

To: Horseshoe Crab Management Board

From: Dave Smith, USGS EESC

3 Nov 2022

Re: Addendum VIII

Thank you for the opportunity to comment. I'm a researcher with the USGS and have served on the stock assessment and ARM sub-committees.

The Board faces a choice today with far-reaching implications. But I'm not referring to the choice between a past addendum and the revised ARM Framework.

In the Harvard Business Review, Garvin and Roberto¹ contrasted two approaches to making decisions. *Advocacy* characterizes one approach, and *Inquiry* describes the other. *Advocacy* is a contest, while *Inquiry* engages in collaborative problem-solving. Advocates lobby while inquirers test and evaluate. Participants in *Advocacy* are spokespeople who dismiss different views and attempt to limit options. Those involved in *Inquiry* are critical thinkers who strive to include multiple viewpoints, explore options in the decision space, and accept constructive criticism. *Advocacy* results in winners and losers. *Inquiry* seeks collective ownership.

The ARM Framework, grounded in Structured Decision Making and Decision Analysis, is squarely and deliberately characterized by *Inquiry*. In the Framework, you can see multiple viewpoints in the reward function and evidence-based exploration of decision options. In developing and revising the ARM, you can see extensive testing, evaluation, critical review, and incorporation of valid critiques, as in any scientific process. The vision of the ARM Framework is to represent the stakeholders' values in the reward function and be responsive to learning through evidence.

So, the choice before the Board is more than between two harvest levels. If the Board rejects the ARM, then the Board will have rejected a decade-long project to approach decision-making through *Inquiry*. What can this Board, or any Board, expect from technical experts if they turn their backs on such a dedicated and good-faith effort?

The opportunity before the Board is to endorse the ARM Framework and use it to represent all stakeholder values and incorporate the multiple lines of evidence to help the Board make informed decisions. Furthermore, the ARM Framework can readily address any of the most recent critiques.

Thank you



¹ Garvin, DA, and MA Roberto. 2001. What you don't know about making decisions. Pg.80 in Harvard Business Review. 2013. On making smart decisions. Harvard Business School Publishing.