



*Ed Saade, Chair
Julie Thomas, Vice-Chair*

June 11, 2020

Dr. Neil Jacobs, PhD.
Acting Under Secretary of Commerce for Oceans and Atmosphere
U.S. Department of Commerce
1401 Constitution Avenue, NW
Washington, D.C. 20230

Dear Dr. Jacobs:

On behalf of the Co-chair Julie Thomas and myself, please find the Hydrographic Services Review Panel (HSRP) recommendations from the virtual meeting on April 28, 2020 with over 270 participants. Thank you for speaking and for the essential participation of NOAA leadership. The adjustment to convert it to a webinar instead of a public meeting was made seamless by the extensive preparation of NOAA staff. This virtual meeting showcased the value of NOAA's services to a nation dependent upon maritime commerce and comprehensive management of water resources, all of which help to navigate our nation's Blue Economy. Panelist and attendees addressed daunting challenges faced by our nation during the COVID19 pandemic quarantine and Stay-At-Home orders. Essential services supporting safe navigation and vessel commerce continue, weather events such as flooding or other extreme weather events need to be predicted/tracked/mitigated, the Continuously Operating Reference Station (CORS) system and tidal information remain critical. Users depend on NOAA essential services and products to help prepare mariners, transportation workers, protect communities and fisheries and are incorporated by locals into plans for surfing and fishing trips.

The HSRP continues to follow the good work performed by National Geodetic Survey, Office of Coast Survey and Center for Operational Oceanographic Products and Services, recognizing the critical importance of such efforts as the CORS network, the Physical Oceanographic Real Time System (NOAA [PORTS® Program](#)), and the development of Electronic Navigation Charts (ENC). We briefly heard about OCMIA legislation for the Integrated Ocean and Coastal Mapping. The HSRP will discuss in more depth during a full panel discussion and provide recommendations at the next meeting.

The HSRP is pleased by the efforts of NOAA and supporting agencies to address multiple stakeholders from varied backgrounds as partners. The HSRP saw enthusiasm through multiple sector engagement in several of the presentations and offers the following recommendations.

HSRP Recommendations:

1. The HSRP strongly supports the Presidential Memo regarding mapping of Alaska and the U.S. EEZ. We encourage partnerships with industry and the Integrated Ocean Observing System Regional Associations. We will look forward to hearing more when the Administration formalizes a response.
2. The HSRP is following and supports increasing the availability, accuracy, and development of restricted visibility forecast, sensors, technologies and real time visibility data via

the [PORTS® Program](#) and the Operational Forecast System models to help mariners during fog or reduced visibility. We recommend this technology continues to be developed and also the management of such sensors be addressed. It is critical to the economy of the ports to keep traffic flowing, so careful attention must be paid to the decision process in sensor application and integration in systems to fully support navigation in restricted visibility.

3. The HSRP supports NOAA's joint research with academia such as with the University of New Hampshire and the University of Southern Mississippi on unmanned systems. Autonomous Surface Vehicles (ASV) and Autonomous Underwater Vehicles (AUV) and possible cooperation is a new and exciting possibility. The HSRP supports additional research and operational trials as well as the potential for having a fleet of autonomous unmanned vehicles that could be operationally surveying, especially in times of national emergency such as during a pandemic.
4. HSRP supports using Artificial Intelligence (AI) and other emerging technology throughout your data, products and services. This is especially needed for post emergency applications such as post hurricane response requirements when time matters such as with LIDAR and photogrammetry overflights and for hydrographic surveys required to reopen ports to commerce. We recommend you consider and review the use of needs assessments where possible with your stakeholders and partners to help prioritize the needs and requirements. Attached is an issue paper on this topic.
5. The HSRP continues to recommend the National Geodetic Survey develop materials and messaging to focus on the datum changes in 2022, as well as the possible impact to their stakeholders and the public. This is a follow-on to our previous issue paper "All U.S. Latitudes, Longitudes, and Elevations to Change in 2022".

The HSRP recognizes the strong leadership provided by retiring Rear Admiral Shep Smith and that this was his last HSRP public meeting. Under his guidance the HSRP has become stronger and more engaged in its duties to support NOAA. He has made a significant positive impact and we thank him for his service. We look forward to working with his replacement.

Attached please find three documents: 1) an Issue Paper on NOAA's Post-disaster Products and Services 2) HSRP Priorities Matrix highlighting the topics for discussion; and 3) April 28 meeting minutes.

Sincerely,



Edward Saade
Chair, HSRP



Julianna Thomas
Vice-Chair, HSRP

Enclosures (3)

Issue Paper "Automation and Artificial Intelligence in NOAA's Post-disaster Products and Services"
HSRP Priorities Matrix
April 28 meeting minutes