

23
24 **DR. HOLLENSSEAD:** Sure thing. It's David Dale.

25
26 **CHAIRMAN BANKS:** Dr. Dale, are you on the line?

27
28 **DR. DAVID DALE:** This is David Dale, and I'm with the Habitat
29 Conservation Division at the Southeast Regional Office, and I'm
30 the Essential Fish Habitat Coordinator. Thank you, Mr.
31 Chairman. I am available to answer any questions, and I knew
32 that there would be concern regarding habitat areas of
33 particular concern, because this council has traditionally only
34 identified and described coral essential fish habitat as a
35 habitat area of particular concern, and, also, in doing so, have
36 applied fishery management measures on those areas.

37
38 Applying fishery management measures on those areas is not
39 necessary, and habitat areas of particular concern, again, don't
40 have to have fishing restrictions applied to them, and it's a
41 tool that we can use in the Habitat Conservation Division during
42 the process of doing the EFH consultations, and we do not have
43 many EFH consultations that occur offshore. Since we don't have
44 any HAPCs identified in inshore areas, it's just one of the
45 tools that we're not currently using.

46
47 You can see that in the letter that we wrote back to the

1 council, both in 2010 and 2016, that was one of the things that
2 we asked the councils to consider.

3
4 **CHAIRMAN BANKS:** Thank you, Dr. Dale. Any questions for Dr.
5 Dale? Seeing none, what's next, Dr. Hollensead?

6
7 **DR. HOLLENSEAD:** Mr. Chair, we can either look at the purpose
8 and need of the document -- If, at this time, the committee
9 feels that they've kind of got a handle on the various
10 alternatives, we could skip that and move on, or, if we would
11 like to look at them in the document, we can do that as well,
12 and whatever you think is best.

13
14 **CHAIRMAN BANKS:** Well, what's the pleasure of the committee? I
15 think looking at the purpose and need would be helpful. I am
16 comfortable with what I saw in the options and your description
17 of them, but, if the committee feels otherwise, we can do some
18 more there, but let's at least look at the purpose and need,
19 please.

20
21 **DR. SHIPP:** I agree with Patrick. Let's look at the purpose and
22 need.

23
24 **DR. HOLLENSEAD:** The purpose and need here, the purpose is to
25 review and amend the description and identification of EFH for
26 the Shrimp, Reef Fish, Coastal Migratory Pelagics, Spiny
27 Lobster, Coral, and Red Drum Gulf FMPs. This amendment
28 incorporates all information required by 50 CFR Section
29 600.815(a).

30
31 That information, if it's required there by that section, is
32 also found in those recommendation letters from the Habitat
33 Division, and it sort of goes point-by-point through those, and
34 so, as I mentioned earlier in that presentation, the EFH
35 description is sort of the tip of the iceberg, and there would
36 be these other things to consider, the fishing effects, non-
37 fishing effects, these sorts of thing that could be handled in
38 the amendment, and so those would also be incorporated in here
39 as well, and so that's what that is referring to.

40
41 The need is to consider contemporary habitat and species
42 presence data sources, along with advances in computational
43 modeling techniques to update the description and identification
44 of EFH originally adopted in the EFH Generic Amendment 3. That
45 was the amendment that was originally published in 2004. I
46 would be happy to take any questions on the purpose and need.

47

1 **CHAIRMAN BANKS:** Ms. Bosarge.
2
3 **MS. BOSARGE:** So this is the comment that I was going to make
4 earlier, but it's probably more appropriate here, but I do have
5 some hesitation when we start talking about modeling techniques,
6 especially for habitat.
7
8 I have seen those used at times, and maybe they just weren't
9 used appropriately, and maybe they should be used for other
10 things, but, when they were used, in the scenario that I was a
11 part of, it mapped it incorrectly, and it said that, in that
12 particular case, that there was coral where there wasn't coral,
13 and the fishermen said there was not coral there, and yet that
14 mapping was used to, as you said, that HAPC, and it ends up
15 being a HAPC, and the fishermen were cut off from areas where
16 they shouldn't have been cut off from.
17
18 I guess that's maybe where I have this bad taste in my mouth for
19 this modeling technique, a computer telling me what the bottom
20 of the Gulf of Mexico might look like in some particular area,
21 based off what it looks like next door to that, and so I don't
22 know. That's just my two-cents' worth, and I have some
23 hesitation there. The newest is not always the best, and so --
24
25 **CHAIRMAN BANKS:** Thank you, Leann. I would like to talk to you
26 more at some point about that specific spot was, and I would be
27 interested in that.
28
29 **MS. BOSARGE:** It wasn't in the Gulf.
30
31 **CHAIRMAN BANKS:** Okay. Never mind. Any other questions or
32 comments from the committee? Seeing none, I guess we will move
33 on with no changes to the purpose and need, not at this time.
34 Go ahead, Dr. Hollensead.
35
36 **DR. HOLLENSHAD:** One thing to clarify, Mr. Chair, and Carrie and
37 I were just discussing it, and so, I guess, would the committee
38 feel comfortable -- I know we've just talked about some of these
39 methodologies and things, but we can take them in front of the
40 SSC, and I would be curious to know if the committee, I guess,
41 would then be interested in what they report back to the council
42 and what they would recommend, and perhaps, as Ms. Bosarge had
43 pointed out, go through some of these and sort of look at some
44 of this data a little bit more rigorously.
45
46 I guess I was just curious, as staff, and we just wanted to
47 clarify what perhaps the next steps would be, if you thought

1 that it would be worthwhile to take both of these methods in
2 front of the SSC and get recommendations from them.

3
4 **CHAIRMAN BANKS:** Unless somebody disagrees, I think it would be
5 helpful. As I understand it, you will further develop the
6 document based on the options that you presented today?

7
8 **DR. HOLLENSEAD:** Yes, sir. That's correct, and so we plan,
9 perhaps at the next council meeting, to reconvene the Habitat
10 Committee, and so we would come back, I guess, with
11 recommendations from the SSC. Anything that they may have said
12 to go back and look at, and we would meet with the IPT as well,
13 to continue developing this.

14
15 Like I said, one of the holding spots right now is that text in
16 that one alternative that says to use contemporary mapping data
17 source, and we don't quite know what that would be just yet, and
18 so that's something that we would have to go back and absolutely
19 look at, and, as Dr. Froeschke had mentioned, looking at some of
20 these other data sources as well for these maps, and so, like I
21 said, the point of this presentation was to sort of give you
22 almost like an outline, or a bit of a scope, a framework, of
23 where we're going with this particular action and to continue
24 building on it.

25
26 If I come back at the next meeting and I say something like
27 boosted regression tree, hopefully it's a little bit on
28 everybody's radar, because I know these are the kinds of things
29 that we don't talk about too often, and so, that way, the
30 committee is informed and knows that that alternative is
31 referring to and the methodology behind it.

32
33 **CHAIRMAN BANKS:** Thank you, Dr. Hollensead. Any final thoughts,
34 before we move on to the next item on the agenda? Thank you.
35 Let's go ahead and move on, and we'll get a report from the SSC
36 at our next meeting, based on their review of some of these
37 methods, and so that will be helpful.

38
39 Item Number V is Discussion Session on President Biden's
40 Executive Order 14008: Tackling the Climate Crisis at Home and
41 Abroad. Do we have a presentation from NOAA for this?

42
43 **DR. HOLLENSEAD:** Yes, sir. We do. We're just making sure that
44 NOAA leadership is on the line, and we're running a little bit
45 ahead of schedule.

46
47 **DR. TOM FRAZER:** If we're not, we might take a fifteen-minute

1 break and make sure they're all squared away.

2
3 **CHAIRMAN BANKS:** That's fine with me. We can take a break.
4 We're ahead of schedule, because that's the intent.

5
6 **DR. FRAZER:** All right. We'll come back at 2:45.

7
8 (Whereupon, a brief recess was taken.)
9

10 **CHAIRMAN BANKS:** Committee, let's start to move back to our
11 seats, please. All right. I think we've got most of the
12 members back now, and so we'll get started again. Going back to
13 our agenda, we are going to get a presentation from Mr. Sam
14 Rauch with NOAA Headquarters. Welcome, Sam.

15
16 **DISCUSSION SESSION ON PRESIDENT BIDEN'S EXECUTIVE ORDER 14008:**
17 **TACKLING THE CLIMATE CRISIS AT HOME AND ABROAD**
18

19 **MR. SAM RAUCH:** Thank you. I am Sam Rauch, and I am the Deputy
20 Director of the National Marine Fisheries Service, and, before I
21 start on the presentation, I wanted to take the point and
22 express the welcome of our brand-new Assistant Administrator,
23 who is still working on communications issues, but she started
24 yesterday afternoon, Janet Coit from Rhode Island, and I'm sure
25 that she will be addressing the councils at some point as she
26 gets started, but she did want me to express, personally, how
27 pleased she is to have the opportunity to work with the councils
28 going forward.

29
30 To the America the Beautiful report, either Paul Doremus or I
31 have talked to the various councils about the Executive Order
32 216, the various provisions of that, and have taken comments on
33 that. That effort, and we'll talk a little bit more in detail
34 in just a minute, led to the release of the Conserving and
35 Restoring America the Beautiful Report, which was issued in
36 early May.

37
38 It complements much of the work that NOAA has done on conserving
39 the natural, cultural, and historic resources within our nation
40 and Great Lakes and managing that in partnership, in many
41 instances, with the councils. In the report, the President
42 calls on Americans to join together in pursuit of a goal of
43 conserving at 30 percent of our lands and waters by 2030,
44 through inclusive and locally-led efforts.

45
46 The report does include recommendations, which we're going to
47 get into, emphasizing the importance of ongoing dialogue,

1 engagement, and collaboration, and we're going to get into those
2 specific recommendations, but this is the Executive Order text.
3 We have talked with the council about 216(c), and this is
4 216(a), and I believe this came up in those discussions as well.

5
6 This one is directed, unlike 216(c), which you may recall was
7 directed at Commerce, and it sought comments on how to make
8 fisheries and the ecosystems more resilient to climate change,
9 and this one was directed at Interior, to develop this report.
10 The report was technically to a climate taskforce that is
11 established elsewhere in the Executive Order. Interior was to
12 coordinate with us, consult with us, which they have done, on
13 the preparation of this report, and, as you can see, the goal
14 here is to conserve at least 30 percent of our lands and waters
15 by 2030, and we're going to break that down in a minute.

16
17 It should be clear though that the goal is not necessarily to
18 preserve, or protect, but it is to conserve, and that definition
19 of what is or is not conserved is an important thing that is
20 undefined in the report and that we do want to seek comment on.

21
22 The report lays out that the 30 percent, in and of itself, is
23 not an endpoint, and they are more concerned, we are more
24 concerned, with the process of achieving the conservation
25 outcomes and the benefits they provide over the long term,
26 rather than achieving some numerical specific number.

27
28 This council, in particular, has a long track record of
29 understanding the importance of area-based conservation measures
30 to achieve the larger goals, and a lot of that comes through in
31 the report.

32
33 216(a)(i), the first subsection, does ask Interior, working with
34 the other agencies, to solicit comments from states, local,
35 tribal, and territorial officials and fishermen and other
36 stakeholders on identifying strategies that we can adopt, for
37 participation, with the goal of conserving 30 percent, and so
38 we're doing that. This is one, and not the only, outreach
39 effort that we are doing. We are particularly interested in the
40 views of the councils, but we also are interested in the views
41 of the many stakeholders that attend council meetings, and we
42 will be reaching out to them, in other forums directly, to seek
43 their input.

44
45 The bulk of the report is to propose guidelines for determining
46 whether the lands and waters qualify for conservation and a
47 mechanism to measure progress, and so this report is a first

1 step, as we will talk about, and it does not define
2 conservation, but it sets out a process by which we're going to
3 get there and a process for evaluating various lands and waters,
4 as to whether they meet that, and we'll talk about that more in
5 just a minute.

6
7 There was a number of preliminary engagements ahead of this
8 report, where Interior, mostly, reached out, sometimes with our
9 assistance, particularly with the fishing interests, to various
10 stakeholders, to try to get input on this report, and all of
11 that engagement helped to inform the report.

12
13 As we said, the report was issued on May 6, and it's the first
14 step, and it affirms the long-term goal of combating key
15 threats, in terms of the loss of natural areas and resources,
16 climate change and resilience, and something that is important
17 not just in this report, but in a number of the administration
18 documents, is equitable access to the benefits of the natural
19 resources, not just in terms of recreational, though that is
20 important, but also all the benefits that can be provided. The
21 administration has issued many statements about equity and
22 ensuring access from underserved communities to the bounty of
23 our natural resources.

24
25 It launches a ten-year campaign, and we'll talk more about some
26 of the details of that campaign, and it's locally led and
27 nationally scaled. It's to build on local efforts, and it's not
28 intended to create a super structure from the top-down that
29 dictates outcomes for individual areas of land or water, and it,
30 critically, I think for this organization, recognizes a broad
31 range of potential approaches to conservation.

32
33 It's not just protected areas in which some or all of the uses
34 in there are prohibited, and it would consider those kinds of
35 actions, in terms of the continuum of what we might look at
36 conservation, but also ecosystem restoration, areas that allow
37 for sustainable mixed use, other kinds of actions that may occur
38 on private lands or other kinds of things.

39
40 We are seeking input on how to measure progress to the Thirty-
41 by-Thirty goal, which includes defining what exactly
42 conservation is. We do not, at the moment, have a definition on
43 where on that continuum of the broad range of different kinds of
44 conservation actions we would say is met or not for the area to
45 be included in the goal of 30 percent.

46
47 The report outlines eight core principles, some of which I have

1 talked about, and it is important, in the report, that the lands
2 build on locally-led efforts and not that there is a federal
3 overlay that will dictate, either to private landowners or
4 states or others, how certain lands need to be managed.

5
6 As I already mentioned, it's important to look at the benefits
7 for all the people, particularly underserved communities, and
8 there is a reflection that, in many areas, traditionally, we
9 have not served those well, or those communities get shut out of
10 neighboring or adjacent resource opportunities, and it's
11 important that we look at the benefits for all of those
12 communities and all the capacities that it could provide, and
13 not just in biological terms, but in terms of access for
14 recreation or other kind of issues and for looking at climate
15 change issues that are broader than just the particular unique
16 biological characteristics of the area.

17
18 I just talked about locally-led efforts, and the report does
19 talk -- It puts a particular emphasis on tribal sovereignty,
20 recognizing the unique role that the tribes play in this nation
21 and their governance structures and the pointed effort to
22 respect and honor tribal sovereignty. Treaty and subsistence
23 rights, and freedom of religious practices need to be something
24 that is considered as we develop these approaches.

25
26 The report also talks about the job-creating ability of this,
27 and the vision of this administration is that, through the
28 creation of these areas, you can spur economic growth, and this
29 is something that the councils deal with all the time, and we
30 have a lot of closed areas that are closed for particular
31 purposes, but the idea is that, by closing say a spawning
32 ground, you are protecting the fish stocks that then could be
33 harvested much more profitably in the long run, and so this kind
34 of understanding that a conservation area can be an important
35 tool to create and maintain jobs is something that is discussed
36 in the report as one of the core principles.

37
38 I also mentioned the need to be respectful of private property
39 rights and to incorporate and build on voluntary stewardship
40 efforts. Then to use science as a guide, but also to reflect
41 the importance of indigenous and traditional ecological
42 knowledge. Many indigenous communities have a longstanding
43 history and view of what has been available, what kind of uses
44 are available and appropriate for various lands that can
45 integrate into these efforts.

46
47 Then, finally, to build on existing tools and strategies, which

1 is clearly, in terms of fishing areas, building on the Magnuson
2 Act process and incorporating the Magnuson Act process, rather
3 than to create a new process that would address fishing issues.

4
5 The first step in evaluating this report is figuring out where
6 we are now, conducting a baseline assessment, and we have not
7 just the fishery managers, but a lot of area-based managers,
8 both management systems on land and on the ocean, and we need to
9 do a comprehensive look at the various areas that are managed,
10 particularly what the purposes are, and then develop a sense as
11 to whether or not they qualify for the conservation area, to
12 meet this goal or not.

13
14 Then, assuming we're below the goal, then you figure out how you
15 would get to that goal or create a sustainable conservation
16 ethic, but the first step is a baseline assessment, which the
17 report calls out, and it's called the American Conservation
18 Stewardship Atlas, which is going to incorporate the various
19 area-based management now and sort of keep a running total,
20 which will look at some of these issues.

21
22 It will be developed by an interagency working group, a federal
23 interagency working group, but there will be input from the
24 public, states, tribes, scientists, a wide range of
25 stakeholders. Currently, I do not have a schedule for how this
26 is going to work. This is something we're still working out at
27 the federal level, not only how and on what timeframe we're
28 going to prepare this atlas, but how we're going to incorporate
29 this various input, but there is a commitment to get all of this
30 input.

31
32 Some of the things that are going to go in there, or that at
33 least are going to be evaluated are voluntary conservation
34 measures on private lands, farms, forests, ranches, and,
35 explicitly, conservation measures under other authorities,
36 including the Magnuson-Stevens Act, including the various
37 closures or area-based management systems that the councils have
38 recommended and that we've put in place. Then other efforts by
39 other organizations, tribes, private landowners and other
40 things. A wide range of efforts and designations are going to
41 go into the atlas.

42
43 Once the atlas is done and we know where we sit on the spectrum
44 of 30 percent, there will be annual reports which look at, if we
45 are below 30 percent, how we might build and encourage local
46 efforts to get closer to that number. We will look at an
47 assessment of land and cover changes, and then we'll also look

1 at wildlife corridors and the importance of trying to not just
2 focus on isolated pockets, but reflect that animals, in
3 particular, need to move between these pockets, and so you need
4 a network of areas to support the native wildlife and things
5 like that.

6
7 The six particular areas of focus that are highlighted in the
8 report to begin making early progress, one is the creation of
9 more parks and safe outdoor opportunities in nature-deprived
10 communities, which also ties in, as I said earlier, to this idea
11 of equity in access to natural resources, both recreational and
12 other kinds of approaches.

13
14 Support tribally-led efforts. Not just support the efforts, but
15 to review the various programs and the way we develop them,
16 currently, and make sure that the tribes have the ability to
17 engage and engage constructively, and it's not just the tribes,
18 but we have other kinds of indigenous communities that may not
19 be tribal, per se, including like the native islanders and other
20 kinds of things, but to look at the way that we account for the
21 use and subsistence use and other important cultural uses of
22 indigenous communities.

23
24 I mentioned several times the need to be collaborative and to
25 look at collaborative conservation, but also in terms of
26 corridors and building that kind of issue. The report, within
27 that section, calls for an expansion of the National Marine
28 Sanctuary System and the Natural Estuarine Research Reserve
29 System, and both systems are run by the Ocean Service, one of my
30 partner agencies within NOAA, but it also explicitly recognizes
31 the work of the councils under the Magnuson-Stevens Act and
32 calls for us to work closely with the councils to identify
33 areas, or networks of areas, where fisheries management efforts
34 would support long-term conservation goals.

35
36 Clearly, there is an understanding that the councils are
37 significant actors, and have been for decades, and they do
38 create conservation areas to meet the specific purposes, and we
39 want to make sure that those efforts are recognized and
40 incorporated into the process.

41
42 Increasing access to outdoor recreation, and not just -- I mean,
43 on its own, but also in terms of these underserved communities
44 and to incentivize and reward voluntary conservation efforts, in
45 particular if you're looking at the land-based goal, and it's
46 going to be hard to get there without voluntary conservation
47 efforts on landowners and others that can operate on land, given

1 the vast array of ownership and other kinds of challenges to
2 land-based conservation.

3
4 Finally, as I indicated, to create jobs by investing in
5 restoration and resilience, not just in terms of the overall
6 structure, but there is proposals for putting new and diverse
7 generations to work, through such things as the Civilian Climate
8 Corps, which is discussed in other parts of these Executive
9 Orders, that can be a tool to help conserve and restore public
10 lands, and I will indicate that National Marine Fisheries
11 Service sponsors at least three of these Conservation Corps that
12 we think will be incorporated into a broader climate corps
13 network that is envisioned in the Executive Orders.

14
15 Next steps will be the report is a starting point, as I
16 indicated, and we are in the outreach stage in the report, and I
17 want to get to the questions in a minute, but we, are in
18 particular, seeking input on what is conservation, what does
19 work, what kinds of things should be included, or what areas
20 should be included. Working both formally and informally, we're
21 specifically seeking comment of the councils, but also of the
22 many stakeholders that are important to the fisheries issues.

23
24 We're looking at a broad range of authorities and not just the
25 Magnuson authority, which, obviously, that is important to what
26 the council does, but all of the NOAA authorities, and, on land,
27 a whole suite of other land-based authorities, and these are
28 some of the NOAA authorities, in particular, that many of you
29 are familiar with, and all of these tools that you could create,
30 or that we do currently have, area-based conservation measures
31 under, and so how those interrelate to the broader Presidential
32 initiative is something that we need to talk about and to
33 determine, and we would look forward to your input on those.

34
35 Then the last slide is the questions that I sort of laid out in
36 the report, and we are seeking input, either now or as it can
37 come in, through the council process, and what are the baseline
38 -- I mean, there is all kinds of baseline conservation actions,
39 a range of area-based alternatives, and which ones of those are
40 effective? Are there any that are ineffective?

41
42 Some of them are effective for particular purposes, and we know
43 the councils have a wide range of closures, seasonal
44 restrictions, or just broader management areas, and how are they
45 effective? I laid out, at the very beginning, some of the
46 goals, like climate resilience and loss of natural ecosystems
47 and promoting jobs and promoting equity, those kinds of things,

1 and are these tools effective at achieving any of those goals?
2
3 What specific criteria should we use to identify the areas, or,
4 in other words, what is conservation, and which areas currently
5 would qualify or should be considered for conservation? Are
6 there additional areas that we should consider, and what are the
7 processes that we would use to consider those areas?
8 Particularly, in this realm, it would probably be the council
9 process.
10
11 Are there other areas, and I just indicated this, that would
12 meet these criteria, or are there existing areas that you think
13 are close, but we may need to add something to meet the
14 criteria, and then, finally, is there a better way? How should
15 we interact, build, collaborate, with stakeholders in this
16 process? Those are the specific questions the administration is
17 seeking input on, and, Mr. Chairman, I am happy to take
18 questions or engage in a discussion at that point, but that is
19 the end of my presentation.
20
21 **CHAIRMAN BANKS:** Thank you, Sam. I appreciate the presentation.
22 Any questions for Mr. Rauch? We've got a quiet group today,
23 Sam. I apologize.
24
25 **MR. RAUCH:** That's all right.
26
27 **CHAIRMAN BANKS:** Leann. I knew I could get one out of you.
28
29 **MS. BOSARGE:** Hi, Sam. How's it going? Long time no see.
30
31 **MR. RAUCH:** It's going well. I wish I could be there in person.
32
33 **MS. BOSARGE:** Me too, especially in Key West, and it's a pretty
34 nice view down here.
35
36 **MR. RAUCH:** Yes.
37
38 **MS. BOSARGE:** I guess you want Thirty-by-Thirty, and you want to
39 conserve lands and waters, and I did hear a lot about conserving
40 them for recreation, kind of in the mindset of parks and things
41 like that, and I can see, most definitely, on land, I can see
42 where that applies, and I see the value, and I can see where it
43 applies on the water as well.
44
45 However, I feel like, on land, and we are a population of humans
46 that live on land, right, and we have developed a lot of the
47 land in this country, and so the part that was still set aside

1 as a national park, pristine, where anyone could go for free and
2 enjoy nature and hike and do whatever, that seemed to be
3 constantly shrinking.

4
5 On water, it's a little different, right? Other than maybe an
6 oil and gas rig here or there, we're not developing and taking
7 up all the water, per se, right, and we may utilize it to catch
8 fish, but it's not ours, and it still belongs to everyone, and
9 so, to me, it's almost more that, if we want to look at access,
10 and I almost look at it where the water meets the land, and, to
11 me, there seems to be plenty of access for recreation.

12
13 I come from a commercial background, and, as far as trying to
14 find access for commercial vessels along the coast, that, to me,
15 is -- That access is the part that's dwindling. We have no
16 working waterfront anymore, and it's all developed for personal,
17 whether it be private homeowner use, a dock in your backyard
18 where you have your recreational vessel, or otherwise, right,
19 public boat ramps for recreation and things like that.

20
21 I don't know, and something just didn't set well with me right
22 there, and I feel like there's a whole lot of recreational
23 access for the waterfront right now, and, if you're going to set
24 something aside, it would be nice if you could preserve a little
25 bit of access, in the public forum, right, of public working
26 waterfronts that are there for any vessel to dock at.

27
28 There's a few here and there, and there's on in Louisiana that I
29 know of, where a shrimp boat can still go and tie up, but it's
30 getting harder and harder. On the east coast, it's terrible. I
31 mean, there's really -- You know, you might have one, or maybe
32 two, ports along the coast in a state that you can go in and out
33 of with a shrimp boat these days, because it's just so
34 developed, and it's a lot of tourism, and so I just want you to
35 remember that access applies to all of our different citizens
36 and stakeholders, and what may be lacking in access on land that
37 you need to set aside for a certain stakeholder group on land
38 may be very different when you get to the coastline, where, if
39 you have enough money, you can have a nice house on the water,
40 but the commercial fisheries are generally not highly, highly
41 lucrative, profitable fisheries in the Gulf of Mexico, as
42 compared to other New England and certain fisheries like that,
43 Alaska, and so you just don't -- Our access is dwindling here.

44
45 Just keep that in mind for me, and that also goes back to your
46 job creation, and you talked about underserved communities and
47 resilience, and we have a lot of commercial fishing communities

1 here that are going by the wayside, and you are losing them, and
2 that resiliency is not there, and so, if you would, keep that
3 mind for me. It might not jibe with your Executive Order, but I
4 think there's two sides to every story.
5

6 **MR. RAUCH:** Thank you very much, and I do think it goes jibe
7 significantly, particularly in terms of underserved communities,
8 which is not just related to recreational opportunities,
9 although we know that's important, and recreational
10 opportunities -- It's an important function of this council as
11 well.
12

13 When you're looking at access, I tried to stress that it is not
14 just recreational access, right, and it's access to the
15 resources for a wide range of uses. Historically, many of these
16 underserved communities have gotten shut out of that access, for
17 whatever purpose, and we need to keep that in mind as we are
18 thinking about why you might set something aside or what you
19 might set it aside for, and not just only recreational
20 opportunities for people that can afford it, but also looking at
21 what the particular needs of these underserved communities are
22 and how you might make sure that the natural resources that are,
23 at least on the ocean, are public trust, are open to all, and
24 how they get equitably allocated and preserved for all those
25 communities.
26

27 **CHAIRMAN BANKS:** We will go next to Dr. Shipp. Go ahead, Dr.
28 Shipp.
29

30 **DR. SHIPP:** Thank you, Patrick. Welcome back to us, Sam, even
31 if it's virtually only, and I love to see you still
32 participating. My question is the 30 percent, and could you go
33 into a little bit more about where that number came from? I
34 remember, ten or fifteen years ago, we were hearing 40 percent
35 of the world's oceans need to be protected, and no fishing, and
36 a lot of extreme projections, but 30 percent, and can you go
37 into a little bit of where that came from? Thanks.
38

39 **MR. RAUCH:** I just gave this presentation to the New England
40 Council this morning, and I gave a very similar answer to what
41 I'm going to give you, which is I cannot. It came from the
42 Executive Order, and so it was the goal set by the President.
43 It is a number that has been discussed internationally as a
44 number, but, like you said, I have heard different numbers, and
45 I have heard 20 percent, and I have heard 40 percent, and that
46 is one reason that this report, although we recognize, as we
47 must, that this is the President's goal, and we talk about it

1 not being a specific endpoint, I don't think there's anything
2 magic about 30 percent, as opposed to 25 percent, as opposed to
3 35 percent or anything else like that.

4
5 It is important though that we recognize that there are many
6 uses that we rely on, both extractive and others, from our
7 natural community, and we need to make sure that a certain
8 portion of it is set aside to meet those goals, something the
9 councils do already, right, and there are closed areas that the
10 councils have recognized are important.

11
12 I don't get too wrapped up in the number, and I cannot tell you
13 exactly how that number was arrived, and I don't think there's
14 anybody that can tell you there is a magic to particularly that
15 number, as opposed to another number, beyond the idea that it is
16 important to recognize conservation, something that we do.

17
18 I will say that, if you were to look at just protection, and so
19 we know that the Executive Order focuses on conservation, which
20 is a broader, potentially, concept than protection, we have,
21 within NOAA, a Marine Protected Area Center in which we try to
22 evaluate how much of the U.S. ocean is protected under a
23 definition that is largely the definition that the IUCN, the
24 International Union of Conserved Nations, and I may have gotten
25 that wrong, code that they use that many international
26 organizations use.

27
28 I believe their last census, which does not include any Magnuson
29 Act areas, was at 26 percent, and so, while I don't know that 30
30 percent is a specific magic number, in the U.S. already, at
31 least in the ocean, even before you consider the councils'
32 actions, we are at about 26 percent of U.S. waters protected,
33 and not necessarily conserved, and so that's the right general
34 ballpark.

35
36 That's about the most precise answer, but I don't think there's
37 a scientific study that you could point to that says 30 percent
38 is the particular number or that there is a magic number, given
39 the wide ranges of uses that we try to use with our ocean and
40 the very different ecosystems that we deal with, and I think
41 that would be an impossible sort of task.

42
43 **CHAIRMAN BANKS:** We'll go next to Dr. Stunz. Go ahead, Greg.

44
45 **DR. GREG STUNZ:** Thank you, Sam, for taking the time to speak
46 with our council, and I've got a question regarding -- You
47 talked about the conservation partnerships and that sort of

1 thing, and a lot of what, as you well know, I'm sure, is
2 happening in the Gulf is habitat restoration, whether it's
3 oyster reef marshes, and, obviously, a lot of state programs
4 sitting around this table have very active artificial reef
5 programs and that sort of thing.

6
7 I am wondering where does that fit in, where you're not
8 necessarily setting aside, but you're creating habitat that was
9 either degraded or wasn't there, or that sort of thing, and so
10 it seems like, one, there is, obviously, a lot of partnerships
11 that can occur there, but, also, you're enhancing, or creating,
12 habitat that didn't exist, and that certainly could count
13 towards that 30 percent number, in my opinion, and I just wanted
14 to see what your thoughts were on that.

15
16 **MR. RAUCH:** Let me just preface by there is no definition of
17 conservation now, and so any recommendations for what definition
18 should be will very helpful as the federal government, with all
19 these partners that we laid out, tries to come up with that
20 standard.

21
22 When we talked about, at the outset, a continuity of approaches,
23 there is a recognition that there are areas that are currently
24 not very productive, but we are engaged in efforts to make them
25 more productive, for whatever purpose, and that that is a viable
26 conservation action and should be on that spectrum of continuity
27 of uses that we consider as to whether to include.

28
29 Certainly you could think of a scenario where, if we were under
30 30 percent on land or water, that restoration may be a way to
31 get there, even if we're not there today, or you may include
32 those there, even if they are not fully where we want them to
33 be, but we're currently engaged in a process to bring them
34 along, and so there's a lot of things.

35
36 I mean, it is very well conceivable, and it is envisioned that
37 this is a discussion that we will have, but there's no
38 conclusion in the report about whether those kind of areas, or
39 those kind of efforts, how they would be considered, but there
40 is a recognition that there's a lot of that out there and that
41 we do need to take a considered determination about that, and so
42 any recommendations this council may have on that would be
43 helpful.

44
45 **DR. STUNZ:** Thank you.

46
47 **CHAIRMAN BANKS:** Dr. Simmons.

1
2 **EXECUTIVE DIRECTOR CARRIE SIMMONS:** Thank you, Mr. Chair, and
3 thank you, Mr. Rauch, for that presentation. I just wanted to
4 mention, to the committee and council, that, at the recent
5 Council Coordinating Committee meeting, we decided to put
6 together a subcommittee, and so one staff from each regional
7 management council will participate in that subcommittee that
8 will work on this effort, and that is the area-based management
9 effort that you just were provided an overview on.

10
11 Our staff member that is leading that is Dr. John Froeschke, and
12 they just had their first meeting last Thursday, and so he can
13 kind of provide an outline of what that group is proposed to be
14 working on, if you would like.

15
16 **CHAIRMAN BANKS:** At a future meeting you're talking about?

17
18 **EXECUTIVE DIRECTOR SIMMONS:** Just really quick.

19
20 **CHAIRMAN BANKS:** Sure. Go ahead, Dr. Froeschke.

21
22 **DR. FROESCHKE:** As Carrie mentioned, we had a meeting, and so,
23 essentially, the plan forward is we have a group, and I think
24 there's about ten of us or so, and it's mostly council staff,
25 and we're planning monthly meetings, and we're kind of talking
26 about terms of reference.

27
28 Essentially, our immediate charge, for each region, are the
29 staff are to begin gathering sort of our list of areas that may
30 be compatible with this definition that are going to be
31 assembled into an atlas, and so we're working on that, and we're
32 going to have, like I said, these monthly meetings, where we're
33 going to start compiling some of this information.

34
35 Some of the things that we just talked about, briefly, are kinds
36 of the nuts and bolts of what kinds of areas would be included
37 in this, and it was a little bit ambiguous to me at first, but
38 it's going to focus on EEZ areas, for our purposes, and so not
39 state waters and things that are closures, but it would not
40 include things like migratory zone closures and things like
41 that. It's more habitat-based closures.

42
43 I suspect that this will be fairly nuanced, in trying to figure
44 out what it is, but, anyway, that's what we're going to be
45 working on in the upcoming months, is assembling this list and
46 contributing to the atlas.

47

1 **CHAIRMAN BANKS:** Okay. Thank you, Dr. Froeschke. Any other
2 questions for Sam? Greg, is your hand still up before, or do
3 you have another question?

4

5 **DR. STUNZ:** No, Mr. Chairman. No question.

6

7 **CHAIRMAN BANKS:** Okay. I will go to Ms. Bosarge.

8

9 **MR. RAUCH:** Mr. Chairman, if I could follow-up on that last --
10 Not Dr. Stunz, but the council presentation.

11

12 **CHAIRMAN BANKS:** Go ahead.

13

14 **MR. RAUCH:** It certainly is true that the CCC has created this
15 group, and I have had some discussions with the chair of that
16 group. I just wanted to point out that we do not have a
17 schedule yet as to how the atlas, from our perspective, or the
18 federal perspective, is going to be created.

19

20 I know the council is trying to get all the council areas
21 analyzed and put in, and there may need to be some adjustment,
22 and the CCC is aware of this, between the CCC's expected pace of
23 work and the federal pace of work, when that is announced, and
24 so we'll work with the CCC, and we very much do appreciate the
25 leadership that the CCC is showing on that, and we look forward
26 to getting that input into the process, but it's just the
27 timing, and I don't know whether it's going to work out yet or
28 not, because, on the federal side, we don't have a schedule yet.

29

30 **CHAIRMAN BANKS:** When you said that timing may not work out, do
31 you feel like you guys are working faster along this road than
32 what the CCC is?

33

34 **MR. RAUCH:** I expect the administration may want to work faster,
35 but, whether or not it actually can work faster, it remains to
36 be seen, and so I don't really know whether they will be faster
37 or slower, but we're going to try to work with the councils, to
38 make sure the collective council input can be fed into the
39 process.

40

41 **CHAIRMAN BANKS:** Okay. Understood. I appreciate it. Go ahead,
42 Leann.

43

44 **MS. BOSARGE:** All right. Last comment, and so you asked about
45 strategies that would encourage stakeholder participation, and I
46 think one thing, and I think this is being done, or considered,
47 Sam, but I feel like I should still verbalize it, and so I think

1 one thing you can do to encourage stakeholder participation is
2 to recognize those efforts that have already been made to
3 promote conservation of our lands and waters, which requires the
4 stakeholders, typically, to make some sort of sacrifice, in
5 order to do so, and so all the areas that we have closures for,
6 protections for, restrictions on thus far, to me, all of those
7 things are conserving those areas, in the sense that they are
8 all measures that promote long-term productivity, right, of that
9 habitat and the animals that rely on that habitat.

10
11 To me, that's one way to think about conservation, is this idea
12 of productivity, and that doesn't mean that you can't ever touch
13 it, right, and an area can be productive and still be utilized,
14 but you just can't overutilize it and expect it to still be
15 productive, and so that would be my suggestion, to make sure
16 that that's going to be counted in that baseline and utilized
17 towards that mark, or the 30. Thank you.

18
19 **MR. RAUCH:** Thank you for that input.

20
21 **CHAIRMAN BANKS:** Thank you, Leann. It's an interesting point of
22 view, because, as I recall, we don't have any fishery out there
23 that is unlimited, and so, by that point of view, technically,
24 the entirety of the Gulf of Mexico, within our EEZ, has been
25 conserved.

26
27 **MS. BOSARGE:** It has. I mean, we conserve a portion of it
28 constantly, and we do not allow you to access all of it, to
29 ensure long-term health and productivity.

30
31 **CHAIRMAN BANKS:** But I am taking that a step further, and, the
32 minute you put any kind of restriction in place, and it doesn't
33 mean that you keep a boat out of a place, but, if you restrict
34 it in some way, that is a conservation measure, and so the fact
35 that we conserve fisheries species in the entirety of the Gulf
36 of Mexico -- I am just talking here, and I am not pushing this
37 point as my opinion on this matter, but I'm just saying, by that
38 line of thinking that you're going down, you could technically
39 say the entirety of the Gulf of Mexico has been conserved. Mr.
40 Chairman.

41
42 **DR. FRAZER:** I would agree with that, and the environment,
43 whether it's providing access or providing only fisheries
44 resources, but the environment provides a whole suite of
45 resources, right, and so you have to consider those services in
46 their entirety.

1 **CHAIRMAN BANKS:** Well, I completely agree with that as well, and
2 I think that's the difficulty that Sam and his group are going
3 to have in trying to come up with a definition of conservation.
4 That's going to be -- I would imagine he's going to have a lot
5 of debate on trying to define that word.

6
7 Any other comments for Sam, while we have him? I don't see any
8 more. Sam, thanks so much for your time that you gave us today,
9 and I know you're very busy up there, especially with a new
10 boss, and there's no telling what kind of new initiatives are
11 going on, but we appreciate your time, and you're always
12 welcome, sir.

13
14 **MR. RAUCH:** All right. Thank you very much.

15
16 **CHAIRMAN BANKS:** Hold on, Sam. Leann has one more question for
17 you.

18
19 **MR. RAUCH:** She said that was the last question.

20
21 **MS. BOSARGE:** I lied, Sam. I'm a woman. Here's my question,
22 and it's on a different Executive Order, but I've got you, and
23 so I'm going to ask you. Are you going to ask the councils --
24 Are you going to reach out to them on that Executive Order 14017
25 on strengthening the resiliency of America's supply chains, and
26 it speaks specifically to food production and food processing
27 and food distribution, markets, and consumers, of which,
28 obviously, seafood would be a big part of that, and the councils
29 could probably give you some valuable feedback?

30
31 **MR. RAUCH:** I do not know that we're going to have the same sort
32 of organized outreach to the councils as we've had for these
33 other efforts, in which the Executive Orders explicitly talk
34 about the councils, or fisheries management, but, to the extent
35 that the councils, the Gulf Council, or any other council, would
36 like to give us input, we certainly would take it and either
37 consider it ourselves, as we take action under the Executive
38 Order, or share it with other federal entities that are taking
39 action under that Executive Order, but, in terms of structured
40 outreach from the councils, I do not know that we're going to do
41 that.

42
43 **CHAIRMAN BANKS:** Anything else, Leann?

44
45 **MS. BOSARGE:** No, and I'll see if I can get on the Gulf Council
46 agenda, and we'll send you some feedback.

47

1 **MR. RAUCH:** We would appreciate it.

2
3 **CHAIRMAN BANKS:** Thanks again, Sam. We appreciate it.

4
5 **MR. RAUCH:** All right. Thank you.

6
7 **CHAIRMAN BANKS:** All right. Moving on our agenda to Item Number
8 VI, Conserving Our Nation's Lands and Waters, we're going to
9 hear from Dr. Hollensead and Ms. Muehlstein about some results
10 from the Something's Fishy poll that includes some public
11 comments. Go ahead.

12
13 **SECTION 216(C): CONSERVING OUR NATION'S LANDS AND WATERS**
14 **SUMMARY OF PUBLIC COMMENTS**
15 **DRAFT RECOMMENDATIONS AND LETTER**

16
17 **MS. EMILY MUEHLSTEIN:** I am getting the okay from Lisa that I
18 can just go ahead and start. You all may remember that, when we
19 first heard about this Executive Order, we were asked to get
20 some targeted stakeholder feedback on this Executive Order, and
21 so we did produce a Something's Fishy tool, and we sent it out,
22 and we left it open for a month, and we asked two questions in
23 the Something's Fishy tool, and I will sort of go through that
24 as we get further along in this document.

25
26 We did receive sixteen comments from stakeholders. The first
27 question that we asked was are there any changes to current
28 management and conservation measures that could make our
29 fisheries more resilient to climate change?

30
31 What I did here was separate out some of the suggestions that we
32 got, as to whether they were under the council's jurisdiction or
33 they were not, and so I will start with the comments that were
34 related to something that the council would have power, or
35 control, over, and I will just go through these really quickly.

36
37 We heard that we should stop banning certain species from
38 harvest, because they overrun other species, and the example of
39 goliath grouper was given. We heard that we should use more
40 state management, to allow each state to manage their own
41 waters.

42
43 We heard that we should lower the ABC on every species, in order
44 to build stocks and allow them to withstand changes in the
45 environment. We heard that we should stop overfishing from the
46 private recreational sector, that we should minimize bycatch and
47 discard mortality to maintain robust and resilient populations.

1 We heard that we should implement an ecosystem-based management
2 plan with a vision of a changing environment and use buffers to
3 develop sustainable harvest strategies. We heard that we should
4 reconvene the Ecosystem Technical Committee and to develop an
5 ecosystem plan with a public hearing draft ready in the fall of
6 2022.

7
8 We heard that we should develop a fishery ecosystem plan to use
9 as a primary instrument to identify and prioritize actions that
10 are needed to address climate change impacts to populations,
11 fisheries, and the habitat.

12
13 We heard that we should develop strategies within the FEP to
14 minimize impacts on species, such as gag and red grouper, that
15 caused by environmentally-driven episodic mortality events, such
16 as red tides or other changes.

17
18 We heard that we should establish a standard process to review
19 new information on ecosystems, science, and the fishery, in the
20 context of existing marine protected areas. We heard that we
21 should reduce reliance on static, permanent, no-take areas
22 closures in the Gulf in favor of sustainable, commercial fishing
23 that is well-regulated and accountable.

24
25 We heard that we should proactively protect essential habitat,
26 such as deep-sea corals, before fisheries that utilize bottom-
27 contact gear move into colder and deeper waters, as sea
28 temperatures increase and the range of various fish populations
29 shift in response. We heard that protecting corals and other
30 important habitat can foster climate resilience, by minimizing
31 potential stressors.

32
33 It was suggested that we increase opportunities for output-based
34 management strategies, that we increase assessment of the
35 upstream impacts of land-based activities on marine ecosystems,
36 such as red tide and blue-green algae blooms in the dead zone.

37
38 We also heard that we should ensure that management strategies
39 are in place to address shifting species distribution and
40 changing population dynamics, such as the timing or location of
41 spawning events.

42
43 It was also suggested that we increase outreach opportunities
44 with the commercial fishing industry to assess what climate
45 change looks like in the Gulf, that we should change the
46 starting dates of fishing seasons, rather than shortening or
47 eliminating them, that we should evaluate federal management

1 needs and coordinate with other agencies to ensure that our
2 policies foster a healthy forage base to maintain ecosystem
3 resilience in the face of climate change.

4
5 We also heard that we need to ensure that our allocations are
6 fair, and we heard that mismanagement of red snapper has allowed
7 red snapper to overpopulate and decimate other species. we also
8 heard that allowing big money from commercial fishermen to drive
9 red snapper regulations is corrupt.

10
11 Now, the suggestions that we received to answer this question
12 that were outside of the council purview are within this
13 document, but I don't think it's necessary for me to take up
14 time and read those aloud today.

15
16 Next, we asked the question of are there any improvements in
17 science, monitoring, and cooperative research which could lead
18 to more resilient fisheries?

19
20 We were told to keep the politics out of the science. We were
21 told to ask recreational fisherman what's going on, because the
22 commercial fishermen lobby for profit. We heard that stringent
23 monitoring of the industry and municipal discharges, along with
24 strict enforcement of the Clean Water Act, would help.

25
26 We heard that we needed to use an independent audit of the
27 science. We were told to quit using models and do actual
28 sampling to make management decisions. We were asked to involve
29 divers, cameras, and other technology to monitor the real
30 biomass of our fisheries.

31
32 We were asked to require each state to monitor recreational
33 harvest with technology, such as Snapper Check, and to employ
34 people to check each boat ramp. It was suggested that we
35 improve data collection on fishing effort in general. It was
36 suggested that we study time-released fertilizer usage in areas
37 that are impacted by red tide.

38
39 It was also suggested that science, monitoring, and cooperative
40 research should be part of a climate-ready fisheries community
41 of practice between the council and the industry and other
42 communities.

43
44 Were told to perform annual stock assessments or updates for all
45 regulated species and expedite the way that we incorporate those
46 results into management. We were asked to develop a pathway to
47 implement electronic monitoring and reporting in the commercial

1 fisheries.

2
3 We were asked to use real-time IFQ market price data to inform
4 CPUE. It was also suggested that we increase dockside
5 enforcement of commercial, charter, and private angler landings
6 and offloads.

7
8 It was suggested that we improve accuracy, precision, and
9 timeliness of private angler catch, that we develop a protocol
10 for alternative fishery surveys and analyses to avoid survey
11 gaps like the ones experienced during COVID-19.

12
13 We heard that we should increase opportunities for commercial
14 fishermen to collect oceanographic and other ecosystem data. We
15 were also told to develop a recommendation to NOAA for ways to
16 close the timeliness gap between scientific data collection and
17 management implementation. Finally, we heard that we should
18 improve coordination between management objectives and
19 priorities and NOAA cooperative research funding opportunities,
20 and that concludes my report.

21
22 **CHAIRMAN BANKS:** Thank you, Emily. Any questions on that? Let
23 me flip back to my agenda here. I think our next part of the
24 agenda is to go over a draft letter that staff has put together.
25 Go ahead, Dr. Hollensead.

26
27 **DR. HOLLENSEAD:** Thank you, Mr. Chair. Council staff thought it
28 might be a good idea to begin trying to draft a letter that may
29 be considered. To tackle this, we decided to sort of put
30 together an opening paragraph, sort of discussing some of the
31 points of the Executive Order and then moving through and then
32 focus on a couple of highlights that could be quickly pulled out
33 of the letter there in that first paragraph. Currently, we have
34 five.

35
36 Those would be water quality and environmental covariates,
37 habitat and fisheries surveys, social and economic and human
38 dimensions and those sorts of things, and then we have a
39 bulleted list within those broader categories, and those bullet
40 points actually came from input from the public, topics that
41 were brought up at our last habitat meeting back in April, along
42 with some of the other letters that we saw from other regional
43 councils, and actually FWC, that was provided by Ms. Guyas at
44 our last meeting as well.

45
46 We looked at some of these things for other regional management
47 councils, and, where we saw topics that could be used

1 analogously here used in the Gulf of Mexico, we included those
2 as well, and then we also have sort of a follow-up summary
3 paragraph, to round out the letter.
4

5 The idea being that the committee can certainly look at any part
6 of this draft, but to help you all sort of kick off that you
7 would maybe start to construct some part of the body of the
8 letter, if you saw any bullet points that could be added, or
9 another broad category that you would like to include, or
10 anything like that, and that could sort of kick off the
11 discussion.
12

13 It wouldn't be intention to put everybody on the committee to
14 have to wrap this up now, but it was just something for you all
15 to consider, based on the discussions today.
16

17 **CHAIRMAN BANKS:** Thank you. What is our timeline for submittal
18 of this? Did they give us one?
19

20 **EXECUTIVE DIRECTOR SIMMONS:** I think the original Federal
21 Register notice public comment period has already ended, but my
22 understanding, from the previous presentation, from Mr. Rauch
23 and their staff, was that they would be taking comments from the
24 regional management councils for a period of time now, without a
25 deadline.
26

27 **CHAIRMAN BANKS:** Okay. Anybody on the committee have any
28 thoughts on what is included? I thought the staff did a good
29 job of covering most of the points that we had talked about in
30 our last committee meeting, but I would recommend that committee
31 members take a look this letter. Is there anything we're
32 missing, anything that's too much? Certainly give me some
33 feedback, so we can pass it back to the staff. Dr. Hollensead.
34

35 **DR. HOLLENSSEAD:** I just wanted to mention that, in looking at
36 all of these letters that had already been submitted and some
37 things from the public, we found some recurring themes, and so
38 that's what we sort of pulled out and put into the letter, many
39 of which were mentioned at our last meeting, and so, those, we
40 did try to highlight as much as we could.
41

42 **CHAIRMAN BANKS:** Any other comments from the committee on this?
43 Anybody feel like this letter is good to go, or do we want to
44 spend a little bit more time chewing on it and working on it? I
45 see thumbs-up on that. All right. I guess we will do a little
46 bit more work on it, Dr. Hollensead, before you all submit it.
47

1 **DR. HOLLENSEAD:** That sounds good, Mr. Chair.

2

3 **CHAIRMAN BANKS:** Thank you. Anything else from the committee?
4 Mr. Chairman, I think we're going to turn this over to you with
5 twenty extra minutes.

6

7 (Whereupon, the meeting adjourned on June 22, 2021.)

8

9

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