Virtual Public Meeting Agenda – Spring 2022* NOAA Hydrographic Services Review Panel Federal Advisory Committee

Wednesday, March 9: 12:45-5:30pm EDT Thursday, March 10: 1-5:30pm EDT

WEBINAR link: https://attendee.gotowebinar.com/register/4379173811123072784

HSRP meeting materials: https://www.nauticalcharts.noaa.gov/hsrp/meetings.html

Wednesday, March 9, 2022, 12:45-5:30pm EDT

12:45 – 1:15 HSRP Member and NOS Introductions and Roll Call - alpha order

• Julie Thomas, HSRP Chair, Senior Advisor, Scripps Institution of Oceanography

1:15 – 2:00 Welcome and Opening Remarks

- Julie Thomas, HSRP Chair
- Nicole R. LeBoeuf, Assistant Administrator for Ocean Services and Coastal Zone Management, National Ocean Service (NOS), National Oceanic and Atmospheric Administration (NOAA)
- Rear Admiral Benjamin Evans, Director, Office of Coast Survey (OCS), NOS, NOAA, and HSRP Designated Federal Officer (DFO)
- Randy TeBeest, Deputy Assistant Administrator for Programs and Administration, NOAA Office of Marine Aviation Operations, "An Update on NOAA's Fleet Modernization and Recapitalization"

2:00 – 3:00 Updates: Opportunities, Challenges and Priorities for NOS's Navigation Services Portfolio

Moderator: Sean M. Duffy, Sr., HSRP Co-Chair and Executive Director, Big River Coalition

Directors address NOAA's navigation, observations, and positioning portfolio in support of "seamless data". Updates include topics such as: Infrastructure funding, Disaster supplemental funding updates; National Spatial Reference System (NSRS) modernization efforts; uncrewed systems; data sharing and data licensing; NOAA's raster paper chart transition and improvements to Electronic Navigational Charts; PORTS and air gap system and technology; and digital navigation technology research.

^{*}Topics, times and speakers are subject to change. Please refer to the website <u>meeting materials</u> for the most updated agenda.

- Rear Admiral Benjamin Evans, Director, OCS, NOS, NOAA
 "OCS's Priorities for the HSRP". Updates on NOAA's raster paper chart transition and improvements to Electronic Navigational Charts, data sharing and licensing, uncrewed systems, and highlights of OCS projects and priorities.
- Juliana Blackwell, Director, National Geodetic Survey (NGS), NOS, NOAA
 "NGS Updates for the HSRP". An overview and updates on NGS' Coastal Mapping efforts and progress toward Modernizing the National Spatial Reference System.
- Richard Edwing, Director, Center for Operational Oceanographic Products and Services (CO-OPS), NOS, NOAA
 "CO-OPS Updates for the HSRP". An overview of the CO-OPS and update on recent navigation services improvements.
- Dr. Larry Mayer and Capt. (NOAA, ret.) Andy Armstrong, Co-Director, NOAA-UNH Joint Hydrographic Center (JHC), University of New Hampshire (UNH)
 "Digital Navigation Technology R&D at the Joint Hydrographic Center". Overview of NOAA-UNH JHC research efforts aimed at advancing the technology for digital navigation and improved situational awareness.

3:00 - 3:10 Break

3:10 – 4:30 Mind the Gap: Plans for Data Licensing and Big Data Ingestion/Use for Charting and Bathymetry Products

 Moderators: Deanne Hargrave, HSRP member, and Geoscience Manager, Atlantic Shores Offshore Wind LLC; CDR Briana Hillstrom, Chief, Hydrographic Surveys Division (HSD), OCS, NOS, NOAA

How will data licensing help us achieve our national and global mapping objectives? The session will focus on data needs and opportunities to facilitate the sharing, collaboration, and throughput of bathymetric data. Attendees will gain a perspective on the future of data sharing and how to unlock the full value of data for applications beneficial to the blue economy and supporting climate change adaptation.

- Tony LaVoi, Chief Data Officer, NOAA
 "Defining the Gap: NOAA's Data Licensing Landscape". An overview of NOAA's approach to develop and publish NOAA Data Licensing Guidance that conforms with and supports Evidence Act requirements and NOAA Data Strategy goals.
- Matt Wilson, Physical Scientist, HSD, OCS, NOS, NOAA
 "Bathymetric Data Licensing for the NOAA Office of Coast Survey." The OCS implementation of Data Licensing why do we need it, and how will it help us?

- Dr. Brian Calder, Research Professor and Associate Director, Center for Coastal and Ocean Mapping (CCOM) and NOAA-UNH Joint Hydrographic Center, University of New Hampshire
 - "Getting from 'Why?' To 'Why Not?'". How do we normalize the selection and acceptance of data licenses for bathymetric data?
- Dr. Kurt Schwehr, Software Engineer, Google and Affiliate Research Professor, University of New Hampshire, Center for Coastal and Ocean Mapping
 "Managing spatial data at scale a perspective from Google Earth Engine". A description of the key aspects around managing ingesting and using greater than 50 petabytes (PB) of spatial data.

Commenters:

- Lindsay Gee, HSRP member, Mapping and Science Coordinator, Ocean Exploration Trust
- Guy Noll, Associate Director, Esri Mapping Systems
- Ed Saade, HSRP member, Group Director Americas, President USA, Fugro Inc. (ret.)
- Derek Hanson, Attorney-Advisor, Weather, Satellites, & Research Section, NOAA Office of General Counsel
- Discussion with the HSRP members
- 4:30 4:40 Public Comment Period comments for the HSRP members
- 4:40 5:30 Recap & Round Robin with HSRP members and NOAA leadership

Julie Thomas, Sean M. Duffy, Sr., and HSRP members review and summarize meeting, consider recommendations for NOAA Administrator letter, and other topics

5:30 Day 1 of the Public Meeting Concludes

Thursday, March 10, 2022, 1 - 5:30pm EDT

1:00 – 2:00 Round robin recap from day 1; HSRP discussion continues

- Julie Thomas, HSRP Chair
- RDML Benjamin Evans, Director, OCS, NOS, NOAA

2:00 – 3:20 Bridge Heights and Datums: What's NSRS, Air Gap Sensors, and Navigation Have to do With It?

Moderators: **Sean M. Duffy, Sr.**, HSRP member, **Galen Scott**, Constituent Resources Manager, NGS, and **Chris DiVeglio**, Maritime Services Program Manager, NOAA <u>PORTS®</u> <u>Program</u>, CO-OPS

NOS contributes to safe navigation for shipping and infrastructure projects with accurate water levels, nautical charts, hydrodynamic models and precise positioning. How can new technology work with datums, bathymetric surveys, positioning and air gap sensors to promote the blue economy? Join us to explore the technological possibilities of using data from the modernization of the National Spatial Reference System (NSRA) to harmonize the myriad of datums at the coast and meet the requirements for measuring accurate heights to determine bridge clearances for safe navigation. Examples of challenges along the Mississippi and Lower Columbia Rivers will be highlighted.

- Julia Powell, Chief, Navigation Services Division, OCS, NOS, NOAA, "Setting the Stage: The Importance of Common Datums as Related to Navigation".
- Sean M. Duffy, Sr., HSRP Co-Chair, and Executive Director, Big River Coalition "The Invisible Infrastructure Important to the Mississippi River". The complexities of properly calculating the vertical clearance of the 7 Bridges that transit over the Mississippi River Ship Channel and the need for increased channel adjusted data and metrics.
- Capt. Paul Amos, Pilot, Columbia River Pilots
 "Navigation challenges and considerations along the Lower Columbia River". How do
 a unique river datum and highly variable water levels throughout the year contribute to
 necessary navigation considerations for long transits up and down the Lower Columbia
 River.
- Chris DiVeglio, Maritime Services Program Manager, NOAA <u>PORTS® Program</u>, CO-OPS, NOS, NOAA
 - "Communication and Engagement Surrounding NOAA Air Gap Data". A review of how NOAA effectively conveys air gap data reporting, display, and the importance of standardizing and communicating system setups, reference points and outreach among maritime stakeholders.

Jeff Jalbrzikowski, P.S., GISP, Regional Geodetic Advisor, NGS, NOS, NOAA
 "Marine to Riverine - The Role of the Modernized NSRS in Navigation Data
 Harmonization". Encouraging more widespread use of the National Spatial Reference
 System for navigation-related data may provide better opportunities for users and
 responsible agencies.

Commenters:

- Sam Knight, Director, Product Management, Blue Marble Geographics
- **Dr. Neil Weston,** Chief Scientist, OCS, NOS, NOAA and Affiliate Research Professor, University of New Hampshire, Center for Coast and Ocean Mapping, UNH-NOAA Joint Hydrographic Center
- Discussion with the HSRP members

3:20 - 3:30 Public Comment Period - comments for the HSRP members

Discussion with the HSRP members – continues if time allows

3:30 - 3:40 Break

3:40 – 4:40 *HSRP Discussion: Working Groups, Issue Papers, Comments, Priorities,* Moderators: Julie Thomas and Sean M. Duffy, Sr., HSRP Co-Chairs

- **Dr. Dave Maune**, HSRP Planning and Engagement Working Group member discussion and finalize write ups: HSRP data licensing comments; 3 issue papers; Priorities Matrix
 - Lindsay Gee, HSRP member, discussion on comments to the NOS request regarding data licensing
 - Dr. Dave Maune, HSRP member, discussion on new issue paper on Public Private Partnerships
 - Gary Thompson, HSRP member, discussion on updates to old issue paper on NSRS
 - Capt. Ann Kinner, HSRP member, and Dr. John Nyberg, Deputy Hydrographer, OCS, NOS, NOAA; discussion on updates to the boater issue paper – updated for raster paper chart transformation
 - Julie Thomas and Sean M. Duffy, Sr., member discussion on HSRP priorities matrix, topics for next meetings, other topics
- Dr. Qassim Abdullah, Co-chair, HSRP Technical Working Group

4:40 – 5:30 Meeting Recap & Round Robin with HSRP Members, Actions, and Wrap Up

- Julie Thomas and Sean M. Duffy, Sr., developing an HSRP recommendation letter
- Around the room with the HSRP members: review and summarize meeting and other topics
- Request HSRP suggestions towards recommendation letter and topics for next meetings

5:30 Public Meeting Concludes