



# Gulf of Mexico Fishery Management Council

*Managing Fishery Resources in the U.S. Federal Waters of the Gulf of Mexico*

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Tab E, No. 4(c)

## DRAFT FOR COUNCIL REVIEW

August 12, 2022

Dr. Jon Hare, Science and Research Director  
Northeast Fishery Science Center  
166 Water Street  
Woods Hole, MA 02543

Dear Dr. Hare:

The Gulf of Mexico Fishery Management Council (Council) appreciates the opportunity to comment on the draft *Southeast Regional Action Plan to Implement the NOAA Fisheries Climate Science Strategy in 2022-2024*. The Council is supportive of the research and planning being conducted by the Southeast Fishery Science Center (SEFSC) and Southeast Regional Office (SERO) to promote resiliency of natural marine resources in the Gulf of Mexico (Gulf) in the face of a changing global climate. We have provided some general comments on the Regional Action Plan (RAP) that are focused on the Gulf of Mexico (Gulf) Action Plan and categorized using the same seven NOAA Fisheries Climate Science Strategy 2015 roadmap objectives below.

### General Comments:

- 1). The Council appreciates the proactive considerations highlighted throughout the Gulf RAP but is discouraged to see many of the objectives are classified as future funding needed. Additionally, there are no other sources of funding identified; thus, it is unclear what will become of the unfunded RAP objectives in the Gulf in 2025. The Council recommends developing cooperative funding agreements with state agencies to address some of the issues that extend beyond the agencies' jurisdiction and that would address the RAP's goals.
- 2) The RAP would have benefited from including questions on the interview survey such as predicted costs, staff resources, and expertise as outlined in Appendix A. This would likely have aided in prioritization of priority action goals and roadmap objectives that could have resulted in achieving the strategy outcomes within the timeline (i.e., 2022-2024). Specifically, it would have been useful to include a metric for success or outcomes based on current or ongoing projects as they relate to the roadmap objectives and more largely the priority actions 1-16.
- 3) It would be helpful to link the specific actions outlined in the Table 1 to anticipated outcomes that would inform climate science and research specific to fisheries, as some of the action items appear to be a list of research and monitoring needs for each of the Council management regions, that may or may not be attributed climate change.

4) In Table 1, it is also unclear how each of the action items were prioritized for funding and are ongoing, compared to those listed in need of future funding. For example, was there a particular management need that drove the action item to move forward?

### **Objective 1: Climate-informed Reference Points**

The Council suggests including appropriate state scientific agencies in providing climate-informed reference points. For example, in the Gulf of Mexico, detrimental red tide events can be exacerbated or expanded by inland and coastal anthropogenic influences. An understanding of these effects can only be achieved by collaborating with Gulf states partners to help identify potential catastrophic red tide events that may prove harmful to marine fishery populations.

### **Objective 2: Robust Management Strategies**

The Council supports the development of the empirical dynamic modelling (EDM)-based management procedures for shrimp in the Gulf of Mexico and is optimistic that this modeling approach or other suitable methods can be developed to meet the needs of all penaeid shrimp species, including pink shrimp, that need an updated stock assessment with refined status determination criterion to inform management benchmarks.

The Council continues to support the conservation of protected resources such as sea turtles. It is unclear how this action would result in a robust management strategy. The Council suggests a better explanation of the proposed Operating Model and the Management strategy evaluation for Kemp's Ridley sea turtles.

The Council has no concerns with integrating climate and ecosystem considerations in its descriptions of Essential Fish Habitat (EFH); however, the RAP incorrectly states that these factors are incorporated into the Gulf's current EFH descriptions. While some work on this topic has been considered for coral Habitat Areas of Particular Concern in the Gulf, to date, EFH descriptions for other managed species are qualitatively generated based on maps of twelve benthic habitat types, five ecoregions, and species life history tables. No physicochemical or climate change effects are currently considered for identifying and describing EFH. Even using the current qualitative methodology for describing EFH, the paucity of data for most managed species by life stage results in EFH designations that are broadly defined (i.e. simply water column associated) and encompass the entire economic exclusion zone, which is not particularly informative. Rather than promote a goal that is inaccurate, the Council suggests modifying this portion of the RAP to instead focusing research on species surveys that collect environmental covariate data for all assess life stages (eggs, larva, early juvenile, late juvenile, adult, and spawning adult).

### **Objective 3: Adaptive Management Processes**

The Council supports this concept but suggests obtaining a baseline the communities' socioeconomic data so that the RAP results are useful for quantifying fishing communities and businesses socioeconomic resilience due to climate change factors. The Council also suggests that the RAP consider inclusions of the regional experts on the Council's Standing and Special SSCs, APs, along with the Outreach and Education Technical Committee as review partners on

monitoring the development of any SEFSC socioeconomic plan to measure socioeconomic resilience due to climate change factors.

#### **Objective 4: Identify Future States of Marine and Coastal Ecosystems**

The Council is supportive of the various actions identified under this objective, but suggests the focus be given to obtain basic life history information (i.e., presence/absence information and simultaneous observation of environmental covariates) for stock assessments that can also be used as a baseline to compare potential impacts of climate change, harmful algal blooms, and anthropogenic disasters. In addition, the actions outlined in Objective 4 would require strong interagency collaboration, especially as it relates to matters of water quality, especially as Priority 8 focuses on coral restoration.

#### **Objective 5: Understand Mechanism of Change**

Some of the actions under this objective, such as G2.15 may be better suited for academic partners to conduct, due to the prescriptive nature of the outlined research objectives. The Council would suggest identifying and adding academic partners that may be better equipped to address these actions.

#### **Objective 6: Track Change and Provide Early Warnings**

Specific to Action Number G2.18, the Council is fully supportive of continued and expanded research surveys that would inform novel approaches for identifying and describing EFH (i.e., sample the ecosystem from inshore estuarine areas out to the continental shelf) in the Gulf. However, much of remaining portion of this action appears to basic fishery-independent monitoring for species management versus novel research. Perhaps the considerations within this action could be better teased apart.

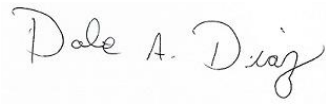
#### **Objective 7: Infrastructure to Deliver Actionable Information**

The Council welcomes any NOAA staff to present on any deliverables of the RAP. The Council also suggests the RAP include its Ecosystem Technical Committee as a review partner as RAP results are made available.

#### **Overall comment summary**

The Council again thanks you for the opportunity to comment and recognizes that complicated fishery management issues are further confounded when also considered unknown affects from climate change. Continued environmental monitoring, collaboration with numerous partners, and novel planning approaches will be necessary to ensure resiliency within the Gulf. The Council is supportive of many of the goals identified in the RAP, invites collaboration, and NOAA staff to present ongoing work regarding the RAP at is future meetings.

Sincerely,

A handwritten signature in cursive script that reads "Dale A. Diaz". The signature is written in dark ink on a light-colored background.

Mr. Dale A. Diaz  
Council Chair

Cc: Gulf Council / Council staff / Andy Strelcheck / Clay Porch, Ph. D. / John Walter, Ph.D.