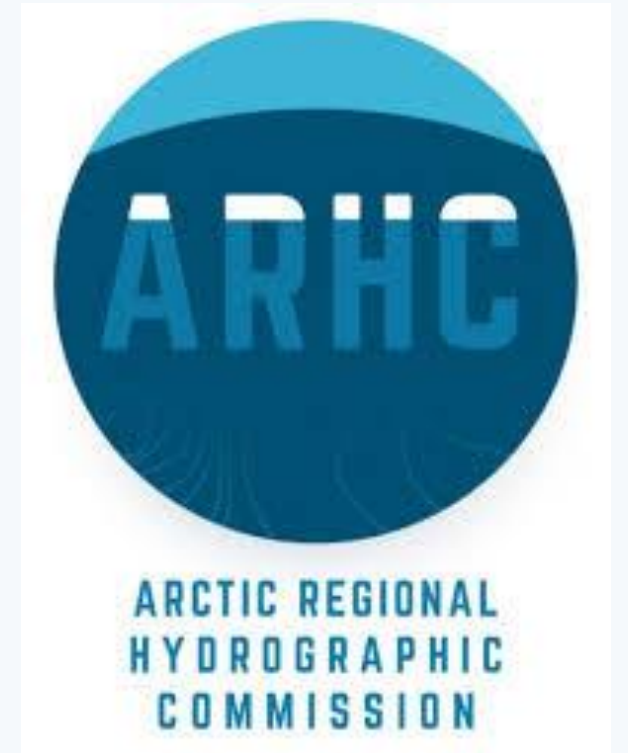


# 11<sup>th</sup> Meeting of the Arctic Regional Hydrographic Commission

National Report by  
United States of America



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# Achievements during the Past Year and Plans for the Region



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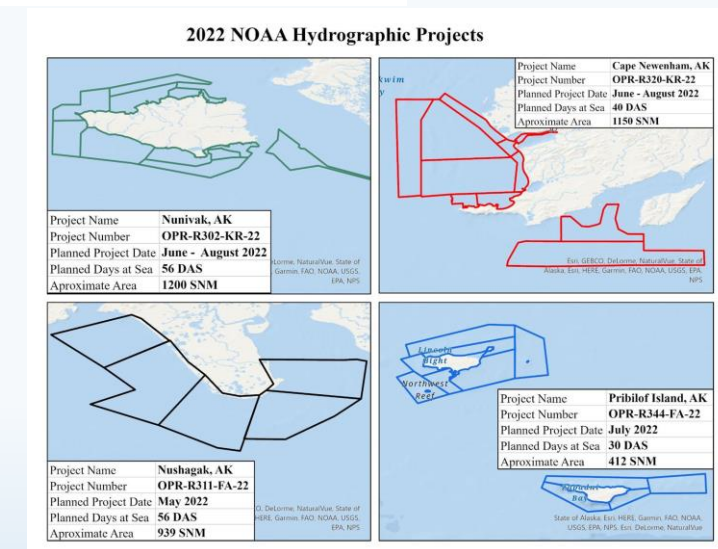
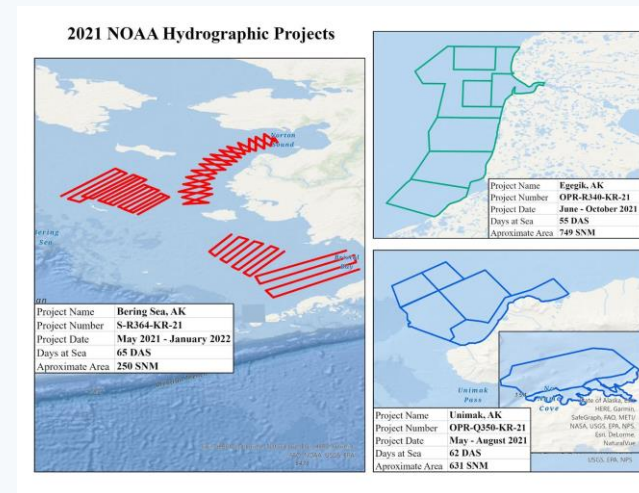
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# Progress on Surveys

## Surveys:

- In 2020 and 2021, NOAA surveyed approximately 2400 square nautical miles (SNM) of Arctic seafloor across six separate projects.
- In 2022, four Arctic hydrographic surveys are planned to provide updated bathymetry in over 3000 SNM of Arctic waters.
- Continued investigation into operationalizing Uncrewed Systems (UxS) and Autonomous Surface Vehicles (ASVs)
- Saildrone - North Slope (2020) and Bering Sea (2021)
- Hydrographic data also collected 2,300 SNM in the vicinity of Unimak, Herendeen Bay, Egegik, and Norton Sound



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# Progress on Charting

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## Charting:

- Major program to rescheme the entire suite of NOAA ENC's underway
- NOAA has begun raster transition process - completed by Jan, 2025
- NOAA produces about 250 RNC and ENC charts over Alaskan waters
- NOAA Custom Chart Tool ver 1.1 released in March 2021
- NOAA crafting high-level S-101 transition plan
- NGA's Maritime Safety Office has begun its transition of Vector Product Format (VPF) Digital Nautical Charts (DNC) to S-57 Electronic Navigation Charts (ENCs)
- NGA creating Worldwide ENC grid for use in building future ENC portfolio, and assisting with S-100 transition



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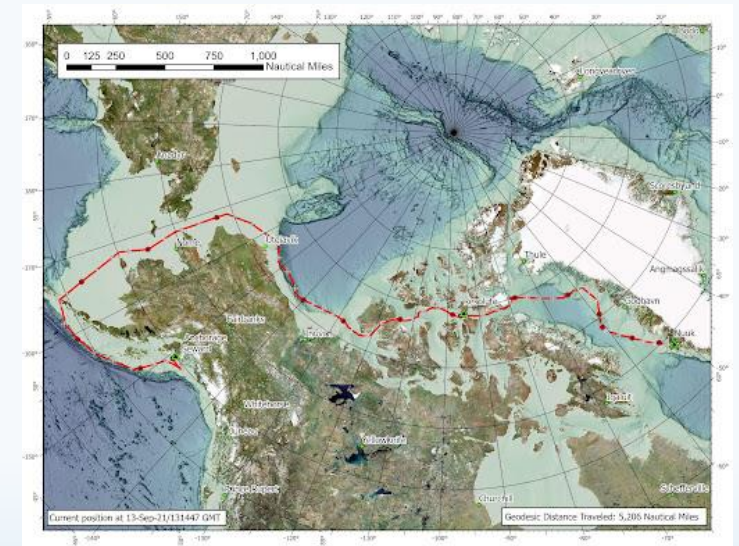
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# U.S. Coast Guard Cutter *Healy*

- USCG Cutter *Healy* transits Northwest Passage (Alaska to Greenland) - Aug and Sept 2021
- To collect data and fill gaps in current hydrographic coverage
- Data will be provided to
  - General Bathymetric Chart of the Oceans
  - Charting agencies: Coast Survey, Canadian Hydrographic Service, and Danish Geodata Agency
  - Seabed 2030
  - Seascape Alaska



Read more in the Coast Survey blog: <https://nauticalcharts.noaa.gov/updates/alaska-to-greenland-via-the-northwest-passage/>



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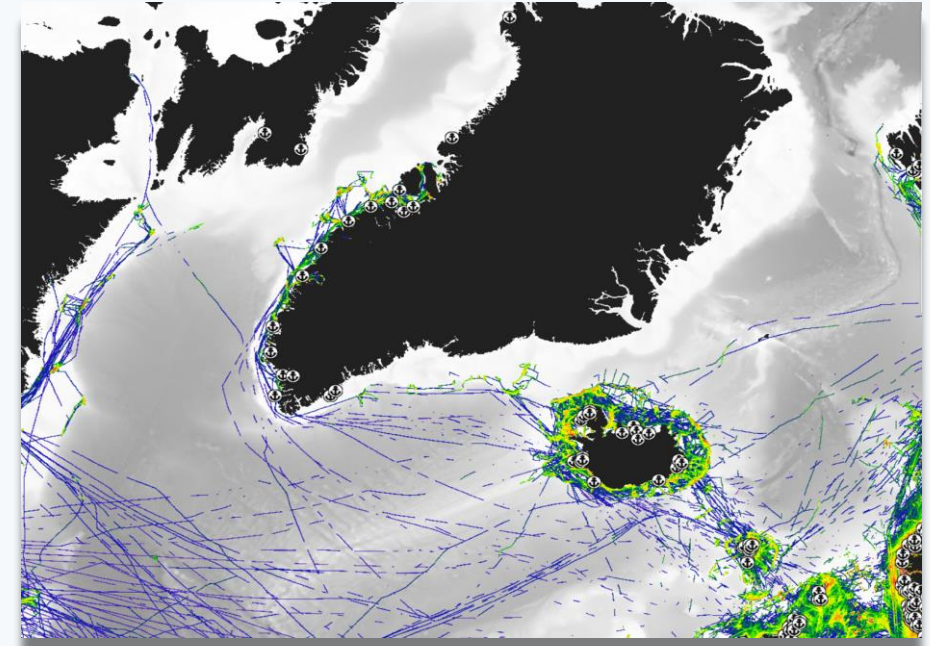
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# Global Marine Spatial Data Infrastructure - API

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- U.S. approved release of global vessel traffic density data to the public in Fall 2021
  - 1 km monthly raster data going back ~1 decade
  - Native projections for Polar and mid-latitudes
  - Access via viewer, link to API, and download will be made publicly available via URL within days



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# Global Marine Spatial Data Infrastructure - World Port Index

- U.S. released a World Port Index
  - Physical characteristics, facilities, and services
  - Major ports and terminals worldwide
  - Available as a suite of web-based applications via URL
  - Access via MSI site:  
<https://msi.nga.mil/Publications/WPI>
  - Direct link:  
<https://nga.maps.arcgis.com/apps/MapSeries/index.html?appid=f9515d53e3e24ae7919f02eb8f554c96>



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# Seascape Alaska

- [Seascape Alaska](#) initiative launched
- Regional campaign supporting NOMEAC to fully map the U.S. waters off Alaska
- Accessible, high quality modern seabed data
- Initiative benefits
  - Safe navigation
  - Hazard and mitigation adaptation
  - Identification of marine habitats
  - Ocean and climate models and research
  - Renewable energy
  - Fisheries management



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# Main Challenges and/or Obstructions

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- Operational limitations related to COVID-19 persist
- Continuing use of VTCs / lack of in person meetings
- Unique challenges of mapping the Arctic
  - Limited operational window
  - Limited infrastructure
  - Seasonable accessibility
  - Impacts to indigenous communities



NOAA Ship Fairweather in front of Hubbard Glacier,  
AK



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# Thank you!



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