

Joint Coral AP and Special Coral SSC Meeting Summary February 7, 2022

The meeting of the Gulf of Mexico (Gulf) Fishery Management Council's (Council) Coral Advisory Panel (AP) and Special Coral Scientific and Statistical Committee (SSC) was convened at 9:00 AM EST on February 7, 2022. The agenda and the minutes from the September 16, 2019 Joint Coral AP and SSC meeting were approved as written.

Overview of Contract Roles and Responsibilities of the Coral AP and SSC

Recognizing the unique function and vulnerability of coral habitats, the Council has a history of conservation management for coral areas in the Gulf. Specifically, the Council has identified and described coral Habitat Areas of Particular Concern (HAPC). The purpose of this designation is to provide extra protections and conservation measures to areas that are rare and particularly vulnerable to environmental, biological, and anthropogenic impacts. In 2014, a Coral Working Group was convened and identified 47 priority areas for corals in the Gulf and many, but not all, of these sites were formally described as HAPCs in Coral Amendment 9 that was completed in 2018 and became effective November 2020. HAPCs are an important management tool in that they may have additional place-based regulations (e.g., some HAPCs enacted in Coral 9 restricts the use bottom contact gear) and are given additional consideration by the National Marine Fisheries Service when conducting its Essential Fish Habitat consultations for projects in the Gulf. To review and determine if other areas may also be appropriate for additional conservation and management measures, the Council advertised a competitive request for research proposals in December 2020 and CSA Ocean Sciences Inc. (CSA) was awarded the project. With the project nearly completed, the Coral AP and SSC will serve as the review body for the report and related deliverables.

Gulf of Mexico Fishery Management Council Mesophotic and Deepwater Coral Assessment

Mr. Steve Viada (CSA) provided an overview presentation of the Gulf Mesophotic and Deepwater Coral Assessment Report. The purpose of the project was to compile and synthesize information on mesophotic (water depth 30-150 m) and deep-water (water depth greater than 50m) corals identified by the 2014 Coral Working Group. The contractors were also asked to identify other ecologically important coral habitat that may benefit from management measures. The project comprised four deliverables: selection of coral areas for analysis, a comprehensive literature review, ecological assessment of selected coral areas, and design of a web-based dashboard with interactive maps of the selected coral areas.

After review of Coral Amendment 9, consultation with the Council, and examination by CSA, 44 project sites within four major regions in the Gulf were initially selected as project sites in the review. Several of these sites are nested within three "megsites" defined as larger conglomerate sites. The literature review focused on the most recent twenty years of research and resulted in 1,474 considered citations. Research conducted during the review period did not include standardized naming of reef sites which confounded the literature review somewhat. For the ecological assessment, a data matrix was constructed to rank reef site vulnerability based on a

number of environmental factors. The matrix development process resulted in a synoptic presentation of area-specific information that was used for site comparisons and rankings as part of the ecological assessment. The approach further allowed for the identification of data needs (represented as data gaps) and modification as new studies results are made available. CSA has also developed an interactive webpage with information within the matrix informing spatial attribute tables.

Several members discussed the methodologies for selecting the 44 coral areas of focus on the report. An SSC member thought that a number of sites in the northern Gulf had been omitted from the report and several members suggested some other data sources that may identify other areas eligible for selection. The group also inquired about the report not including areas that were known to be octocoral-dominated. Octocorals are no longer part of the Council's Fishery Management Unit, thus additional rationale would be necessary in order to provide protections under a Coral amendment. However, for comparison purposes and the fact that these deepwater areas may also have diverse fish abundance the group thought that the Council should be as comprehensive as possible, not limit their consideration of sites to the project sites included in the CSA report.

Motion: For the Council to consider additional sites in the Gulf that were not part of the CSA report. These sites can include areas identified as priority sites from Meso/Deep bottom communities prioritization effort by NOAA.

Motion carried with no opposition.

Members acknowledged the large list of environmental, biological, and anthropogenic factors used by CSA to generate the matrix and inform a hierarchical approach to assessing vulnerability of selected sites. However, several members stated that more consideration on the effects of climate change should be reflected in the report. Members agreed that, while these effects were not directly included into the ecological assessment matrix, they should be more thoroughly addressed in the report discussion section. Mr. Viada stated that additional language to the discussion would be included in the final version of the report.

Motion: That CSA add discussion on potential climate change impacts to deepwater corals in their report.

Motion carried with no opposition.

Mr. Viada then presented the report and solicited specific feedback from group members. Focused discussion was conducted on the environmental assessment factors used to inform the matrix. When reviewing the report figures for reef relief and water depth, members indicated that multi-beam data did exist for a few sites that were not presented in the report and suggested these data be included. Additionally, several group members suggested not considering sites encompassed in the west Florida wall since they have already been identified as HAPCs. Several members also expressed concern of comparing sites using coral species richness. The precision of taxonomic identification is known to vary between studies and determining a direct relationship may be unattainable for coral and fish species. The group agreed that clarifying language, caveats, and an

appendix should be included to aid in interpretation of the results. To aid the Council in potential selection of additional HAPCs, several group members recommended that an examination on the relationship between reef vertical relief and diversity would help focus management conservation measures. To this end, group members also stated that a further examination of current HAPCs that do not have additional, area specific regulations should be conducted to determine if additional conservation and management measures are needed .

Motion:

The Coral AP & SSC make the following recommendations for the CSA Report:

- **Use multi beam data for reef relief: Elvers, Horseshoe, Okeanos Ridge, Parker Bank, Pinnacle 1, Rankin Bright, Rezak Sidner Bank, West Pinnacle 2**
- **Removal of North Reed, Many Mounds, Long Mounds, west Florida wall. Sites already encompassed in the west Florida wall since they are already identified as HAPCs.**
- **Add discussion on species richness specific to corals. Depending on study identification of coral may not be species specific**
- **Add caveat outlining the concerns of species richness and level of effort for each individual study**
- **Add an appendix with the species present for corals and fish**
- **Consider examining the relationship between relief and diversity on their reefs**
- **Add evaluation of the HAPCs without regulations in the Gulf:**
 - **South Reed, Garden Banks 299, 535, Green Canyon 140 and 272, Green Canyon 234, Green Canyon 354, Mississippi 751 and Mississippi 885**
- **Use multi beam data for depth: West Pinnacle, Rankin Bright Bank, Pinnacle 1, Parker Bank, Horseshoe Bank, 29 Fathom Bank**

Motion carried with no opposition.

*Gulf of Mexico Fishery Management Council Mesophotic and Deepwater Coral Assessment
Deepwater Horizon Mesophotic and Deep Benthic Communities Restoration-Upcoming Activities
and Products*

NOAA staff provided a progress report on projects related to assessing Mesophotic and Deep Benthic Communities injury and restoration as a result of the 2010 Deepwater Horizon oil spill. Since the spill and working through the Natural Resource Damage Assessment, funding has been made available for a number of research projects including: mapping, ground-truthing and predictive habitat modeling, habitat assessment and evaluation, active protection and management, and coral propagation technique development. A two-year planning phase will begin in 2022, followed by a five-year implementation plan and one-year reporting stage. The presentation provided an overview of proposed experimental design, methods, project goals, and desired outcomes for each funded project.

Group members inquired about the coral propagation study and inquired as to whether NOAA principle investigators had considered working with licensed zoos and aquariums that have existing coral propagation programs. NOAA staff stated that they had been communicating with

these groups and were focused on using established husbandry techniques to explore possible reproductive success on selected coral species. Another member asked if any genetic examination would be conducted on collected species to ascertain information on stock connectivity and NOAA staff indicated that these examinations would be conducted. A member inquired as to whether there would be an opportunity for stakeholders to provide input on the location of mooring buoys within the Sanctuary reef sites. NOAA staff responded there is a budget to hold a series of workshops to gather input from stakeholders regarding the installation of mooring buoys, including sites outside of the Sanctuary.

Overview of Coral Reef Conservation Program Outcomes and Products titled: A proposal addressing changes in coral reef habitats and potential management implications to ensure the sustainability of coral reefs and associated fisheries habitats in the Gulf of Mexico

Dr. Basher (Council staff) gave an overview of products and services produced as part of the recent past and ongoing Coral Reef Conservation Program grant. SSC and AP Members were requested to provide feedback on demonstrated products and services. Members are also encouraged to utilize and share outreach materials including web applications produced as part of this effort.

Public Comment

Jake Emmert commented that he was supportive of the work being presented to the Coral AP and SSC on mesophotic communities and appreciated feedback provided by the AP and SSC.

Chad Hanson from the Pew Charitable Trusts recommended that existing HAPCs should be considered for expansion by the Council as well. He also supported focused examination of deepwater coral sites as these areas may become more vulnerable to anthropogenic affects as advances in fishing technology increases. Mr. Hanson also expressed support for convening a group of coral experts to comment on the development of Coral Amendment 10, as had been done during the development of Coral Amendment 9.

The group acknowledged that convening coral, shrimp, and other experts would be important in the development of Coral Amendment 10. With the CSA report near completion, the group agreed that this report, along with other information, would be valuable for informing Coral Amendment 10.

Motion: As part of the development of Coral Amendment 10, request that the Council convene another expert working group to review the CSA report and to consider other data to inform any additional HAPC sites.

Motion carried with no opposition.

The meeting was adjourned at 5:00 pm eastern time.

Meeting Participants

Coral AP

Morgan Kilgour, Ph.D., *Chair*
Scott Hickman, *Vice Chair*
Jon Paul Brooker
Shelly Krueger
Richard Ruzicka
Portia Sapp

Council Staff

John Froeschke, Ph.D.
Carrie Simmons, Ph.D.
Natasha Mendez-Ferrer, Ph.D.
Lisa Hollensead, Ph.D.
Zeenatul Basher, Ph.D.

Coral SSC

Sandra Brooke, Ph.D.
Paul Sammarco, Ph.D.
Andrew Shantz, Ph.D.

Council Representative

Tom Frazer, Ph.D.