

July 21, 2014

The Honorable Dr. Kathryn Sullivan  
Administrator  
National Oceanic and Atmospheric Administration  
Herbert C. Hoover Building, Room 6811  
14<sup>th</sup> Street & Constitution Avenue, NW  
Washington, DC 20230

Dear Dr. Sullivan:

On behalf of the NOAA Science Advisory Board (SAB), I am pleased to transmit to you the review report,  
“Exploration of Ecosystem-Based Fishery Management in the United States.”

The Ecosystem Sciences and Management Working Group (ESMWG) prepared this report on request of the SAB, which then reviewed and approved it at the June 2014 SAB meeting.

The goal of the report is to assess the progress toward implementation of Ecosystem-Based Fishery Management (EBFM) in the United States (US) regional fisheries management council system during the period of 1999-2014, as well as to assess the status and use of ecosystem science in fisheries management. To obtain regional perspectives on these issues, representatives of regional fishery science centers (RFSCs) and regional fishery management councils (RFMCs) provided information during ESMWG meetings. A synthesis of observations was created from the responses to questions posed to RFSCs and RFMCs as well as from regional Council and Science Center documents and peer-reviewed publications.

The ESMWG concluded the science enterprise for fisheries management is strong, with a large amount of the effort going into stock assessments, essential fish habitat and other mandates that are at the foundation of EBFM. Additionally, a considerable amount of research is being developed and used to support regional council decision making. Greater investment in social sciences needed for EBFM to be effective a coupled socio-ecological system. RFMCs are using EBFM science in management, but the demand for and use of ecosystem science is highly variable by council region. Where RFMCs commit to development and implementation of Fishery Ecosystem Plans there is increased demand for and use of EBFM science..

The report makes a principal recommendation and seven primary recommendations to NOAA Fisheries (National Marine Fisheries Service). The principal recommendation to be implemented over the next few years is that a needs assessment should be undertaken to prioritize ecosystem science inputs regionally and nationally that will contribute to improving the performance of Councils in meeting the challenges posed by climate change, changing economic and social factors affecting fisheries management, etc.

The ESMWG also makes the following seven primary recommendations that reinforce current practices and can to be implemented immediately for improving EBFM science and its utilization:

- 1.) Continue and expand support to Council processes for ecosystem science based on a prioritized needs assessment, including, for example, retrospective performance evaluations to investigate how much difference various types of ecosystem inputs could have made, had they been available and wisely used in past ecosystem decision-making.
- 2.) Invest more in the development of science to understand fishery management as a coupled socio-ecological system.

- 3.) Facilitate cross-region and council interactions on EBFM Science and Management. Examples exist where the importance of sharing ideas and making use of peer effects can be used to overcome inertia.
- 4.) Invest in tools for assessing trade-offs [spatial and temporal] of alternative management decisions.
- 5.) Assess and implement best practices for coordinating and integrating ecosystem science across NOAA and with partners.
- 6.) Develop training and capacity building in Council/ Science Center interactions to experiment with model results, scenarios and trade-off analyses for long term EBFM.
- 7.) Continue to lead international efforts to use EBFM in fishery management, e.g., in Regional Fishery Management Organizations as well as bi and multilateral fora.

The SAB encourages NOAA to consider incorporating these recommendations into its fishery science programs. The SAB respectfully requests a response from NOAA to these recommendations by the Summer 2015 SAB meeting. Please let me know if you have any questions, comments or concerns.

Sincerely,



Lynn Scarlett  
Chair, NOAA Science Advisory Board  
Managing Director for Public Policy, The Nature Conservancy

Attachment

cc: Peter Kareiva  
Robert Hicks  
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