



*Joyce Miller, Chair  
Ed Saade, Vice-Chair*

September 30, 2018

RDML (Ret., U.S. Navy) Tim Gallaudet, PhD.  
Acting Under Secretary of Commerce for Oceans and Atmosphere  
U.S. Department of Commerce  
1401 Constitution Avenue, NW  
Washington, D.C. 20230

Dear Rear Admiral Gallaudet:

It was an honor to have you attend our August 2018 Hydrographic Services Review Panel (HSRP) in Juneau, Alaska. The discussions between National Oceanic and Atmospheric Administration (NOAA) leadership, HSRP members and the regional stakeholders were greatly informative. The joint sessions with the Integrated Ocean Observing System Advisory Committee (IOOS AC), the US Geological Survey (USGS) including Kevin Gallagher and Jim Reilly, the USGS Director, along with participation of members of the Alaska Mapping Executive Committee (AMEC), and other groups, highlight NOAA's spirit of collaboration and partnerships. Below we present the highest priority recommendations and a brief meeting summary with background information on our recommendations.

HSRP Recommendations:

1. NOAA should prioritize and advocate much more strongly for increased investment in establishing and maintaining the Continuously Operating Reference Station (CORS) stations in Alaska managed by the National Geodetic Survey (NGS) to augment the local accuracy of GPS readings. This is needed for accurate surveying, mapping and charting in Alaska and to advance the establishment of the vertical datum in Alaska.
2. It has been noted that the current pace of charting update is too slow. NOAA should continue to improve its ability to deliver real-time NOAA navigational services data, data products, and services as well as to accept externally sourced data into the processes. We heard this is especially useful for places in Alaska where data is very limited.
3. As mentioned in our March 2018 letter, NOAA should continue to work with the U.S. Coast Guard (USCG) to support dissemination of real-time NOAA data streams to mariners and other stakeholders via the USCG National Automated Information System (NAIS). This is especially needed for safety to transmit water levels and other environmental data from NOAA's Center for Operational Oceanographic Products and Services (CO-OPS). Although a test run was conducted, the initiative has stalled. We request you raise this issue with Admiral Karl Schultz, and ask USCG make completing this collaboration a priority given the significant safety benefits that will be realized. The USCG Director of the Marine Transportation Systems Management Mike Emerson's presence at the meeting was very informative and he offered to

discuss this request further at USCG. We believe that with your added support, NOAA may be able to get a positive resolution.

4. NOAA should support existing programs and invest in redundant aerial and hydrographic survey assets. The shallow water technology, including small boat survey operations, is critical to hydrographic surveying and fueling capabilities in remote communities.
5. NOAA should continue to explore and expand water level deployments around the coastal U.S. We heard that the Alaska Ocean Observing System, in conjunction with CO-OPS gold standard National Water Level Observation Network (NWLON), could develop a tiered system for water level gauges that might be applicable to Alaska and other coastal regions.

There were a number of high-level attendees at the Juneau meeting. We would particularly like to thank U.S. Senators Murkowski and Sullivan for their welcoming video messages. The Alaskan native and tribal messages from the Lieutenant Governor Byron Mallott and Mr. Willy Goodwin Jr., Chair of the Arctic Waterways Safety Committee, were impactful and reminded us of the unique and challenging life in Alaska.

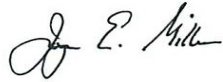
We would like to thank Captain Ed Page for his contribution to navigation services and his wonderful hospitality. We recognize the ingenuity and agility with which he operates the Marine Exchange of Alaska and his commitment to fostering partnerships in order to assure safe passage for mariners in the Alaskan waters. Through his efforts, this meeting proved to be both a great example, and the perfect kick-off, to building teamwork and partnerships with all of the staff attending from NOAA, HSRP, IOOS AC, USGS, USCG and local stakeholders.

The HSRP is excited that you are now a Co-Chair of the AMEC, and we commend AMEC's announcement at the HSRP meeting of their new goal of integrating the topographic and bathymetric data for shoreline definition and the generation of a seamless terrain surface from the mountain peaks to the deep ocean seabed. We would like to thank Rich Edwing for the opportunity to review and the HSRP provided comments to the CO-OPS Strategic Plan. The excellent panels on water level partnerships, stakeholder perspectives, Alaska mapping, and addressing Arctic challenges were informative and insightful as to the unique challenges in Alaska. Many discussions evolved around the Alaska water level requirements. Stakeholders are asking for flexibility and innovation in their sensor deployments in order to better serve local or regional needs. One topic of particular interest was that the ever growing shipping in the Arctic greatly increases the importance of real-time data, ports of refuge and deep-water channels. The briefings on advanced autonomous systems technology for hydrographic applications, NOAA Science Advisory Board collaboration and NOS updates all provided interesting perspectives for future direction. Also well noted, is your statement recognizing the importance and commitment regarding developing comprehensive seabed mapping for critical minerals applications in the deep ocean, including the Clarion Clipperton Fracture Zone.

Future issue papers will include one on sea level rise, highlighting the role of NOS. The HSRP will also work with the National Geodetic Survey to develop materials that will focus on the impact of the datum changes in 2022 to the general public as a follow-on to our previous issue paper "All U.S. Latitudes, Longitudes, and Elevations to Change in 2022".

Two documents are attached: A Joint HSRP and IOOS AC Statement and the HSRP's Comments on the CO-OPS Draft Strategic Plan.

Sincerely,



Joyce E. Miller  
Chair, HSRP



Edward Saade  
Vice-Chair, HSRP

Enclosures (2)  
IOOS AC-HSRP joint session statement  
HSRP comments to the CO-OPS draft Strategic Plan