September 24, 2021

Dr. Richard W. Spinrad  
Under Secretary of Commerce for Oceans and Atmosphere & NOAA Administrator  
Herbert C. Hoover Building, Room 6811  
14th Street & Constitution Avenue, NW  
Washington, DC 20230

Dear Dr. Spinrad:

Subject: SAB Review of the Draft NOAA Climate and Fisheries Implementation Approach

On behalf of the NOAA Science Advisory Board (SAB), I am pleased to transmit to you a SAB report on the “Review of the Draft NOAA Climate and Fisheries Initiative (CFI) Implementation Approach.” The SAB approved this report at its August 25, 2021 virtual meeting. The SAB’s Climate Working Group (CWG) prepared this report. The purpose of the report was to review the Implementation Approach developed by NOAA, under the purview of the Weather Water Climate Board, and provide substantive comments on its scope and detail. The Approach itself builds on the NOAA Climate and Fisheries Initiative White Paper, which was endorsed by the Weather Water Climate Board in 2020.

The CWG and SAB agreed the authors drafted a thoughtful Implementation Approach. The SAB commends the authors for their progress towards implementation of this ambitious initiative, which demonstrates that NOAA is preparing to fill key gaps that exist in its current ocean modeling and decision-support systems.

The report makes the following recommendations:

1. **Accelerate implementation of an integrated modeling system** – The CFI should designate responsible parties within NOAA for each of the critical enhancements, the required components across the NOAA line offices, and stress the necessity of coordination between them.
2. **Stakeholder engagement in products and process** – The CFI should elaborate on approaches to working with more diverse groups of interested and affected stakeholders, in order to ensure that models inform management products providing usable information for decision-making.
3. **Trust in products and process** – As the CFI proceeds, NOAA should continue its exemplary practices in assuring scientific integrity and consider how to further enhance trust as it engages with diverse stakeholders who are making decisions in a dynamic scientific environment under deep uncertainty.
4. **Upgrading the ocean observing system** – The CFI should engage across NOAA to upgrade the ocean observing system to fill crucial gaps such as physical observations on the shelf and nearshore, and biogeochemical observations in shelf, nearshore, and offshore waters. These data are central to enabling the attribution and predictive capability called for by the CFI.

5. **Multi-stressor predictions at multiple scales** – NOAA’s CFI should extend to include steps towards development of climate-informed, multi-stressor predictions at multiple temporal and spatial scales that meet the needs of One NOAA managers and stakeholders.

The SAB accepted the review report with no changes, but would like to emphasize the following point: it is critical for success that NOAA coordinate efforts to accelerate the transition to an integrated modeling system. “Integrated modeling” may have different interpretations, so it is imperative for leadership to manage a well-coordinated effort to ensure alignment and success. Such an effort includes identifying responsible parties, identifying designated resources, and developing detailed actions for each component of the initiative to achieve successful accelerated integration.

The SAB values the advice and expertise of the CWG and appreciates its excellent work in taking on this review.

The SAB looks forward to hearing NOAA’s response to these recommendations at the first opportunity. Please let me know if you have any questions, comments, or concerns.

Very Respectfully,

John Kreider  
Chair, NOAA Science Advisory Board


CC: Karen Hyun  
Kirstin Dow  
Letise LaFeir  
Adrian Mahoney  
Michael Weiss  
Cynthia Decker  
Craig McLean  
Tiffany Atkinson  
Janet Coit  
Courtney Edwards  
Cisco Werner  
David Detlor  
Wayne Higgins  
Joellen Russell