45th Meeting of the US - Canada Hydrographic Commission

National Report by

United States of America









Personnel Transitions: incoming since USCHC44

RDML Benjamin Evans - Director, Office of Coast Survey
Lorraine Robidoux - Deputy Director, Office of Coast Survey
RDML Ronald Piret - Hydrographer of the Navy
CAPT Dwight Smith - Director, NGA Maritime Office









Main Achievements during the Past Year

- Intersessional work
 - External Source Data sharing discussions and data licensing presentation at the CHS Executive Committee meeting, April 2022
- NGA created first U1 ENC and disseminated to customers June 2021
 - Pass-through CHS and NOAA ENCs since January 2021
- Transboundary collaboration
 - Monthly meeting between CHS-Central and NOAA-Pacific/Great Lakes Branch to discuss Great Lakes Transboundary Issues
 - Initial meeting set up with CHS-Atlantic and NOAA-Atlantic Branch April 2022
 - Coordination will continue, will likely turn into another monthly meeting once rescheming in the area ramps up
 - Initial meeting set up with CHS-Pacific and NOAA Pacific/Great Lakes May 2022
 - Schedule A U.S. entering into Canadian waters when surveying along the Detroit River









Main Challenges and/or Obstructions

- COVID challenges persist
 - VTC used for continued communication
 - Getting back to in person meetings!
- NOAA operated on a Continuing Resolution through mid-March, 2022.
 This delayed NOAA's ability to execute contract hydrographic survey work
- NGA maintenance of dual digital chart products ENC and DNC. Hoping to develop full ENC portfolio in the next few years









Progress on Surveys

- NOAA Ship Thomas Jefferson 2022 field season will be spent in the Great Lakes in the vicinity of Cleveland, Ohio and the Detroit River
- Coast Survey's Navigation Response Team will survey in Lake Michigan and Lake Huron in 2022
- NOAA Contractor will survey within the newly designated Wisconsin Shipwreck Coast National Marine Sanctuary in 2022
- NBS/Data Licensing & St. Lawrence CHS data sharing



NOAA Ship *Thomas Jefferson* transit route



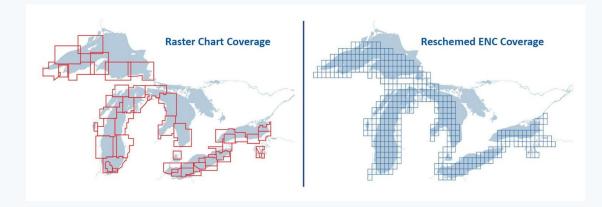






Progress on Charting

- NGA created Worldwide ENC grid for use in building ENC portfolio – about 35% of cells in work or complete
- NOAA has begun raster sunset process; 66 charts canceled, 145 in last edition; all will be canceled by Jan 2025
- NOAA ENC rescheming 11% complete, most of the work continues in Great Lakes and Atlantic Coast
- NOAA Custom Chart v. 1.3 release date scheduled for June 2022
- NOAA has a high level S-101 transition plan drafted. New S-101 transition manager will arrive on MCD Staff in July











Contributions to the IHO DCDB and GEBCO

Crowdsourced bathymetry

- Within US waters, CSB data is being made available via the IHO DCDB. The DCDB is hosted, managed, and supported by NOAA NCEI
- US supporting CSB globally via support to the IHO DCDB
- US continues to provide interagency support of the IHO CSBWG

Seabed 2030

- US supports the IHO DCDB use within the Seabed 2030 project. Many enhancements underway for data discovery and accessibility
- US is working with CHS to keep both Nations' Gap Analysis coordinated and as consistent as
 practicable given our respective national needs
- USCHC rep to Seabed 2030, andy.armstrong@noaa.gov



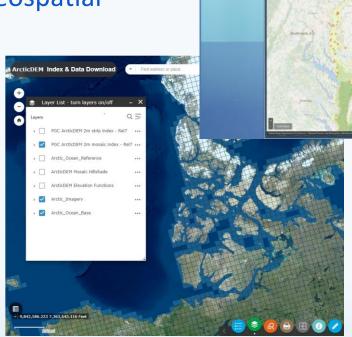






Progress on MSDI

- Policies and Governance
 - IHO MSDIWG + regionally-focused MSDIWGs, UN-GGIM WG-MGI, OGC Marine DWG
- Standards
 - IHO S-100, Open Geospatial Consortium, Federal Geospatial Data Committee
- Information Systems
 - Product-centric to data-centric approach
- Data
 - MarineCadastre.gov
 - NGA Arctic Digital Elevation Model (DEM)
 - Data.gov
- Federated MSDI Pilot













Plans that Affect the Region

- Great Lakes surveying
 - There are multiple hydrographic mapping missions in the Great Lakes this field season aboard the NOAA Ship *Thomas Jefferson*, and with Navigation Response Teams and contracted assets to support critical updates to marine navigation products and services and provide modern data to the scientific and benthic mapping communities
- Raster chart cancellations Lake Superior charts cancelled 12/30/21



NOAA Ship Thomas Jefferson shown from the bridge wing of a passing ship outside of Montreal, Quebec. (Credit: St. Lawrence Seaway Pilots)





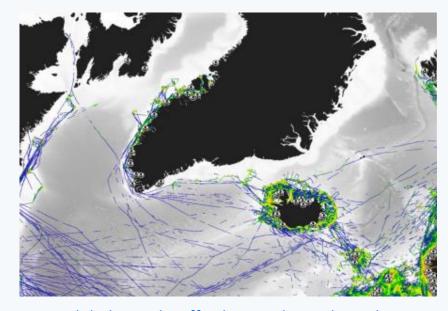






Success Stories to Share

- Global Maritime Traffic Density Service (GMTDS) available to the public
- First NGA Certified Printed ENCs (CPENCs) to be available Summer 2022
- World Port Index (WPI) web application available with crowd sourcing ability
- U.S. support for the IHO and Canada's Empowering Women in Hydrography Project
 - Hosting three candidates during 2022 survey season



Global vessel traffic density data released to the public in 2021











Thank you!







