UNITED STATES DEPARTMENT OF COMMERCE
The Under Secretary of Commerce
for Oceans and Atmosphere
Washington, D.C. 20230

OCT 0 5 2012

Mr. Matt Wellslager
Chair, Hydrographic Services Review Panel
South Carolina Geodetic Survey
5 Geology Road,
Columbia, South Carolina 29212

Dear Mr. Wellslager:

Thank you for your summary of the most recent Hydrographic Services Review Panel (HSRP) meeting in Anchorage, Alaska, May 22-24, 2012.

Although I was unable to attend, Dr. Kathryn D. Sullivan, Assistant Secretary of Commerce for Environmental Observation and Prediction, Deputy Administrator and Acting Chief Scientist, National Oceanic and Atmospheric Administration (NOAA), attended on my behalf. She and Dr. Holly Bamford, Deputy Assistant Administrator, National Ocean Service (NOS), were also able to engage with the Panel members and meet with Alaska's Lieutenant Governor Mead Treadwell and Representative Reggie Joule.

I was pleased to learn the meeting went well. Please be assured that NOAA continues to appreciate and benefit from the HSRP's work and please express my thanks to everyone involved.

Alaska Lieutenant Governor Mead Treadwell and Representative Reggie Joule identified several scientific and environmental challenges facing the Alaska/Arctic region and how NOAA's navigation services can help address some of them. Having the recognition of state officials who are knowledgeable about the science and the capabilities of NOAA's navigation services makes our job easier as we plan for efforts to address the issues and concerns raised at your Anchorage meeting.

Your Alaska Regional Needs for NOAA's Navigation Services, Products & Information and Alaska Multi-Mission Applications of NOAA's Geospatial, Tides & Currents and Hydrographic Services stakeholder panels raised important issues including impacts from: sea level rise; coastal erosion and storm damage; increased Arctic shipping; marine safety and search and rescue; expansion of oil, gas and mining exploration; fishing and tourism; and the subsequent environmental and economic impacts to native Alaskans.

Responding to your specific recommendations, NOAA will consider the following:

Recommendation #1: NOAA should develop a "Frontier Mapping Strategy" that includes gathering data that is "fit for use."

Response: NOAA advocates for an Integrated Ocean and Coastal Mapping (IOCM) approach nationwide, but nowhere is IOCM more necessary than the Arctic due to the distance and cost of mapping in this challenging region. With limited resources for new contracts, NOAA is taking steps to foster IOCM efforts in the Arctic, including work under the National Ocean Policy's Arctic Implementation Plan to:

- Establish mapping guidelines, standards, vessel of opportunity protocols, and standard operating procedures to facilitate integrated ocean and coastal mapping and acquisition of Arctic hydrographic, shoreline, habitat mapping, and water column data in the Bering, Chukchi, and Beaufort Seas, and
- Conduct coordinated interagency ocean and coastal mapping operations and incorporate results into the Ocean and Coastal Mapping Inventory.

One tool NOAA will use to accomplish the above milestones is the newly completed IOCM Seafloor Mapping Standard, which outlines the minimum guidelines for sonar data collection that still enable multiple uses of the same data. NOAA is also working on an IOCM Track line Survey Protocol for vessels of opportunity transiting Arctic waters. Initiated during a 2012 joint NOAA/United States Coast Guard (USCG) Arctic survey, the protocol will guide any vessel with sufficient mapping capability in acquiring useful survey data while underway.

NOAA's Arctic Nautical Charting Plan (http://www.nauticalcharts.noaa.gov/mcd/docs/Arctic_Nautical_Charting_Plan.pdf), released in 2011, also contributes to an Arctic mapping strategy by identifying survey priorities in and near a number of coastal communities where NOAA is proposing new large and medium scale charts. NOAA will use this and other information such as stakeholder requirements, Automatic Identification System (AIS) tracks and vessel types transiting Arctic waters to update its Hydrographic Survey Priorities plan (NHSP). The 2012 NHSP is available here: http://www.nauticalcharts.noaa.gov/hsd/NHSP.htm.

Recommendation #2: NOAA should prioritize and support the collection of geodetic data which serves as the foundation for all mapping and charting activities.

Response: NOAA's National Geodetic Survey (NGS) will continue to densify the Continuously Operating Reference Stations (CORS) network in Alaska to supplement the existing active geodetic control, as well as fill in areas where station coverage is needed. Priority will be given to: 1) providing near real-time access to data and the National Spatial Reference System (NSRS); 2) co-locating CORS to support multiple missions (NOAA, State of Alaska); 3) improving data availability for web-based positioning tools such as the Online Positioning User Service (OPUS); and 4) improving the currently adopted crustal motion modeling tool, Horizontal Time Dependent Positioning (HTDP). NGS will also improve accessibility, via the web, to other reference station networks such as the Plate Boundary Observatory (PBO). Geodetic data from these networks can be used in many forms to support numerous applications in surveying, engineering,

Geographic Information System (GIS), forestry, land administration, photogrammetry, construction, shipping and resource management.

NGS is also collecting airborne gravity data in Alaska as part of the ongoing Gravity for the Redefinition of the American Vertical Datum (GRAV-D) initiative to redefine the vertical reference system of the United States. The resulting vertical datum will improve the accuracy of the foundation for mapping activities from 2 meters to as little as 2 centimeters in many areas. Mr. David Kennedy, Assistant Administrator, National Ocean Service, serves as NOAA's representative to the Alaska Mapping Executive Committee which was formed to coordinate Federal activities in support of Alaska's statewide topographic mapping program.

Recommendation #3: NOAA should work with the Coast Guard and Army Corps of Engineers at both local and national levels to coordinate mapping and data collection and to share data.

Response: NOAA agrees that coordination of mapping and data collection and free exchange of data are critically important to our efforts moving forward. NOAA's Office of Coast Survey (OCS) already has several programs in place and will continue to increase these efforts. For example, in 2012, a NOAA Corps Officer from OCS, deployed to a USCG cutter to train USCG personnel on hydrographic operations. The data from the cutter may be used to update chart products. If successful, additional USCG vessels may be added in future years. The recent Memorandum of Agreement signed between NOAA and oil and gas development firms will allow the transfer of hydrographic data collected during development that may be useful to our charting efforts. Also, NOAA's Center for Operational Oceanographic Products and Services works closely with the Army Corps of Engineers under their Comprehensive Evaluation of Project Datums program to ensure all coastal projects conducted by the Corps are utilizing NOAA tidal datums as prescribed by their engineering policies. These are just a few examples, but they show the efforts we are currently undertaking to leverage opportunities and conduct the work as efficiently as possible. Work in the Arctic is difficult and costly; only by coordinating and combining efforts will we be successful.

Recommendation #4: Hiring personnel, such as a Geodetic Advisor from the National Geodetic Survey, to serve as the focal point for geodetic issues, tides and currents, datums, navigation products and services, and, most importantly, stakeholder engagement, would be very beneficial.

Response: NOAA's NGS plans to hire a Regional Geodetic Advisor in the state of Alaska who will work with state, local and Federal agencies to provide guidance on geodetic issues, assist with the state's geodetic and surveying programs, and provide workshops and seminars on navigation products and tools. In the past, NGS supported a State Geodetic Advisor program which provided a liaison between NOAA and the host state, usually with a jointly-funded NOAA employee residing in the state. While this model worked well for states able to provide support, NGS is currently transitioning to a Regional Geodetic Advisor program which will provide coverage for all states.

Now that the HSRP has visited the Alaska/Arctic region and listened to the needs and challenges facing our stakeholders and users of NOAA's navigation products, services, and information for this region, I look forward to hearing further recommendations from the working groups and the Panel that will help NOAA address these challenging issues as we move forward with improving our products, services and information. Please extend my appreciation to the entire HSRP for its ongoing dedication to supporting and strengthening NOAA's navigation services. I look forward to continuing to work with the entire HSRP, and I hope to be able to meet with all of you at a future HSRP meeting.

Sincerely,

Jane Lubchenco, Ph.D.
Under Secretary of Commerce
for Oceans and Atmosphere

cc: The Honorable Mead Treadwell, Lieutenant Governor, State of Alaska
The Honorable Reggie Joule, Representative of the State Alaska