

GULF OF MEXICO FISHERY MANAGEMENT COUNCIL

CORAL MANAGEMENT COMMITTEE

Crowne Plaza @Bell Towers Shops

Fort Myers, Florida

June 21, 2022

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 Leann Bosarge.....Mississippi
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1 Clay Porch.....SEFSC
2 Steve Ross.....
3 Steve Viada.....CSA Ocean Services
4
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6

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1 The Coral Management Committee of the Gulf of Mexico Fishery
2 Management Council convened at the Crowne Plaza @Bell Towers
3 Shops in Fort Myers, Florida on Tuesday morning, June 21, 2022,
4 and was called to order by Chairman Tom Frazer.

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

10 **CHAIRMAN TOM FRAZER:** I will call to order the Coral Management
11 Committee. The members of that committee are myself, Ms.
12 Bosarge, Ms. Boggs, Mr. Dugas, Ms. McCawley, Dr. Shipp, and Mr.
13 Strelcheck.

14
15 The first item on the agenda is the Adoption of the Agenda, and
16 that would be Tab N, Number 1. Is there any changes or
17 modifications to the agenda? Not seeing any, is there a motion
18 to adopt the agenda? Motion made by Dr. Shipp. Is there a
19 second? It's going to be a short meeting. J.D. All right.
20 We've got a second, and we're going to consider the agenda
21 adopted.

22
23 The second item on the agenda is the Approval of the January
24 2020 Minutes. We haven't met as a committee in quite a while,
25 but that's Tab N, Number 2, and I'm wondering if there are any
26 modifications or edits to those minutes, as written. Not seeing
27 any, is there any opposition to approving the minutes? I am not
28 seeing any there, and so we'll consider the January 2020 minutes
29 approved, and that will lead us to Item III on the agenda, and
30 that would be the Action Guide and Next Steps, and that would be
31 Tab N, Number 3, and, Dr. Mendez-Ferrer, if you want lead us
32 through that, that would be great.

33
34 **DR. NATASHA MENDEZ-FERRER:** Thank you, Mr. Chair. Agenda Item
35 Number IV is the results from the coral request for proposals on
36 Gulf of Mexico mesophotic and deepwater corals, and, if the
37 committee remembers, the council contracted CSA Ocean Sciences
38 to assess available information on mesophotic and deep coral
39 locations in the Gulf of Mexico.

40
41 This stems from multiple requests, along the way, on reassessing
42 additional areas that could benefit from management, and so we
43 will have Mr. Viada summarizing the results and deliverables
44 that were produced as part of this effort, which included an
45 ecological assessment of the areas and coming up with a ranking
46 method that could be used for prioritizing which areas would
47 benefit from management.

1 We also have Dr. Steve Ross on the line, who may be able to
2 chime-in and be able to answer some of the questions the
3 committee may have regarding the ranking methodology, and so
4 this would be a good opportunity for the committee to ask any
5 questions related to the work that has ended.

6
7 Agenda Item Number V is the joint Coral AP and Coral SSC
8 recommendations and proposed next steps, and so I will be going
9 over some of the recommendations that the group came up with
10 during their February of this year meeting, where they reviewed
11 CSA's progress to-date. One of the recommendations that came up
12 is to continue looking -- Identifying additional areas that
13 would benefit from management measures, as well as creating a
14 coral working group, similar to what we did with Coral Amendment
15 9 to advise on the process.

16
17 I will also provide an overview of some of the work that has
18 been done and some of the questions that we can hash out with
19 the coral working group, and so what we're looking for from the
20 committee, at that point, is to provide recommendations on these
21 next steps and what we want to see, if we want to move forward
22 with a Coral Amendment 10. Then, if we have time, then Other
23 Business, or additional items can be brought up during Other
24 Business.

25
26 **CHAIRMAN FRAZER:** Thank you, Dr. Mendez-Ferrer, and so we'll go
27 ahead and start with the presentation by Mr. Viada, and it's on
28 the Gulf of Mexico mesophotic and deepwater coral assessment.
29 The floor is yours, sir.

30
31 **RESULTS FROM THE CORAL RFP: GULF OF MEXICO MESOPHOTIC AND**
32 **DEEPWATER CORAL ASSESSMENT**
33

34 **MR. STEVE VIADA:** Thank you very much. My name is Steve Viada,
35 and I'm a Senior Scientist with CSA Ocean Sciences, which was
36 called Continental Shelf Associates in the past. We've done
37 quite of bit of work in the Gulf of Mexico, and we put together
38 a team, along with Dr. Steve Ross, to go after this contract to
39 look at a number of deepwater, or deep-reef, areas in the
40 northern Gulf of Mexico and to conduct, or design and conduct,
41 an ecological assessment of these reefs, in hopes to identify
42 areas that might warrant additional protection from the council.

43
44 The project purpose, again, was prescriptive, and it was largely
45 prescriptive, in the RFP. We were going to identify a number of
46 sites that were not selected for their previous Coral Amendment
47 9 in 2018, and we were going to do a literature search on those
48 reefs, or reef areas, and then we were going to design this

1 ecological assessment.

2
3 The project tasks to accomplish this goal, we, obviously, needed
4 to work closely with the council to come up with a final list of
5 sites. We needed to do as comprehensive of a literature review
6 as we could, and we had some issues, which I'll discuss in a
7 moment, and then the assessment, the ecological assessment, and
8 I have several issues that concern us that I will talk about.
9 Then, lastly, we had some GIS products, a geodatabase and a web-
10 based dashboard, to present the final results of our study.

11
12 Task 1 was the selection of the sites. The RFP specified that
13 we would look at mesophotic and deepwater corals in federal
14 waters of the Gulf, from nine to 200 nautical miles offshore.
15 This involved looking at a number of sites that had not been
16 selected by the council in the past, again, most recently in
17 Coral Amendment 9, but were worthy of consideration for future
18 protection, and, in addition, in the RFP, we had recommended
19 that, if we, the contractor, knew of additional areas that might
20 warrant investigation and potential protection, we were to
21 identify those and to look at those as well.

22
23 Initially, we came up with sixty-seven project sites, in four
24 major regions of the Gulf. In consultation with the council and
25 NOAA, we shaved those down to forty-four sites. Three of the
26 sites included what we called mega-sites, and they were a
27 compilation of smaller individual sites that had been studied
28 more thoroughly than the individual sites, and so we thought
29 that would be -- It would give us a higher resolution of data
30 quality, and we -- CSA had identified eight sites, from studies
31 that we had done, four in the Pinnacle trends area, during the
32 old MMS studies in the 1990s and four for oil and gas operations
33 in the eastern Gulf for lease block characterization studies and
34 pipeline corridor studies.

35
36 I have provided a listing and then some figures to show the
37 relative locations of our sites, and, again, we divided it into
38 four regions of the Gulf, and then by area. For example, the
39 southeastern Gulf, we included the West Florida Slope, and we
40 divided that into the north and south. The Pinnacles Trends, or
41 Pinnacles, area was by itself, with a number of sites within
42 that area, and then, from CSA studies, we had those in Desoto
43 Canyon and Destin Dome.

44
45 We also included a number of sites along the shelf edge, in the
46 central and western Gulf planning areas for MMS, or for BOEM,
47 and in the South Texas Banks as well. These figures show,
48 again, the relative locations, and this is the southeastern

1 area, and it shows the individual sites as well as the two mega
2 sites along the west slope.

3
4 The Pinnacles area, or the Pinnacles Trend area, is the mega
5 site you see in the large pink polygon, and the individual
6 pinnacle sites selected are shown there. The CSA sites and
7 Destin Dome and the Desoto Canyon Rim are to the Northeast of
8 this polygon called the Pinnacles. These are the shelf-edge
9 features in the central and western planning area, and these are
10 the South Texas Banks.

11
12 Once we came up with the final list of sites to study, we had
13 our librarian, who we were very fortunate to have on staff, who
14 was Harbor Branch's librarian for a number of years, and she
15 conducted a thorough search of all those features. That came up
16 with a number of issues, and I'm sure all of you have done these
17 graphic reviews, and, first, the selection of key words to use
18 is critical, and the problem with a number of these sites, and
19 the colloquial names that are used to name the sites, are not
20 often captured in the literature path.

21
22 In the case of Pinnacles area, a lot of the previous studies,
23 where they were studied thoroughly, they were only sort as sort
24 of an alphanumeric site, a dive site, for example, when we were
25 looking at differences, or changes, in communities from east to
26 west from the Mississippi River. Later, they were named things
27 like Alabama Alps and Roughtongue Reef, things like that, and so
28 it causes problems with the literature review.

29
30 We had to accommodate that and try to backtrack and find which
31 site was B-7 and which was Alabama Alps, or something like that,
32 to try to get enough information on the sites.

33
34 In the beginning, we received an enormous number of hits, and it
35 was far above what we could really work on. A lot of the hits
36 might mention the bank name in one sentence of the whole report,
37 and so it was a laborious process, and we had to do a lot of
38 culling to get information that was pertinent for our study.
39 One of the requirements was to take our entire bibliographic
40 database and to convert it into an Endnote library, which we've
41 done.

42
43 The Task 3 for us was this ecological assessment. We have this
44 information, and how do we use it in a way that we can determine
45 a relative sensitivity between these banks and make comparisons,
46 based upon either numerical data or descriptive data.

47
48 What we decided to do was to look at -- Again, we needed to try

1 to be as comparative as possible between sites across the entire
2 Gulf, different sizes of banks, and, again, going back to the
3 literature search, some of these sites have not really been
4 researched in decades, and others were really researched. There
5 is a lot of fisheries data, looking say at red snapper
6 populations on a reef, as compared to an adjacent platform,
7 things like that that we picked up in the literature. There is
8 a large number of discrepancies in volumes and quality of data
9 that we found throughout the whole project.

10
11 We needed to come up with a scheme that we could compare these
12 data, and we also needed to include data such as fisheries
13 information, and so it made sense for us to use a matrix
14 initially to set up our data, to compile our data, I should say,
15 where we would have our sites on the vertical axis on the left,
16 and we had to look at a number of factors that would potentially
17 affect the sensitivity, or vulnerability, of these particular
18 deep reefs, and we would place these factors across the
19 horizontal axis, at the top of the matrix, and the data would be
20 placed inside each individual cell.

21
22 That way, we created this sort of this synoptic presentation
23 that was easy to look at and see the relative values for these
24 various factors that we came up with during the course of the
25 study. We looked at environmental and physical factors, some of
26 which were very straightforward, like area of the reef, or size
27 of the reef. The relief of the reef caused us some grief later
28 on, because of, again, the availability of data that would
29 provide us with that, either in the literature directly or from
30 say multibeam data.

31
32 The depth of the reef, that is the range of depth of the
33 feature, what is the base of the reef, what is the reef made of.
34 Is it largely unconsolidated sediment, with some outcrops, or is
35 it a large hard substrate feature?

36
37 Temperature and salinity regime near bottom, and then, of
38 course, a number of proximity factors, like how close is this
39 reef to shore, from a major river, from an active oil and gas
40 facility, and we included wind fields and offshore mining
41 operations, and wind fields are proposed by the federal
42 government, and, for Gulf mining, not yet, but we left them in
43 there as bookmarks for future use.

44
45 Shipping lanes, active shipping lanes, how close is the shipping
46 lane to the feature, other protected areas, marine protected
47 area, marine sanctuaries, and consistent military operations,
48 vessels passing through military operations, any ordinates,

1 discharge, et cetera, dumping areas, both ordinates and waste
2 dump from EPA data, and then proximity to benthic methane seeps.

3
4 Some of our biological data, we wanted to look at the taxonomic
5 richness of each of these locations, looking at selected benthic
6 fauna, scleractinian corals, octocorals, hydrocorals,
7 milleporids and stylasterids, if we could find it,
8 antipatharians, and then, of course, fishes.

9
10 We wanted to look at benthic fishing activity and intensity at
11 each of the sites, and then we focused on benthic longline and
12 bottom trawl, because these types of fishing activities would
13 mostly likely potentially impact reefs.

14
15 We have a listing of benthic fishing types and gear used at the
16 site, presence of any species that are invasive at the sites
17 that have been documented, any incidence of disease, primarily
18 coral disease, and a tabulation of research history by different
19 types, any current protections on the reefs, and then we were
20 asked to look at vulnerability to climate change. Again, I'll
21 talk about that in a moment, but that information is really not
22 available through the Gulf, at this level, at this time, and so
23 we had to be very broad. We had to identify it and discuss it
24 in paragraphs in the report, but to have it in our matrix -- The
25 information was just not available.

26
27 As I mentioned before, we worked with the council throughout the
28 whole project, because we wanted to make sure that they were
29 onboard with what we were doing, and a lot of these steps in the
30 ecological assessment are somewhat subjective, and we wanted to
31 make certain that the council, and NOAA, was in approval of what
32 we were doing throughout the project, so we didn't go off in
33 some other direction.

34
35 As I mentioned before, we populated these matrix cells, and all
36 of the proximity data were placed in a separate matrix that
37 included say the name of the river or the land mass that was in
38 proximity to the site, the coordinates of those places, and
39 where we obtained those data, and so we showed all of our work.

40
41 This is an example of just a segment of our data matrix,
42 compilation for the data matrix, showing the factors listed
43 across the top, and the sites below, and this is for the
44 southeast Gulf region, and the mega sites are in light blue, and
45 the other individual sites are clear. As you can see in the
46 matrix, some of the cells are blank, and those indicate data
47 gaps, and we had no information for those. For wind farms and
48 mining activities, we just bookmarked those with a not

1 available, or not applicable at this time. As you can see, some
2 of data are numerical and some are descriptive.

3
4 This is where -- This was really the most difficult part of the
5 study, how to then convert these data into some sort of rank
6 numerical scale that could be used to compare any of the sites
7 across the Gulf in an equal way, based, again, on the fact that
8 the data were not equally -- They were not equal, in terms of
9 quality and quantity. Steve, if you're on, can you discuss your
10 ranking strategy for this?

11
12 **DR. STEVE ROSS:** Thanks, Steve. Just to repeat a couple of
13 things that Steve said, the raw data is sort of the heart of the
14 project, and it's very labor intensive to populate that matrix,
15 but it's also fairly straightforward. There are two components
16 to these ecological factors that are in the report that are
17 worth noting. There's a definitions section, where we describe
18 how we defined these factors, and then there's a methodologies
19 section, in the ranking, about how we assigned ranking, and so
20 those two sections in the report are fairly important.

21
22 The matrix can be useful on several levels. If you were
23 interested in one or two factors across a variety of sites,
24 those data are there for comparison, and so the forty-four sites
25 are fairly easily looked at for say area of sites, the
26 distribution of area, or the distribution of certain species.

27
28 Of the -- We had forty-four sites, as Steve mentioned, and you
29 can't read a lot of these slides very well, because they're
30 huge, but this is an example of the matrix. Of the twenty-eight
31 sites that we identified, we had eighteen that had sufficient
32 data, and so the question, to us, was how do you use all of
33 these data to come up with an assessment of these sites, and so
34 we decided to apply an index routine, where we tried to make a
35 judgment about whether a particular factor was good or bad.

36
37 I think, even though we didn't document extensive literature for
38 most of these, they're fairly commonsense, and we tried to
39 define how we made that judgment, and so, if we go to the
40 frequency distribution slide, and I think that's Slide 22, the
41 data ended up grouping into usually -- I know these are hard to
42 read, but these are frequency distributions.

43
44 On the left, it's fairly easy to see, with the black dots, what
45 data are missing, and it's more the frequency distributions are
46 a little more clear on the right panel, which is a different
47 display of the same data, and so we did this for all eighteen
48 factors where there were sufficient data.

1
2 Most of the sites ended up in either three or four different
3 groupings, and we had points assigned to those groupings, and
4 those are emphasized in the report, and not to dwell too much on
5 these, but the idea here is to separate, you know, in the
6 simplest form, good from bad, vulnerable from less vulnerable,
7 but the idea is to try to tease these sites apart and into
8 groups.

9
10 Basically, once these points are assigned, every site and every
11 factor gets a point assignment, and those points are then
12 totaled, and so, in this particular routine, or iteration of
13 this routine, a perfect score, and so the least vulnerable and
14 maybe the highest quality total score, would have been 106. The
15 range of this exercise, for these sorts of sites, was twenty-
16 nine to seventy-two, with a mean of fifty-two, and so you can
17 see that we sort of have a middle-of-the-road bunch of sites,
18 and this leads to one of our recommendations, which we will
19 cover in a couple of minutes.

20
21 The goal here was to integrate all of these data into an
22 uncomplicated and repetitive method, one that could be repeated,
23 and this is one means to view an array of data across a large
24 area, and there are some issues that we identified within this
25 process, and there are some places that are debatable, and we
26 tried to cover those in our recommendations, and I think Steve
27 is going to go over those, but the recommendations, I think, are
28 an important part of the report, and they are intended to
29 strengthen this process and take care of some issues that we
30 found, and so, with that, I will turn it back over to Steve to
31 complete.

32
33 **MR. VIADA:** Thanks, Steve. As Steve had discussed, after we
34 came up with the means for which to rank these and to have some
35 comparative value, and I will backtrack just slightly, and, as I
36 mentioned, the quality and quantity of the data were very
37 variable, and, all of the benthic resources for taxonomic
38 richness, we had the lowest taxonomic level we could use was
39 genus, and you think, well, how is that possible, but a lot of
40 these studies only identify the genus, particularly say
41 octocorals, and they were using an RV, and they weren't making
42 total collections and inventories of specimens. Fish, however,
43 we were able to identify things to the species level.

44
45 Throughout the whole period of this project, we were find
46 ourselves having to tweak and polish things, because of, again,
47 the data availability or quality.

1 We found that adding additional sites would be a very important
2 and valuable condition to the project, and we were looking at a
3 number of sites that did not make the Coral Amendment 9, and
4 they weren't the big hitters, so to speak, like Flower Gardens
5 or Dry Tortugas, and so we were only comparing a certain subset
6 of what is out there in the Gulf, and it would have been very
7 valuable if we could have looked at the very best, with the ones
8 that we had, to see where they ranked, but we were sort of in
9 the sub-tier level, which made it a little more difficult to
10 say, all right, which ones really warrant protection out of this
11 set, and it would have been nice to have a little bit more
12 information with that.

13
14 Again, missing data, and there were holes in our dataset and
15 holes in the cells of the matrix that clearly show where there
16 are data gaps that future studies could go out and hopefully
17 clean some of these up, if there are concerns with particular
18 reef areas. Better bathymetric data, multibeam data, could
19 better identify areas that are subject to -- Such as relief, and
20 that's a tough one, really, to identify anyway, because of very
21 topographically-complex or multiple sets of outcrops, and how do
22 you really determine relief, and where is it really reef, and
23 where is it just an apron of unconsolidated sediment?

24
25 Again, the coral data are lacking in many of these places. A
26 lot of these areas have not been looked at in a while, or,
27 again, they have not been looked at thoroughly, with the idea of
28 a thorough biological inventory. A more detailed analysis,
29 looking at other potential impact-reducing factors that may
30 affect these reefs and how they may affect the ones that are
31 closer to shore, closer to the river, might be also very
32 helpful.

33
34 Again, these are things that could be added to this matrix, in
35 terms of an additional column of a factor and, again, filling in
36 some of these blanks. Maybe then redefining things, if you have
37 a better idea of the species complex, rather than just genus,
38 because, in some of the early reports in the past of the shelf-
39 edge banks of the Gulf, there were a number of things that were
40 identified to subspecies, and so we had a lot of things that
41 were just genus, and so there was a big difference, and it
42 really affected, I think, a lot of the fine-tuning of this
43 study.

44
45 A lot of the sites were very small. A lot of the sites were
46 just dive sites that were named, and they were named these
47 colloquial names, and that's a problem when you're comparing
48 something like say the Flower Gardens with the North Reed Site

1 and the West Florida Slope. They were more or less ROV dive
2 sites, and it's a very discrete area, versus, as you know, a
3 very large area like the Flower Gardens or the Dry Tortugas.

4
5 We were asked, during the workshop meeting that we had in
6 January, that one of the helpful tools, or helpful additions,
7 would be a table, or multiple tables, that would list exactly
8 which fish, which coral, which benthic taxa, were present at
9 each of the sites, and that would be quite a job, again, to go
10 through the entire literature search and identify exactly what
11 we have. That would be another benefit added to this project.

12
13 Again, in the ranking procedure, some, I think, of the
14 definitions and the way that we went about issuing numbers could
15 be improved if say the council used a panel of subject matter
16 experts, and they could come to sort of consensus on, all right,
17 are we looking at a range of one to ten, or one to five, or one
18 to three, based upon their expertise on the subject, whereas we
19 were doing the best we could with what we had, using the data
20 and seeing how it fell out and using our best judgement, in
21 cases of say proximity to rivers or to shore, to issue these
22 rank values.

23
24 This was our study, and there is, of course, a lot of the
25 details -- I had a limited amount of time to make this
26 presentation, and there are a lot of details, a lot of factors,
27 how we used the available information for each of the sites, but
28 that's what I have, and I will take questions now, if you have
29 some.

30
31 **CHAIRMAN FRAZER:** Okay. Thank you, Mr. Viada. Are there any
32 questions from the council? Ms. Bosarge.

33
34 **MS. LEANN BOSARGE:** They're in the process of finalizing the
35 report, right? It's done? Okay. Well, and so, if we do see
36 this again, your report, maybe if there's -- If you are making
37 any final decisions, and so I had trouble kind of making heads-
38 or-tails of the graph that you were using for the bottom trawl
39 effort, the shrimp trawl effort, right, and I think it's because
40 it's this logscale. It's in the -- Like on page 30 of the
41 actual background report, it says that it's trawling log, mean
42 hours plus one, and so each bank gets a zero, or I guess a three
43 or a six or an eight, and so that was a little confusing for me
44 to try and follow, as someone that's not a scientist.

45
46 Then the other thing that I wondered is, maybe if you do all go
47 down this path of bringing a group of experts back together to
48 look at this again, and I have one suggestion. I think, in

1 Coral Amendment 9, when we looked at shrimp trawling effort
2 relative to where these sites were located, I think we used the
3 BOEM lease plot areas, right, and I think those are three-
4 square-miles each, and I think that the areas, the grid cells,
5 that you all were using -- I think you said they're like ten-
6 kilometers-by-ten-kilometers.

7
8 I tried to do the conversion, but I think that's like thirty-
9 square-miles each, and so maybe we could hone-in on those, and
10 it would give you, I think, a better idea of if there really is
11 shrimp trawling effort close to some of these sites, because I
12 think the way you all did it was, if there was any shrimp
13 trawling in that grid, that thirty-square-mile grid, then that
14 was given a ranking of, hey, there is shrimp trawls right next
15 to the coral, which it may not be, and so just some suggestions
16 to hone-in on, and then have one question, but I see you have
17 some feedback.

18
19 **MR. VIADA:** Okay. Well, with the bottom trawling, we used the
20 Clark et al. data from 2018, who divided them up in ten-by-ten-
21 kilometer grids across the Gulf, and we superimposed that on our
22 site map, and then he presented those data, the ELB data, the
23 logbook data, and gave a max and min and mean of benthic trawl
24 activity, based upon the time span, and it's a little bit of a
25 jump that they used, I guess, to look at a relative scale of
26 activity, or intensity of activity, in a specific area.

27
28 Those are the data that we were presented with, and that's NMFS
29 Southeast Fisheries data from 2006 to 2013, and, again, it was
30 summarized by Clark and others in 2018.

31
32 Now, you're right that if any of the color -- He used different
33 colors to identify the relative amount of activity within each
34 ten-by-ten grid, and, if any of the grids fell into our sites,
35 to be conservative, we indicated that amount, and, again, we all
36 know that it would not be a wise idea to drag a trawl across the
37 pinnacles, and so it's probably done, well, fairly close and
38 adjacent to, and these guys, I'm sure, know where they're going,
39 but we wanted to -- We thought perhaps that these data would be
40 valuable for potential reef fish impacts of fish that are
41 passing between, and, of course, there's a number of these
42 little features that make up the pinnacles that reef fish could
43 inhabit, these small things where they actually are dragging
44 over them, and so that's how we used the fisheries data that we
45 had, and, again, the longline, similarly, and we used the NMFS
46 Southeast Fisheries VMS data for the longline information, but
47 in a similar fashion, and that was done with the five-by-five
48 kilometer grids.

1
2 Once again, we superimposed that on our site map, and we pulled
3 those data directly from that information. That could be fine-
4 tuned, and it could be refined, and that's the information that
5 we had, and we wanted to be conservative in our approach.
6

7 **CHAIRMAN FRAZER:** Go ahead, Leann.
8

9 **MS. BOSARGE:** Okay, and I appreciate that, and that kind of
10 leads to my next question, because I wasn't familiar with that
11 Clark et al. from 2018, and I saw, when I read through the part
12 where you were trying to see if there was any bottom trawling
13 close to some of these features, and that's really what you
14 relied on, and so, if you all meet again, my suggestion would be
15 to actually get the aggregated data from the Science Center
16 directly, because, when I read the report, it says that -- It
17 says effort, shrimp effort, used for this analysis was derived,
18 and that word made me nervous, from the NMFS Science Center data
19 from 2006 to 2013 that was summarized and published by Clark et
20 al.
21

22 It says, you know, specific ELB data is confidential, of course,
23 and, therefore, relative trawl effort, i.e., the estimate of
24 hours trawled within a given area, was provided by Clark, and
25 so, anyway, I guess the point is it sounds like there's a lot of
26 derivations going on here, and so I just want to make sure that,
27 when we get pretty deep into this -- Let's narrow down our box,
28 and we don't want to say that trawling thirty miles from the
29 coral is potentially real hazardous, and we need to get pretty
30 close to the coral for it to be hazardous, and so get the box a
31 little smaller, and then let's make sure we're actually getting
32 the data and not some derivation or model or a model of a model.
33

34 **MR. VIADA:** We were told all along, again, that those data were
35 confidential, that this was probably the most detailed
36 information that we could use in this project. I mean,
37 obviously, if we could get the real information, it would be
38 wonderful, but we were under the understanding that it was
39 proprietary, or confidential, and we couldn't access that.
40

41 **CHAIRMAN FRAZER:** Okay. Well, I guess, Leann, what I would
42 suggest at this point -- The report is done, and it's completed,
43 right, but I think the comments, and the points, that you're
44 making are relevant, as we kind of continue the dialogue,
45 potentially with a working group that will come up a little bit
46 later. Mr. Gill.
47

48 **MR. BOB GILL:** Thank you, Mr. Chairman. I appreciate it, since

1 I'm not on your committee, but, in the same area that Leann is
2 talking about, what struck me was that the bottom trawling data
3 was from 2013, and that's the newest data that was made
4 available, and that's nine years ago, and that's pre-Deepwater
5 Horizon, and so I don't quite understand the age thing, but that
6 brought up the question of how is this work going to incorporate
7 the effects of the dynamics of the ecosystem going on?

8
9 The bottom trawling data is one thing, and climate change and
10 coral impacts, et cetera, are another, and so it's not static
11 that we're dealing with here, but the age of that bottom-
12 trawling data bothers me. It says, to me, that we may not be
13 looking at what is reasonably current. You know, I don't have
14 that same concern with 2018, but we don't have it for the bottom
15 trawling data, and so I think there are some issues there, in
16 terms of how we look at this and make considerations, going
17 forward, given all of that. Thank you, Mr. Chairman.

18
19 **CHAIRMAN FRAZER:** Thank you, Mr. Gill. I'm not sure, Mr. Viada,
20 that there's a question in there for you, and I think that was a
21 bit more commentary. Are there any other questions for Mr.
22 Viada? All right. Seeing none, thank you for your
23 presentation.

24
25 It looks like we have -- On the agenda now is Agenda Item Number
26 V, and that has the -- It's the joint Coral AP and the Coral SSC
27 recommendations and the proposed next steps, and so, Dr. Mendez-
28 Ferrer.

29
30 **JOINT CORAL AP AND CORAL SSC RECOMMENDATIONS AND PROPOSED NEXT**
31 **STEPS**

32
33 **DR. MENDEZ-FERRER:** Thank you, Mr. Chair. I have been making
34 notes of all of those recommendations that have been brought up,
35 because those are great questions that we can address moving
36 forward, when we're revisiting these areas.

37
38 As the presentation comes up, we have had discussions about a
39 future coral amendment for quite a while now, but this project
40 that -- The results that you saw today are our way of making
41 strides forward, to be able to -- We were fortunate enough to be
42 able to have an outside source to help us begin the data
43 collection on these areas that were deemed data limited when
44 Coral Amendment 9 was being considered.

45
46 Like I said, we've had discussions about additional areas that
47 could be evaluated for a future -- Included in a future coral
48 amendment. Along the same lines, we've also seen sanctuary

1 expansions, and so there's a lot of areas that we need to be
2 taking another look at, in terms of what's out there, and do we
3 have enough data that would support a rationale for management.

4
5 Like I said, we're moving forward, and we were able to hire CSA,
6 in March of last year, to begin looking at these areas, and so
7 we've narrowed it down to forty-four being proposed in the
8 report. The Coral AP and the Coral SSC reviewed their work to-
9 day, in February of this year, and you all saw the results at
10 this meeting, and another thing that's kind of coming in, later
11 this year, is the anticipated release of the Florida Keys
12 National Marine Sanctuary draft rule for the expansion, and so
13 this is kind of a tentative date, and we're coordinating with
14 the Florida Keys staff to come present at our next August
15 meeting.

16
17 To recap, Coral Amendment 9 was implemented in November of 2020,
18 and it included -- It designated thirteen new HAPCs with fishing
19 regulations and eight without fishing regulations. We have --
20 Recently, we have had two sanctuary expansions of the Flower
21 Garden Banks, and that included fourteen additional reefs and
22 banks, and that was effective in March of last year, and the
23 tentative release of the draft rule for the Florida Keys
24 expansion is going to come out on July 12, and, like I said,
25 this is tentative, with a 100-day public comment period.

26
27 To remind the committee, the DEIS was released in August of
28 2019, and so we were able to provide comments at the beginning
29 of 2020, when we first saw the DEIS.

30
31 At the Coral AP and Coral SSC meeting, there were some good
32 discussions that took place, and the group had some
33 recommendations to CSA, for their report, and some of them were
34 able to be addressed, and others, due to time constraints and
35 funding constraints, were not able to be included in the report,
36 and Mr. Viada just went over some of those recommendations, but
37 we certainly have taken note to continue looking for those data
38 and how to improve when we're evaluating these areas for
39 management.

40
41 There were two recommendations that were specific to the
42 council, and one of them is for the council to consider
43 additional sites in the Gulf that were not part of the CSA
44 report, and these sites can include areas identified as priority
45 sites from meso and deep-bottom communities prioritization effort
46 by NOAA, and so what this group is referring to here is, last
47 year, we had a workshop with the mesophotic and benthic
48 community group at the agency to identify priority areas that

1 would benefit from restoration, and this is part of the funding
2 that came from the Deepwater Horizon settlement.

3
4 We have access to those sites, and we have the shape files.
5 There is some overlap in the areas with what CSA just presented,
6 and some additional areas that were recommended were Alternative
7 5, or what was included in the Flower Garden Banks expansion,
8 and so this -- If we want to take a look at those sites with a
9 group of coral experts, we can. We have the polygons and the
10 spatial files for those.

11
12 Then the next recommendation is that, as part of the development
13 of Coral Amendment 10, request that the council convene another
14 expert working group to review the CSA report and consider other
15 data to inform any additional HAPC sites. I'm not entirely sure
16 if we would need a motion for this, and I can certainly tell you
17 that we've already started giving some thought on convening this
18 group of experts and the kinds of questions that we can ask
19 them. I can stop here, in case anyone has any questions.

20
21 **CHAIRMAN FRAZER:** Are there any questions for Dr. Mendez-Ferrer?
22 J.D.

23
24 **MR. J.D. DUGAS:** Thank you, Mr. Chair. What is an expert
25 working group? Can you clarify?

26
27 **DR. MENDEZ-FERRER:** We would be reaching out to some of the
28 researchers that are actively collecting data and doing work
29 along these sites, and so there are monitoring efforts, and so
30 we would be reaching out to academia, as well as other people
31 who work at the agency, and so people who are actively doing the
32 data collection, so that we can have discussions on like site
33 prioritization and like what coral species are found in these
34 areas and whatnot.

35
36 **CHAIRMAN FRAZER:** Mr. Gill.

37
38 **MR. GILL:** Thank you, Mr. Chairman, and is that because they
39 don't have the expertise for these corals on the SSC or the
40 Coral AP? Is that the basis and the rationale for forming
41 another group?

42
43 **DR. MENDEZ-FERRER:** It will be in addition to, and so I guess we
44 could have them as guest speakers, but it might be more
45 beneficial to have a large group of people and have sort of like
46 a workshop, maybe, with a nice dashboard that we can have the
47 back-and-forth with the -- Some of these data are not published,
48 and so it would be good to have the actual people who are

1 collecting them say, hey, this is coming out, and we've seen
2 these trends, and I think it will be even more fruitful.

3
4 **CHAIRMAN FRAZER:** Ms. Boggs.

5
6 **MS. SUSAN BOGGS:** So what are we talking? You said a large
7 working group, and let's identify "large".

8
9 **DR. MENDEZ-FERRER:** We don't have a specific number of people,
10 but we were thinking along the lines of something that was
11 similarly done for Coral Amendment 9, and I think it was like
12 ten members.

13
14 **CHAIRMAN FRAZER:** I think there were five, in addition to the
15 SSC and the AP, and so a total of eleven, I think, Susan, was
16 the number. Susan.

17
18 **MS. BOGGS:** So, if you're saying eleven, we have six SSC -- I
19 mean, we have six AP members, and I think there's three on the
20 SSC, and so that's nine. You're looking at bringing two more
21 in? I mean, I'm just trying to get a feel, and I know where
22 this is headed, but I'm just -- We don't need it to blow it.
23 Everything we do seems to -- You know, you get so many people in
24 the room, and like we've got seventeen people here, and we can't
25 agree on anything.

26
27 **CHAIRMAN FRAZER:** Right, and so, at present, we have three
28 members on the Coral SSC and three on the Coral AP, right, and
29 so there would be five, and, I mean, it might be five, for
30 example, and is there six on the AP?

31
32 **DR. MENDEZ-FERRER:** I think we're supposed to designate the
33 Coral AP members at this meeting.

34
35 **MS. BOGGS:** I am looking at the website. Sorry.

36
37 **CHAIRMAN FRAZER:** That's okay, and so, I mean, it's a good
38 question. I mean, there's two steps here, right, and not only
39 is there a need to convene a working group that might take
40 advantage of the expertise that we would have on the SSC, as
41 well as the AP, and then what would the composition of that
42 group, working group, look like, and so I think there are two
43 things we have to consider here today. Ms. Bosarge.

44
45 **MS. BOSARGE:** I'm following you on putting that working group
46 together, and I think that's a good idea, and so what you
47 envision their charge being? Would the base starting point be
48 the assessment that was just presented to us, and they look at

1 that, and maybe fine-tune some of those things that the council
2 mentioned of, hey, you may want to actually look at this a
3 little bit differently, and we bring this in, and we don't use a
4 logscale and things like that, and then but what's the ultimate
5 charge for them?

6
7 **CHAIRMAN FRAZER:** I see John has his hand up, and I'll let him
8 go first.

9
10 **DR. JOHN FROESCHKE:** Thanks. Just speaking from the last time
11 we did, I mean, we brought these guys in, and, I mean, this is a
12 specialized group of people, with very specialized knowledge and
13 things like that, and so we brought them in, and we went through
14 -- We had identified a suite of areas, and we went through them
15 area-by-area and tried to winnow it down to, you know, the most
16 priority areas, and so I would assume that it's not hundreds of
17 areas, and so I would think we would go through every single one
18 of them that we're considering, and they would give them a hard
19 look and give us their feedback.

20
21 **CHAIRMAN FRAZER:** To expand on that a little bit, there were
22 certainly a number of areas that, you know, weren't followed up
23 on after Coral Amendment 9, but there's been new information
24 that was collected as part of this effort that we heard today,
25 right, and NOAA has new data that have been collected, and we've
26 learned more about the Flower Gardens Banks National Marine
27 Sanctuary expansion, and we'll expect to see similar information
28 from the Florida Keys National Marine Sanctuary, and so there's
29 a lot of new information.

30
31 I don't think anybody is really challenging, you know, the idea
32 that there are some significant habitats out there, right, and
33 they serve a variety of purposes, whether it's habitat, and we
34 had an essential fish habitat discussion earlier, and are they
35 going to harbor significant biodiversity, and are they valuable
36 in that regard, or are they a potential reservoir for corals
37 that are probably impacted in shallow sites, right, given
38 climate change and things like that.

39
40 I think, again, you can't do them all, right, and I don't think
41 the intent is to try to make every coral reef, or identified
42 coral hotspot, a HAPC in the Gulf of Mexico. I think what an
43 expert working group does is it identifies those areas that may
44 be particularly vulnerable, or provide a particular ecosystem
45 service, and start to prioritize them as which ones should we be
46 considering special protective status for. That would be the
47 nature of the group. Peter.

1 **MR. PETER HOOD:** Thank you, Mr. Chair. This is -- For me, my
2 life is usually reef fish, reef fish, reef fish, reef fish, and
3 so I haven't had a chance to really focus too much on coral, and
4 has there been any -- We're talking about Coral 10, and has
5 there been any motion by the council to start a new coral
6 amendment, which would be Coral 10? It has been? Okay. I just
7 wanted to make sure, because I didn't see it up on the website
8 or anything. Thank you.

9
10 **CHAIRMAN FRAZER:** Yes, and, Peter, just to follow-up on that, I
11 mean, this is a recommendation of the committee from 2018,
12 really, right, and so it takes a lot of time to collect the
13 information that we need, and, as you're well aware, there's a
14 lot of things that have been going on in the last couple of
15 years, and so I think we are in a position now to follow-up on
16 that, and the first step in that process is probably convening a
17 working group to start to identify and inventory all of the
18 areas beyond those that were briefed on today and then start to
19 think about what areas should be prioritized, and we may use
20 this approach, or we may use another one, but then, ultimately,
21 identify which ones we want to focus on, moving forward. Ms.
22 Bosarge.

23
24 **MS. BOSARGE:** So do you think that you would be amendable to
25 having maybe at least one fisherman involved in that working
26 group, so that, as we go through this idea of sites being at-
27 risk and degraded by possible different types of gears, that we
28 have some input there, sort of like the input that I gave, and
29 it's like, well, can we look at the size of the box, and, if
30 we're maybe trawling thirty miles from there, that's really not
31 relative to the coral and that sort of -- You know, is that
32 possible, and understanding the data that we're working with,
33 the ELB data, and knowing the history of how we've used it
34 before and making sure we use it the same, things like that, and
35 would that be okay with you, Dr. Frazer?

36
37 **CHAIRMAN FRAZER:** Yes, and I think that worked well for Coral
38 Amendment Number 9, and there was a good working relationship
39 with the shrimping community and a number of fishermen, and I
40 think it's always in our best interest to have broad
41 participation. Okay. I am not seeing any other questions. I
42 want to try to keep us on schedule, and so, Natasha, if you want
43 to keep moving.

44
45 **DR. MENDEZ-FERRER:** I only have a couple more slides. Some of
46 the questions that we were thinking about discussing with the
47 group of experts are, like Dr. Frazer has mentioned, how to
48 prioritize these areas, the discussion about boundaries, in

1 terms of like, you know, what kind of ecological value we have
2 to have multiple smaller sites, versus larger areas, and we also
3 have quite a few things going on with the CRCP work that we've
4 had at the council, with Dr. Basher, and the committee is due
5 for an update on this, and so we're thinking about bringing him
6 to a meeting, and so looking also at shallower sites.

7
8 Dr. Basher has also been working on some habitat suitability
9 models, taking into consideration climate change, and so all of
10 these can be included and talk about how to prioritize these
11 areas that are being affected by, you know, fishing activities,
12 in addition to additional environmental stressors.

13
14 Another thing is we need to migrate the dashboard that CSA
15 produced and which has also been included as part of the
16 background materials in your briefing book, and so update this
17 so that we can use it with the working group, and I think having
18 kind of this spatial tool is very useful, to be able to have
19 conversations and for the members to be able to access the data
20 and see what's out there for each one of those areas.

21
22 In light of the Flower Garden Banks expansion, we need to take
23 another look at those areas and would they benefit from also
24 being designated or what should be categorized as a HAPC, and,
25 in terms of thinking about when to convene the coral working
26 group, we think it would be more beneficial to have these
27 discussions after we have an idea of what's coming -- After the
28 Florida Keys Sanctuary proposal comes out and see if we need to
29 add on a couple other questions and more discussion on what's
30 going on in that area.

31
32 I think that's it for my presentation, if you have any other
33 questions or suggestions, and we've been certainly taking notes
34 on some of the concerns that have been brought up by the
35 committee.

36
37 **CHAIRMAN FRAZER:** J.D.

38
39 **MR. DUGAS:** Thank you, Mr. Chair. I guess who is going to fund
40 this working group? I mean, is this in our budget, or how does
41 this work?

42
43 **CHAIRMAN FRAZER:** Dr. Froeschke.

44
45 **DR. FROESCHKE:** I think this would just come out of our normal
46 operating funds. I mean, it's part of what we do.

47
48 **CHAIRMAN FRAZER:** Ms. Bosarge.

1
2 **MS. BOSARGE:** This is about the Florida Keys Sanctuary, and is
3 that okay?
4

5 **CHAIRMAN FRAZER:** You're between lunch.
6

7 **MS. BOSARGE:** Okay. I will be quick. I see the draft rule is
8 to be published on, tentatively, July 12, with a 100-day public
9 comment period. The Shrimp AP has been looking at that, and
10 they have some areas in that that would be extremely
11 detrimental, if they closed it and took that area in, and it's
12 been very important, and we've been staying on top of it.
13

14 I don't know how you get that Shrimp AP to give you feedback in
15 100 days from primetime shrimp season opening, but we need to be
16 cognizant of that and do what we can to look at this new release
17 and get that -- Get an extension on our comment period, from the
18 council perspective, or something, so that we can get that
19 information in there, because that's going to be extremely
20 important to the pink shrimp fishery, what they do down there or
21 don't do down there.
22

23 **CHAIRMAN FRAZER:** Thank you, Leann. Okay. I am not seeing any
24 other questions, but, in anticipation of the committee report in
25 Full Council, we might be prepared to make a motion to form a
26 working group in the initial stages of pursuing the development
27 of Coral Amendment 10. Other than that, is there any other
28 business to come before the committee? I am not seeing, and so,
29 Mr. Chair, I am going to turn it back over to you.
30

31 (Whereupon, the meeting adjourned on June 21, 2022.)
32
33
34

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