

October 11, 2016

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 report from the SAB review of the High Arctic Program in NOAA. The SAB approved this report at its August 2-3, 2016 meeting.

In 2014, NOAA requested the SAB's Ecosystem Sciences and Management Working Group (ESMWG) to conduct a review of its Arctic ecosystem research portfolio. They were tasked with providing input on the quality and direction of the NOAA Arctic Ecosystem research portfolio and identify gaps in activities that need to be filled, and NOAA's overall organization for undertaking Arctic Ecosystem research. The ESMWG formed an Arctic subcommittee to evaluate NOAA's activities and management structure for Arctic Research. Terms of References (TORs) were developed and the decision was made to focus the report on the High Arctic, Bering Strait and north, including the Chukchi and Beaufort Seas and defined the High Arctic ecosystem as encompassing biological, physical, and chemical as well as sea ice and atmospheric aspects. The subcommittee evaluated the status, trends and gaps within the new NOAA Arctic Action Plan in relation to current NOAA Line Office (LO) activities that either have direct scientific and management programs in the Arctic and/or are funded by other US agencies to undertake science activities that feed into NOAA's management authority.

The report identified one overarching finding, five prioritized near-term high priority recommendations and ten intermediate term recommendations. The overarching finding and the five near-term high priority recommendations are:

- **Overarching Finding:** NOAA's Arctic efforts need further improved coordination and enhanced platforms, including fleet replenishments, in order to fulfill its mission and provide international leadership.
- **Recommendation #1:** *NOAA should develop and coordinate, across multiple line offices, a comprehensive, five-year High Arctic Research Program, including both field and modeling efforts.*
- **Recommendation #2:** *Increased and focused investments are needed in order for NOAA to fulfill its identified responsibilities within national and international observing programs that are the front line of detecting change in the Arctic ecosystem.*
- **Recommendation #3:** *NOAA should continue to strengthen its international efforts and science-based leadership through the working groups of the Arctic Council, e.g., Circumpolar Biodiversity Monitoring Program (CBMP) and Emergency Prevention, Preparedness & Response Subcommittee (EPPR).*
- **Recommendation #4:** *NOAA should systematically estimate the impact of science partnerships (both in kind efforts and monetary support) through cross Line-Office, US interagency and international partnerships supporting its High Arctic Program.*
- **Recommendation #5:** *NOAA should develop a clearer vision and statement of its strategic role and scientific research activities in the Arctic, both nationally and internationally.*

More detail on the overarching finding and all fifteen recommendations are included in the report.

The SAB encourages NOAA to provide feedback, as you deem appropriate, at the first opportunity. Please let me know if you have any questions, comments or concerns.

Sincerely,

A handwritten signature in black ink that reads "Lynn Scarlett". The signature is written in a cursive style with a long horizontal flourish extending to the right.

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

Attachment

cc: Richard Spinrad  
Richard Merrick  
Mary Erickson  
Gary Matlock  
David Kennedy  
Michael Donahue  
David Fluharty  
Jo-Ann Leong  
Jacqueline Grebmeier  
Cynthia Decker  
Mary Anne Whitcomb  
Laura Ferguson  
Elizabeth Akede  
Laura Newcomb  
Rachelle Matthews