



*William Hanson, Chair
Joyce Miller, Vice Chair*

25 October 2016

Kathryn 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:

As we provide our recommendations from the 27th meeting of the Hydrographic Services Review Panel (HSRP) in Cleveland, Ohio, August 30 to September 1, 2016, we would like to express our appreciation of your leadership at NOAA, which has helped transform the agency. NOAA is now poised to grow in leadership of coastal and ocean issues in future years as it elevates its partnership role with other like-minded agencies. Your attendance and involvement at several of our meetings was very helpful and the HSRP has benefitted from your direction. It has been an honor to work with you and Admiral Manson Brown to help NOAA Navigation Services better serve the nation, and we wish you much success in your future endeavors.

HSRP Recommendations. The HSRP has been making a concerted effort to provide NOAA with our perspective and advice on important issues by producing a series of papers about Navigation Services issues. Attached please find three additional papers, which serve as our major recommendations at this time. We plan to make the six issue papers written in 2016 available to the transition team and incoming NOAA leaders.

1. Hydrography: A Core NOAA Mandate. NOAA's leadership and the National Ocean Service should emphasize the importance of hydrography within NOAA to the Department of Commerce, the Office of Management and Budget, and to the Congress. Funding for OCS should be at levels that will decrease the hydrographic survey and charting backlog, maintain NOAA's status as a world leader in hydrography, and sustain U.S. economic growth.

2. PORTS®: Critical Data for Critical Decisions in U.S. Ports and Harbors. NOAA should provide consistent, on-going funding for value-added seaport systems, such as the Physical Oceanographic Real Time System (PORTS®), that provide critical data for critical decisions impacting safety of navigation in ports that are becoming increasingly congested.

3. All U.S. Latitudes, Longitudes and Elevations to Change in 2022. The replacement of NAD83 and NAVD88 datums will impact everyone in the US, from professional applications and services to recreational users who use maps, charts and satellite positioning systems such as GPS (Global Positioning System).

The HSRP also provided verbal and written comments on the National Coastal Mapping Strategy (NCMS) document to NOAA's Integrated Ocean and Coastal Mapping (IOCM) coordinator. The HSRP supports the NCMS, IOCM and the concept of "Map once, use many times."

We are very pleased to be working with the newly appointed Rear Admiral, Director of the Office of Coast Survey (OCS) and Hydrographer of the United States, Shep Smith, whose expertise, forward-thinking style, and hydrographic background are invaluable to NOAA and the HSRP. The Panel values the attendance of Mr. Dave Holst, Chief of Staff, National Ocean Service (NOS), and Mr. Glenn Boledovich, Chief, Policy and Constituent Affairs Division, NOS, at our recent meeting. It is especially important in the coming year of transition for the Panel to have the informed perspectives and advice on NOAA issues at a national level that they and NOAA leadership provide.

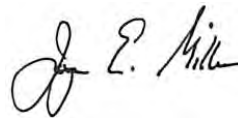
We look forward to working with the transition teams and incoming new leadership to help NOAA best serve the nation. We are scheduled to meet in the Seattle area with tentative dates of Feb 27-2 Mar, 2017, and would welcome the attendance of NOAA leadership.

In addition to the issue papers mentioned above, we are pleased to also attach notes from the meeting which we believe provided the panel great insight into navigational and coastal issues in the Great Lakes Region.

Sincerely,



William Hanson
Chair, HSRP



Joyce Miller
Vice Chair, HSRP

Summary Notes from HSRP Great Lakes Meeting August 2016

The HSRP meeting in the Great Lakes area highlighted the unique challenges of a region that contains 21% of the earth's fresh water, including fluctuating water levels, locks between lakes, constricted and congested rivers and channels, and ice coverage that restricts navigation for several months each year. The meeting also highlighted bureaucratic challenges, such as how administration and control of these fresh waters involve two countries, eight states, two provinces, and numerous international governing organizations. Complicating all these issues are the vast quantities of iron ore, grain, salt, and other bulk commodities shipped between Canada and the U.S., between states, and overseas from approximately 60 major ports in the region, but with only a single U.S. container port (Cleveland) in the Great Lakes.

Great Lakes stakeholders expressed appreciation for the many services that NOAA currently provides, but expressed concern that this "4th Coast" should receive attention equal to the ocean coasts and that NOAA should have a stronger presence in the area. We asked that stakeholders provide perspectives about how NOAA could better serve the region and received numerous suggestions, most of which could be placed into four broad categories: Communications, Partnerships, Observational Data, and Mapping and Charting Issues.

Communications: Various speakers made recommendations on how improved NOAA communications would enhance their ability to do their jobs.

- The U.S. Coast Guard (USCG) uses the current effective OCS chart update system through which reported discrepancies are applied to charts. However, the USCG would like to see better feedback about application of reported discrepancies to the final chart product.
- Numerous speakers expressed the need to maintain in-basin Navigation Team staff in the Great Lakes to improve communication and coordination with Great Lakes stakeholders.
- A representative of the pilots association asked if water levels, wind speed and wind direction could be transmitted on very high frequency (VHF) radio or via the Automatic Identification System (AIS), because cell phone and/or internet signals are not always available to users on the Great Lakes.
- U.S. Army Corps of Engineers (USACE) in the Great Lakes region reported that they post new survey data on their website, but do not send it directly to NOAA. Rear Admiral Smith commented that NOAA and the USACE must better coordinate data transfer.

Partnerships: We witnessed the strong and unique nature of partnerships driving management of the Great Lakes system. The involvement of groups like the Great Lakes Commission highlights the international collaboration present in the region. With the large number of stakeholders and federal partners in the region, there is real potential for

overlapping missions and redundancies; instead our stakeholder panels highlighted gaps in mission and scope. We look forward to the increased collaboration between USACE and

NOAA to identify and address these gaps. We were also pleased to hear that the panel's recommendation from the HSRP meeting in Charleston, SC, (September 2014) for a USACE and NOAA joint agreement has recently been finalized.

Observational Data: Great Lakes stakeholders reported a regional need for additional water level and current sensors and continuation of installations already established. Once again, we received input stressing the value of NOAA's PORTS® program to safe navigation and commerce. NOAA presented the Lake Carriers Association with a plaque honoring their partnership in supporting a PORTS® installation. A pilot reported that water levels in Toledo are often well below average during periods of high and sustained winds from the south, making it dangerous for large ships to enter the harbor at these times; he suggested Toledo as a strong candidate for a PORTS® installation. However, the establishment and maintenance of regional PORTS® are constrained by the current cost-sharing funding mechanism, as detailed in the attached paper.

Mapping and Charting Issues: A number of stakeholders and panel members discussed issues related to mapping. Mapping is needed for a variety of reasons in the Great Lakes, including navigation, ability to monitor lake levels, and ecosystem characterization and monitoring. NOAA's Navigation Services should review Great Lakes mapping needs and incorporate these into its overall mapping priorities.

- The HSRP learned about potential issues regarding the detection and charting of isolated dangers to navigation in federally maintained channels and anchorages. We would like to learn more about the responsibilities of both the USACE and NOAA with respect to detection and charting of such dangers.
- Stakeholders discussed the need to reduce clutter on electronic charts.
- The upper Great Lakes have had changes in lake water levels that cannot be explained without accurate, up-to-date mapping information in the lakes and connecting channels.
- A representative from the Great Lakes Restoration Initiative expressed the need for both bathymetry and lake bottom characterization data. The uses include habitat classification, targeting specific depths to capture a range of depositional issues, development of Environmental Sensitivity Index Maps, and the need for up-to-date depth data in order to develop statistical sampling methods. The representative also requested that the data be made available to the public quickly, in various products and formats, and be available on mobile devices.
- The Panel was pleased to hear that mapping data from a commercial cable survey in another region is being provided to NOAA and will be made publicly available.