UNITED STATES DEPARTMENT OF COMMERCE
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14 November, 2017

006660NOV2017

Ms. Leann Bosarge, Chair
Gulf of Mexico Fishery Management Council
2203 N. Lois Ave. Suite 1100
Tampa, Florida 33607

Dear Ms. Bosarge:

Earlier this year, you sent a letter requesting two analyses: 1) an economic analysis of the Texas closure, and 2) an economic analysis on extending the closure to the adjacent federal waters. I am writing to let you know that we will be unable to provide these analyses by early 2018, as requested. The reasons for this are the following:

The requested analysis will require the building of a new type of model. The requested economic valuation is not in itself complex, but requires as an input a detailed biological evaluation of the Texas closure. The new "stock synthesis" stock assessment models have not yet been adapted to this particular use. In particular, a new bio-economic model will have to be developed that will require time- and area-specific growth, natural and fishing mortality, and other time- and spatially-explicit information. This would allow for the estimation of total harvest by size category of shrimp with or without a closure in effect. The economic benefits or costs can then be calculated in a straightforward manner. Including possible feedbacks between the economics and the biology will require that the stock assessment scientist collaborate with an economist during model development. Our scientists estimate that it would take a number of months to develop this model.

We are in the process of recruiting for our lead shrimp stock assessment scientist and this vacancy has also slowed our ability to collaborate on the bio-economic modeling. Similar efforts in prior decades were usually contracted out, most notably to Dr. Wade Griffin, who developed the model that was used in the last Texas Closure bio-economic analysis that was conducted over 10 years ago. That model is obsolete and no longer available to use for this analysis.

The Gulf Shrimp System, which is the primary data source for landings and revenue and consolidates state trip tickets and information collected by federal port agents, is currently undergoing data management changes to address some issues. One issue of particular significance to the requested analysis is the inconsistent collection of shrimp size information (since higher prices for large shrimp are a central motive for the closures). It will take some time for us to work through these issues to understand what kind of impact they could have on our model estimates.

The SEFSC welcomes the opportunity to provide the information you require about the Texas closure but we anticipate that we would need another year in order to carry out the analysis. Please don't hesitate to contact me if you wish to discuss this further.

Sincerely,

Bonnie J. Ponwith, Ph.D.
Science and Research Director