



May 2, 2014

Kathryn D. Sullivan, Ph.D.
Under Secretary of Commerce for Oceans and Atmosphere
National Oceanic and Atmospheric Administration (NOAA)
U.S. Department of Commerce
1401 Constitution Avenue, NW
Room 6217
Washington, DC 20230

Dear Dr. Sullivan:

The Hydrographic Services Review Panel is pleased to report on our semiannual federal advisory committee meeting held on February 25-26, 2014, in New York City. This letter includes both summary information as well as the resulting panel recommendations.

Dr. Holly Bamford swore in the newly appointed member, Mr. Ed Kelly, as were three other members you reappointed in January 2014: Dr. Lawson Brigham, Mr. William Hanson, and Mr. Scott Perkins. Mr. Stephen Carmel, whom you also reappointed, had to resign from the Panel due to work responsibilities at Maersk Line Limited. I understand that Rear Admiral Gerd Glang will submit a call for panel membership this summer to fill vacant seats on the panel. Importantly, we also want to advise you of a change in chairmanship on the panel. I stepped down as Chair due to my new work responsibilities. The panel elected Mr. Scott Perkins to serve as the Chair and Mr. Bill Hanson to serve as the Vice Chair.

We chose to meet in New York because of how heavily impacted the region was by Superstorm Sandy, and how heavily NOAA's navigation services and products were relied upon before, during and after this event. The panel sought to directly engage with those who use NOAA navigation services for safe navigation and coastal resilience. By meeting in the region we were best able to engage the widest possible set of stakeholders to examine how NOAA navigation products and services were used during Sandy and how they might be improved for future emergencies.

Of particular note, the panel held breakout sessions focused on three themes: Integrating Federal Emergency Response for Coastal Resilience, Updated Nautical Charting and Consistency in Standards, and Integrated Ocean and Coastal Mapping (IOCM) Modeling and Resilience. During these breakouts, the panel was able to further define issues and challenges, as well as to develop the following actionable recommendations for NOAA to consider.

Integrated Federal Emergency Response for Coastal Resilience: The panel recommends that:

- NOAA establish detailed Pre-scripted Mission Assignments (PSMA) with FEMA, in advance of natural disasters and other emergencies. PSMA's will help formalize NOAA's roles in the National Response Framework and assist integration of NOAA assets into response Incident Command Centers. Additionally, outside of oil spill response, NOAA is rarely reimbursed for the support provided in the wake of emergencies. PSMA's provide a vehicle for reimbursement that reduces the impact response operations have on appropriated funds and planned mission work.

Updated Nautical Charting & Consistency in Standards: The panel recommends that:

- The Office of Coast Survey accelerate transition to a database-driven workflow for NOAA's Electronic Navigational Charts (ENCs) to produce charts in a modern and efficient way. Legacy production methods and software dictate that the application of new data to nautical charts must follow a raster-to-ENC progression. A database-driven model would ingest new data to generate vector ENCs, from which raster and paper charts and other products can be generated.
- Coast Survey coordinate with U.S. Army Corps of Engineers (USACE) to develop an efficient mechanism for USACE channel surveys to enhance safety of navigation in federally maintained channels. The generation of "channel tabulations" on nautical charts is time consuming and needs to be made more efficient.

IOCM Modeling & Resilience: The panel recommends that:

- NOAA prioritize IOCM activities and support with top-down emphasis, including funding specifically for IOCM projects and making IOCM an element in performance plans for appropriate management personnel.
- NOAA also expand working agreements and Memoranda of Understanding (MOU); streamline and simplify procedures for other agencies to establish agreements with NOAA, especially for small regional and local mapping projects in order to leverage mapping funds for the greatest utility.
- NOAA improve on existing IOCM coordination efforts such as data catalogs and planning registries by incorporating a broader group of regional and state partners (e.g. universities, Sea Grant and Integrated Ocean Observing System Regional Associations into IOCM coordination.
- NOAA should continue to investigate new technologies and the capabilities of the private sector for improving mapping efficiencies (e.g., autonomous mapping systems and vehicles, bathymetric and topographic LiDAR, etc).

Additionally, the panel was pleased to hear about NOAA's use of non-traditional data to assess chart adequacy, and the potential to use non-traditional data to better focus hydrographic survey resources. It was good to hear that Coast Survey is partnering with the National Geophysical Data Center to create a database of bathymetry track lines from crowd-sourced data with the

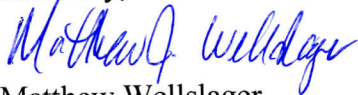
International Hydrographic Organization. The panel also heard about NOAA's active partnership with USACE on topographic-bathymetric LiDAR data acquisition, the HSRP fully supports this Integrated Mapping effort and commends both agencies on the coordination accomplished using the IOCM SeaSketch toolset.

Finally, the panel recommends that NOAA communicate to the Office of Management and Budget the importance of stable federal funding for NOAA's Physical Oceanographic Real Time System (PORTS[®]), in order to ensure navigation safety and security for the nation. We heard again the oft-repeated request from numerous users groups (e.g. local emergency responders, USDHS/FEMA, USACE, USCG, the NWS, universities, recreational boaters, ecologists, port managers, and pilots) in attendance for full funding for the NY/NJ PORTS system. The speakers made clear that the PORTS installations serve a much broader user group than just commercial shipping. Because the funding structure for each PORTS system is so challenging, the concern is that several valuable PORTS installations may be removed within the next two years.

On a side note, I would like to report that one of our panel members, Scott Perkins, had the opportunity to testify at the U.S. House of Representatives Subcommittee on Coast Guard and Maritime Transportation Hearing on "Finding Your Way: The Future of Federal Navigation Programs." He testified along with Rear Admiral Glang, DFO, and Dr. Larry Mayer of the University of New Hampshire Center for Coastal and Ocean Mapping. USACE and USCG representatives also provided testimony. We appreciated the opportunity for one of our panel members to testify before this subcommittee.

To close, the panel greatly appreciated the participation of senior-level NOAA leadership at this New York meeting, and we look forward to your attendance at a future meeting. Please consider strongly the panel's recommendations as you plan for NOAA's budget and mission for 2015 and beyond.

Sincerely,



Matthew Wellslager

cc: Dr. Holly A. Bamford, Assistant Administrator, NOAA National Ocean Service
Dr. Russell Callender, Deputy Assistant Administrator, NOAA National Ocean Service