



UNITED STATES DEPARTMENT OF COMMERCE
The Under Secretary of Commerce
for Oceans and Atmosphere
Washington, D.C. 20230

February 6, 2024

Ms. Julie Thomas
Chair, NOAA Hydrographic Services Review Panel
Senior Advisor, Coastal Data Information Program
and Southern California Coastal Ocean Observing System
Scripps Institute of Oceanography
9500 Gilman Drive, No. 0214
La Jolla, CA 92093

Dear Ms. Thomas:

I want to thank you for your letter and geodesy issue paper on behalf of the NOAA Hydrographic Services Review Panel (HSRP) following the September 2023 public meeting in Silver Spring, MD. I was pleased to attend and appreciated the opportunity to share my thoughts on data as a service, artificial intelligence and digital twin applications, and National Oceanic and Atmospheric Administration (NOAA) systems in the cloud. I have reviewed the HSRP's recommendations in your letter and appreciate the thought that went into their development. Reflecting on those recommendations, I offer the following:

1. Resources for core products and services across NOAA is a top priority. As a scientific agency responsible for fundamental ocean and earth observations and predictions, I know how critical accurate geospatial data is to all that we do. Acquiring additional resources is challenging, but I continue to advocate for resources to continue to maintain and expand our current capabilities.
2. Workforce development of both the current NOAA workforce and a pipeline for the next generation of scientists, mariners, and other critical disciplines that enable NOAA's hydrographic services mission is an area I have called out in the NOAA Strategic Plan. I recognize that developing the geodesy workforce is particularly important to maintaining our global competitiveness – as is developing the hydrography workforce and many other parts of NOAA. NOAA intends to work closely with the private sector and professional societies in this endeavor.
3. I agree that robust standards for observations, including complete metadata and standards, enables increased interoperability of these datasets, which has tremendous value. NOAA's hydrographic services programs have strong standards in place to ensure the data they acquire meet their specific requirements, and we are working to increase coordination of these standards across NOAA to ensure maximum value to all users.

THE ADMINISTRATOR



4. Environmental Justice and increasing services to remote and underserved communities is a focus of my team. Jainey Bavishi, Assistant Secretary for Oceans and Atmosphere, and Dr. Vankita Brown, NOAA's Senior Advisor for Equity, are taking the lead on this effort, and we are encouraging NOAA Line and Program Offices to consider how to spread resources equitably to support all those that we serve.
5. Data transparency to the public through a digital twin concept is a topic that NOAA continues to explore. Dr. Michael Morgan, Assistant Secretary of Commerce for Environmental Observations and Predictions, and Kim Valentine, NOAA Geospatial Information Officer, have engaged teams to actively discuss digital twins and how NOAA can support the use of our foundational, authoritative data, and the implementation and transition of this technology.

I appreciate the HSRP's recommendations, as well as the time and effort the Panel members put into assessing NOAA's Navigation Services. The HSRP's expert input is vital to ensure that NOAA provides the best available scientific information, tools, and services for sustainable economic growth and environmental stewardship as we work together to build a climate-resilient Nation.

Sincerely,

A handwritten signature in black ink, appearing to read "R. Spinrad", written in a cursive style.

Dr. Richard W. Spinrad
Under Secretary of Commerce
for Oceans and Atmosphere
and NOAA Administrator