



SCIENCE ADVISORY BOARD

May 23, 2023

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: Transmittal of the NOAA Science Advisory Board Climate Working Group (CWG)
Report on Climate Information Needs for 5-10 Year Hazard Mitigation Planning Cycles**

On behalf of the NOAA Science Advisory Board (SAB), I am pleased to transmit to you the report developed by the CWG, *Climate Information Needs for 5-10 Year Hazard Mitigation Planning Cycles*. The report explores how NOAA research, operations, and facilities could be adapted to better support early identification, monitoring, and communication of emerging hazards and vulnerabilities in communities and ecosystems confronting near-term changes. The report was developed in response to how near-term changes in the characteristics of climate-related hazards are rendering some communities, infrastructure systems, and ecosystems highly vulnerable to extreme events. Decision-makers need information to prioritize funding in 2- to 5-year budgets and to implement decisions for mitigation solutions on the 5- to 10-year time horizons mandated by local, state, and federal agencies.

The overarching recommendation is that a clearly defined pathway is required to document the process of engaging with decision-makers to identify the characteristics of needed climate products and to transition conceptual climate products from research to operations. This pathway would include a process outlining key decision points and the role of research, product development, and data services teams. The process should be accompanied by a roadmap which is periodically updated to report climate research products that are successfully transitioned to operations, to update the status of climate products in development, and to identify products that are a priority for transition to operations.

The report made further recommendations on the characteristics of four emerging climate hazards addressed under the Climate Ready Nation Initiative: Drought, Flood, Extreme Heat, and Wildfires.

NOAA is uniquely suited to support decision-makers addressing emerging climate hazards and vulnerabilities through: its research on understanding and predicting changes in climate, weather, ocean, and coasts; climate services which share that knowledge and information with others; and stewardship to conserve and manage coastal and marine ecosystems and resources. For decision-makers on the ground and other agencies with responsibilities to climate-sensitive sectors, groups, and regions, NOAA is the trusted source for this type of information. With its prediction mandate, NOAA is best placed to make critical decisions about how best to make climate projections which balance the state of science with the pressing need for actionable information.

The SAB greatly appreciates the opportunity to provide this advice to NOAA. We look forward to engagement with NOAA on this critical topic in coming years.

Very Respectfully,



John R. Kreider
SAB Chair

Cc: Sarah Kapnick
Karen Hyun
Michael Weiss
Steve Thur
Wayne Higgins
Benjamin DeAngelo
Annarita Mariotti
Jeff Privette
Keelin Kuipers
Kenric Osgood
Joellen Russell
Kirstin Dow
Don Wuebbles
Chelle Gentemann
Kwabena Asante
Cynthia Decker
Katherine Longmire
Andrew Peck
Viviane Silva
Karin Bucht

Attachment: NOAA Science Advisory Board CWG Report on Climate Information Needs for 5-10 Year Hazard Mitigation Planning Cycles