



SCIENCE ADVISORY BOARD

January 3, 2024

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 Environmental Information Services Working Group (EISWG) Report on Radar Gaps

On behalf of the NOAA Science Advisory Board (SAB), I am pleased to transmit to you the SAB Environmental Information Services Working Group (EISWG) *Report on Radar Gaps*. The EISWG presented this report to the SAB, and the SAB approved it at its November 15-16, 2023, meeting. The report was developed by the SAB's EISWG, in consultation with external subject matter experts and NOAA experts.

This report's findings describe how the current NEXRAD radar coverage creates additional vulnerability for already unrepresented and vulnerable populations, how gap-filling radars differ from NEXRAD radars, the origins of radar gaps, how gap-filling radars help, and how this presents an opportunity for NOAA to help fulfill its responsibility to protect public safety.

The report notes that the Nation's need for gap-filling radars has not diminished in the two years since the 2021 PWR Report recommendations and emphasizes the urgency of taking action given the social equity implications and extreme weather impacts to people in vulnerable communities.

Specifically, the report recommends that NOAA:

1. **Establish a gap-filling radar data strategy:** Using the EISWG Report (A NESDIS Observing System Backbone Framework) define a radar backbone architecture that will best serve the Nation.
2. **Use commercial data already in hand:** More fully leverage currently available commercial radar data, expand it, and use it directly in operations. For any radar data NOAA acquires commercially and uses within NOAA operations, thus incorporating them into the Nation's foundational weather data, NOAA should also acquire the appropriate license to distribute the data on an equal-opportunity basis at no cost to

the end user, in the same format and with the same timeliness as it would have done if the radar data originated from NOAA-owned and operated equipment.

3. **Act immediately to implement the gap-filling radar data strategy:** Using X-band and C-band radars (e.g., commercial data purchases and/or NOAA-deployed backbone), prioritize coverage of, and engagement with, underserved populations.

The SAB encourages NOAA to utilize the SAB and its expertise to help move these plans forward where appropriate. Please let me know if you have any questions, comments, or concerns, or if the SAB can be of further assistance.

Very respectfully,

A handwritten signature in blue ink, reading "John R. Kreider". The signature is fluid and cursive, with the first name "John" being the most prominent.

John R. Kreider
SAB Chair

Cc: Sarah Kapnick
Karen Hyun
Michael Weiss
Brad Colman
Scott Glenn
F. Martin Ralph
Ilse Gayl
David Fisher
Casey Stewart
Joseph Fillingham

Attachment: Environmental Information Services Working Group (EISWG) Report on Radar Gaps