

## HSRP Priorities MATRIX

April 2020

Topic	Brief Description	Status as of 4/23/2020	Current/Future Action Needed/Recommended	
Integrated Ocean and Coastal Mapping (IOCM)	Integrated Ocean and Coastal Mapping is defined as the practice of planning, acquiring, integrating, and disseminating ocean and coastal geospatial data and derivative products in a manner that permits easy access to and use by the greatest range of users.	IOCM requires intra- and inter-agency coordination with a focus on streamlining operations, reducing redundancies, improving efficiencies, developing common standards, and stimulating innovation and technological development.	Update during Apr 28, 2020 meeting.	
Restricted visibility - Can the suite of NOAA products help?	What can the committee do to increase the availability and accuracy of restricted visibility forecast products in order to improve navigation? Connection with regulatory oversight.			On-going
National Policy issues	The mechanism for addressing the policy is with the CMTS. (Examples: Expand Precision Nav, develop regulations for UAV, develop more accurate restricted visibility sensors, develop further coordination and partnerships with industry)		What can we recommend to Gallaudet for CMTS topics? Messaging for Shep Smith?	On-going
USACE-NOAA Partnership	Example: Issues about the standards to which US harbors and channels are charted in USACE and NOAA surveys. Not all harbors are charted to IHO Class I standards. Standardizing datums	2017 Surveying and Charting in US Channels, Harbors And Anchorages paper. Per Sean Duffy, Admiral Smith making key progress. Example is Smith's participation on the Mississippi River Coalition.	Updates from NOAA on ongoing conversations with USACE. Continue to highlight importance in meeting letter/notes. There are many topics that overlap with the USACE. Examples of the USACE funding many observations which feed into disaster response/modeling. Continue the valuable partnership.	On-going - Continue to encourage and endorse
Identify and quantify the benefits of NOAA's Hydrographic Services	Documenting stakeholder requirements for and benefits from hydrographic services is key to Congressional funding support	Dave Maune is working with Ashley Chapell on the review of the NGS' 3D Nation Requirements and Benefits Study will be completed in 2020.	Russel Callendar asked that we look into this at Miami meeting  No further action needed. Ashley Chapell has reached out to HSRP members for inputs. Expect to be asked to review draft study for comment in 2020.	On-going - Continue to encourage and endorse
USCG and AIS	The need to disseminate NOS PORTS and other data via USCG AIS.	Good progress working with the Coast Guard as funding is allocated. They hope to have the software modified by 2020 so incorporate the changes needed to proceed with this task.	Mention a thank you in the letter to Administrator	On-going - Continue to encourage and endorse
Chart of the Future - supplementary/navigation data management and distribution (Lindsay Gee and Ed Saade)	Similar to Ed Page additional item and relates to better use of current technology in the receipt, management and distribution navigation and related data	Tech WG webinar May 9, 2018 Briana Sullivan, followed by briefing by Ed Saade		On-going - Continue to encourage and endorse

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	Disaster Response	NOAA function - products and services for response and recovery, continuous improvement. NOAA's ability to respond to stakeholder needs and requirements.	Capt Kretovic updated progress through the Precision Nav HD Chart and the Coast Survey Strategic Plan Focus of April 2018 meeting; Recommendations for post-disaster survey and enhanced information delivery and communication in Miami letter	More specifics are needed here. Neeraj just gave a nice presentation on the importance of accurate observations and modeling during extreme events.	On-going - Continue to encourage and endorse
	Public-Private Partnerships	Blue economy-related - precision nav, resilience. Connect with local IOOS How NOAA can facilitate partnerships	NOAA is making great strides in their public/private partnerships. Many examples	Russel Callendar asked that we look into this at Miami meeting; coordinate summary of identifiable examples and targets for evaluation and commentary.	On-going - Continue to encourage and endorse
	Relative Sea Level Rise and high tide flooding	Advocate for the continued measurements of relative sea level rise (sea level rise + subsidence) in coastal areas. Continue measurements by CO-OPS and by NGS in collaboration with NASA and USGS. Critically important for	Establish panel for SLR - Lead - Julie Thomas	issue paper outline - 1: geodetic observations, emphasizing common datums and standard output. 2: long term observations, 3: Climate and statistical analysis tools, 4: Model coupling, 5: Public Education (CMTS, advisory committees, etc.).	HAWAII
	Incorporating non-authoritative sources into hydrographic products	Crowd sourcing; satellite-derived bathymetry	Improving Access issue paper; finalized May 2018.	Ed Saade - Seabed 2030, Ashley Chappell IOCM	HAWAII
	Autonomous Vessels - surveying	Emerging technology/innovation, NOAA strategy; Advances and challenges	Responded to NOAA's request for comments on autonomous strategy 2017	RADM Gallaudet requested HSRP attention 2018 ; Tech WG tracking for future ideas/needs; follow up as needed on NOAA strategy. Possible visit to Saildrone in SF.	SAN FRANCISCO
	Hydrodynamic Modeling and Validation	Ocean Forecast System - Automated integration of observing system data. The need for data inputs to hydrodynamic modeling as it pertains to navigation within the nearshore.	In Progress - OCS will present a webinar on OFS during one of our future Working Tech telcons.	The OFS is being rolled to different regions of the US. San Francisco has their system, so good topic to add to the SF meeting agenda.	SAN FRANCISCO
			<b>ISSUE PAPERS</b>		
	Alaska Coastal Mapping Gaps and Priorities	Need to establish tidal datums and map topobathy surfaces at coastal villages with greatest need	Approved to prepare draft ISSUE PAPER for FUTURE consideration by the HSRP	Dave M to coordinate draft IP and priorities with Alaska Mapping Executive Committee for HSRP consideration in Hawaii	HAWAII

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Expanding Maritime Services in the Artic	The opportunity exists for NOAA National Ocean Service (NOS) to leverage new technologies to deliver innovative product and service solutions. The challenges, needs and proposed solutions are summarized below.	ISSUE PAPER AUG 2019	Improve infrastructure and communications, additional water level sensors and updated bathymetry.	
Relative Sea Level Rise and high tide flooding	Advocate for the continued measurements of relative sea level rise (sea level rise + subsidence) in coastal areas. Continue measurements by CO-OPS and by NGS in collaboration with NASA and USGS. Critically important for storm water managers and other	ISSUE PAPER AUG 2019	Issue paper outline - 1: geodetic observations, emphasizing common datums and standard output. 2: long term observations, 3: Climate and statistical analysis tools, 4: Model coupling, 5: Public Education (CMTS, advisory committees, etc.). Obtain stats for US Coastal SLR and	TRACK
Enhanced Navigational Assistance	Continued roll-out and expansion of PORTS. Types of observational data needed for safe port/harbor operations. Restricted visibility sensors could be addressed as part of this expansion.	Precision nav ISSUE PAPER, revised May 2018; Recommendations in Miami letter	Track growth and capacity of issue following issue paper promulgation	TRACK
USACE-NOAA Partnership	Example: Issues about the standards to which US harbors and channels are charted in USACE and NOAA surveys. Not all harbors are charted to IHO Class I standards.	ISSUE PAPER 2017 Surveying and Charting in US Channels, Harbors And Anchorages paper	Updates from NOAA on ongoing conversations with USACE. Continue to highlight importance in meeting letter/notes. There are many topics that overlap with the USACE. Examples of the USACE funding many observations which feed into disaster response/modeling. Continue the valuable partnership.	TRACK
Marine and Geospatial Information Infrastructure	Critical information infrastructure that supports physical infrastructure. This includes managing big data, and making use of artificial intelligence.	May 2018 ISSUE PAPER	Keep track of issue following issue paper promulgation	TRACK
Hydrographic Survey Fleet	The need to replace the NOAA ships Rainier and Fairweather for Arctic/ Alaska survey needs.	2018 Hydrographic Survey Fleet paper updated; update at New Orleans meeting by Captain Brennan	Regular fleet updates from NOAA	TRACK

## ARCHIVE

Information Dissemination	Getting the wealth of data/information collected/aggregated/analyzed/etc. Related to public-private partnership	Recommendation in Miami 2018 Letter to Acting Administrator -	Overlaps with Education and Public-Private Partnerships.	TRACK, merge with public private
Hardening of Offshore Observing Sites	Strategic approach to hardening sites			Follow up with Larry A.

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	NOAA's application of IoT, AI and M2m (Ed Page)		Recommend exploring this new subject by the technology sub committee of HSRP.		Ed Page and Admiral Smith to follow up
	Arctic Charting/Plan		Arctic issue paper 2016; Arctic report 2015(?)	Ed Page leading update of Arctic issue paper	Ed Page will replace this with Artic Plan
	Education	Promoting hydrographic education/ Involving younger hydro professionals/students in HSRP. Goal: Further outreach to the academic community to promote hydro/geodetic/etc. programs through exposure to HSRP and NOAA/OCS	Invite Southern Miss hydro program students and faculty to the HSRP meeting in New Orleans with the goal of getting them in the room and participating.	Within the scope of the panel, invite hydro/oceano students to HSRP meetings; look into getting young scientists involved with HSRP (e.g. Sea Grant)	New Orleans, move to archives, reach out to local universities invite to meeting