

DRAFT Letter on E.O. 14008 Section 216(c)

Dr. Doremus:

The Gulf of Mexico Fishery Management Council (Gulf Council) appreciates the opportunity to provide comments and recommendations on Executive Order (E.O.) 14008: “Tackling the Climate Crisis at Home and Abroad”. The expertise of the Gulf Council is most constructive to “Section 216(c) Conserving Our Nation’s Lands and Waters” which strives to make fisheries and protected resources more resilient to climate change. Considerations in Section 216(c) also include changes in management and conservation measures, improvements in science, monitoring, and cooperative research. To effectively manage fisheries and protected resources to the effects of climate change, numerous state and federal agencies will need to work in unison to identify and achieve common management and conservation goals. The Gulf Council is uniquely positioned to support the achievement of these goals. The Gulf Council comprises experts from various fisheries and scientific fields that work with state and federal partners. The Council also relies on input from a variety of stakeholders and scientific experts. However, additional resources and processes are required to achieve the E.O. objectives. In the following recommendations, the Gulf Council focuses on the following categories: 1) water quality and environmental co-variates; 2) habitat and fisheries surveys; 3) social and economic dimensions; 4) advancing stock assessments, and; 5) consideration of ecosystem interactions.

Water quality and environmental co-variates

- Regularly provide a variety of physiochemical data (i.e., depth-dependent water temperatures, pH) to help the Council better understand trends in environmental changes related to climate change effects within the Gulf of Mexico
- Use these environmental data to model and inform fisheries management such as abundance forecasting, year class strength, or estimates natural mortality of Gulf fishery stocks (the Gulf Council has already directly incorporated effects of a hazardous red tide bloom into the red grouper stock assessment)

Habitat and fisheries surveys

- Improve basic scientific information for catch monitoring and stock population surveys
- Consider climate induced habitat changes and the effect on ecosystems and fisheries as a result climate change
 - Example: Do saltmarsh habitats function equivalently to mangrove habitats in fish and spiny lobster production as mangroves are becoming more predominate due to climate change?
- The Council supports surveys that investigate abundance of marine species at all trophic levels including marine mammals and other protected species

- Provide consistent funding and support of multiple fisheries and ecosystem surveys that form the fundamental basis for fisheries management

Social and economic dimensions

- Consider economic resiliency and that the influence of climate factors on that stability would affect the next generation of fishermen
 - Example: State of Louisiana strives to consider options to industry stakeholders to improve business resiliency such as expanding areas to fishing and modifying marketing strategies to include more species

Advancing stock assessments

- Reduce uncertainty and estimation errors in MRIP to the extent practicable to promote timely and effective policy making. Improve standardization within the survey and across regions as standardization may be necessary to disentangle effects from a changing climate versus typical ecosystem variability. This has the potential to slow the implementation of appropriate policy responses necessary to promote climate resilient ecosystems and fisheries
- Recognize that estimates of fundamental MSA criteria such as Maximum Sustainable Yield (MSY), that typically rely upon long-term historical conditions, may require more frequent review and potential modification under an altered climate regime

Consideration of ecosystem interactions

- Improve the understanding of multi-species interactions that may change and require different management approaches in a changing climate
- Recognize that climate change may alter fish distribution and require more inter-regional cooperation

The Council is committed to working with NOAA to achieve the goals outlined in Section 216 (c). Within the Gulf of Mexico, fisheries can be sustainably managed in the face of climate change if NOAA is committed to providing funding and support for basic research needs associated with monitoring trends in environmental, biological, social, and economic processes. Data collection on these trends is crucial to developing robust and timely stock assessment that are the foundation of effective fisheries management. With climate change comes an opportunity to investigate interactions beyond the scope of traditional fisheries management approaches and more directly consider ecosystem effects in management decisions. The Gulf Council is supported by several technical committees of regional experts that can aid in the development of a fishery ecosystem plan and strives to incorporate more ecosystem-level variables into stock assessments.

The Gulf Council enthusiastically supports the objectives of the E.O. and is grateful for the opportunity to comment. NOAA should continue to engage the Council, partnering state and

federal agencies, and stakeholders during their continued progress on the E.O. The Gulf Council invites NOAA leadership to provide progress updates and encourages this leadership to continue their collection of comments on the E.O. throughout 2021.