

Julie Thomas, Chair Sean M. Duffy, Sr., Vice-Chair October 31, 2022

Dr. Richard W. Spinrad Under Secretary of Commerce for Oceans and Atmosphere and NOAA Administrator U.S. Department of Commerce 1401 Constitution Avenue, NW Washington, D.C. 20230

Dear Dr. Spinrad,

The September 2022 Hydrographic Services Review Panel (HSRP) meeting was particularly meaningful as it was the first time the Panel met in person since before COVID. Our meeting was introduced by the Hawaiian cultural protocol which so well set the stage for productive presentations and vibrant discussions, keeping in mind the human component of well-being and safety. We were fortunate to have Paul Scholz, Deputy Assistant Administrator for Ocean Services and Coastal Zone Management, attend our meeting, highlighting the priorities of the National Ocean Services (NOS) and above all, his concern for the sustainability of the core programs.

Admiral Ben Evans, Director, Office of Coast Survey (OCS), gave an informative overview of the on-going OCS efforts as well as highlighting many concerns and priorities such as the sustainability of the NOAA fleet, providing mapping data in a timely manner, building out the National Bathymetric Source, and transition to Electronic Navigation Charts (ENCs). Mike Aslaken presented on behalf of Director Juliana Blackwell, National Geodetic Survey, providing an update on Grav-D implementation and the importance of unification of datums. Rich Edwing, Director, CO-OPS, updated about new water-level stations, work on tidal currents and additional ports that have been added to the Physical Oceanographic Real-Time System (PORTS). The HSRP was fortunate to visit NOAA Ship *Rainier* while in port. The Panel was impressed with the multidisciplinary "RICHARD" mapping program - both in terms of what it accomplished from a NOMEC mapping perspective and its contribution to a NOAA presence in the western Pacific. We also visited the He'eia National Estuarine Research Reserve, learning how plant and fish communities thrive with consistent traditional practices.

What impressed the HSRP the most during the meeting was the existing communication between the entities of each panel, and the respect and on-going interaction between the local, state and federal agencies. Interdependence is evident on the Pacific nation of islands. The HSRP meeting held five information panels:

- Partnerships in the Pacific Bill Thomas, Senior Advisor for Islands, Indigenous and International Issues, Office of Coastal Management stated that "Partnerships move at the speed of trust".
- Pacific Mapping Session Highlighted extensive mapping in the Pacific Islands and the 69% of terrestrial Alaska mapped.
- Stakeholder Session Matthew Gonser from the Honolulu Office of Climate Change made a clear request for "acutely local" hydrographic data. Informative update from Julia Powell on Precision Navigation. Much discussion on the challenges of shipping inter-island and to remote Pacific islands.
- Coastal Resilience Chip Fletcher, Professor at University of Hawaii, stated "Sea Level Rise is here to stay, it is an unstoppable reality". Discussion on the mitigation in Hawaii with regard to sea level rise and flooding.
- Private/Public Partnerships Discussion about future collaboration with the National Geospatial Advisory Committee (NGAC) which is also addressing this topic. Many examples given by the HSRP members of existing partnerships.

The following are seven HSRP recommendations from the meeting:

- Sustain and expand core products and services. As leaders in water level information, geodetic measurements, and mapping and nautical charts, continue to focus on these efforts, delivering high quality data. The HSRP recognizes that water levels will be critical over the next decades. Accurate, well calibrated tidal measurements are crucial to ports, harbors and the shoreline population in the underserved communities.
- 2) OCS should maintain hydrographic surveying expertise, producing high quality data and achieve timely data delivery. As outlined in the 2018 white paper "The NOAA Hydrographic Survey Fleet: A Critical National Asset", the HSRP continues to support the critical need for NOAA to recapitalize its hydrographic fleet.
- 3) Continue to promote a national standard for a mapping framework including unification and standardization of datums.
- 4) Expand partnerships between federal, state, local, industry, academia and tribal entities. The HSRP recognizes that the Hydrographic Services Improvement Act includes significant restrictive language which limits taking advantage of advancing hydrographic services partnerships. We hope that in the future this language will be reviewed and changed to be more inclusive.
- 5) Prioritize coastal resilience and sea level change at the forefront of NOAA's efforts.
- 6) The HSRP continues to support the need for dedicated leadership and coordination to meet the NOMEC Pacific mapping goals, and to fully leverage the available deep-water mapping assets of private and academic organizations, as outlined in our 2020 recommendations
- 7) The HSRP urges the offices to begin a process of recording their carbon footprint and continue to support new technologies such as drones and uncrewed vessels, with a goal of becoming carbon neutral for both internal and contractor assets.

As documented in the attached Priorities Matrix, the HSRP will continue to follow topics addressing equity, climate, and the economy. The HSRP proposes an evaluation of the Digital Twin technology and its benefit to NOAA during product development. Also attached is an updated Issue Paper entitled "Coastal Resilience". Possible future Issue Papers will include one on "Standard conversion and transformation tool(s) for geospatial data".

The HSRP appreciates NOAA's significant contribution related to mapping, charting, fisheries science and coastal resilience to mitigate sea level change. The HSRP looks forward to a productive year and to further communication with you and NOS leadership.

Sincerely,

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Julie Thomas Chair, HSRP

Attachments: HSRP Priorities Matrix September 2022 Issue Paper: Coastal Resilience HSRP Meeting Minutes, Oahu, HI, Sept 20-22, 2022

Sean M. Duffy

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