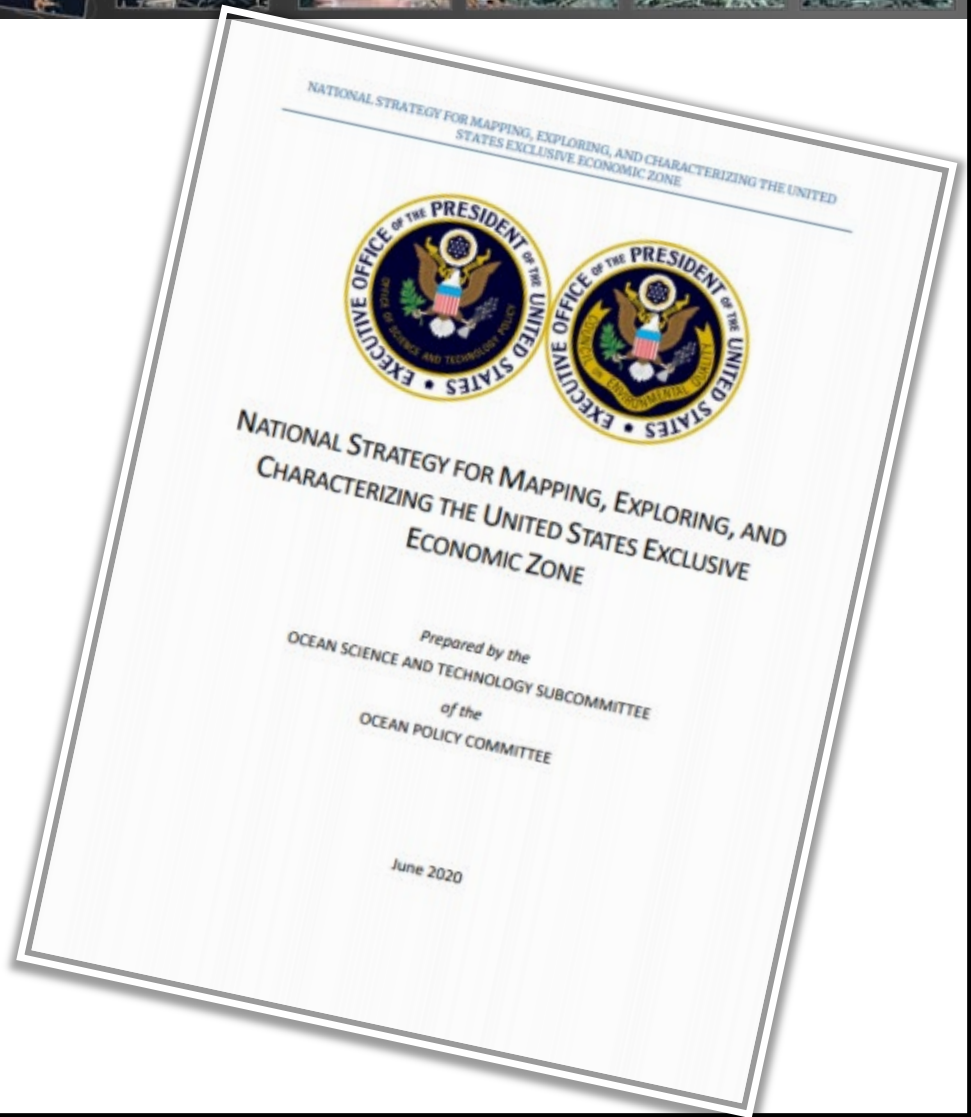
Offshore Alaska Campaign Mapping

Meredith Westington
NOAA Integrated Ocean and Coastal Mapping

National Strategy

"Mapping, exploring, and characterizing the ocean and coastal shoreline advances scientific understanding, safeguards the Nation's economic prosperity, and promotes the health and security of our people. This knowledge is essential to advancing America's understanding of the marine environment and addressing sustainable ocean resource management."

-- National Ocean Mapping, Exploring, and Characterization of the U.S. EEZ (NOMEC)



Goals of the NOMEC Strategy

GOALS

1. Coordinate Interagency Efforts and Resources to Map, Explore, and Characterize the United States EEZ
2. Map the United States EEZ

Objective 2.2. Coordinate and Execute **Campaigns** to Map the U.S. EEZ

3. Explore and Characterize Priority Areas of the United States EEZ
4. Develop and Mature New and Emerging Science and Technologies to Map, Explore, and Characterize the United States EEZ
5. Build Public and Private Partnerships to Map, Explore, and Characterize the United States EEZ

What is Ocean Mapping?

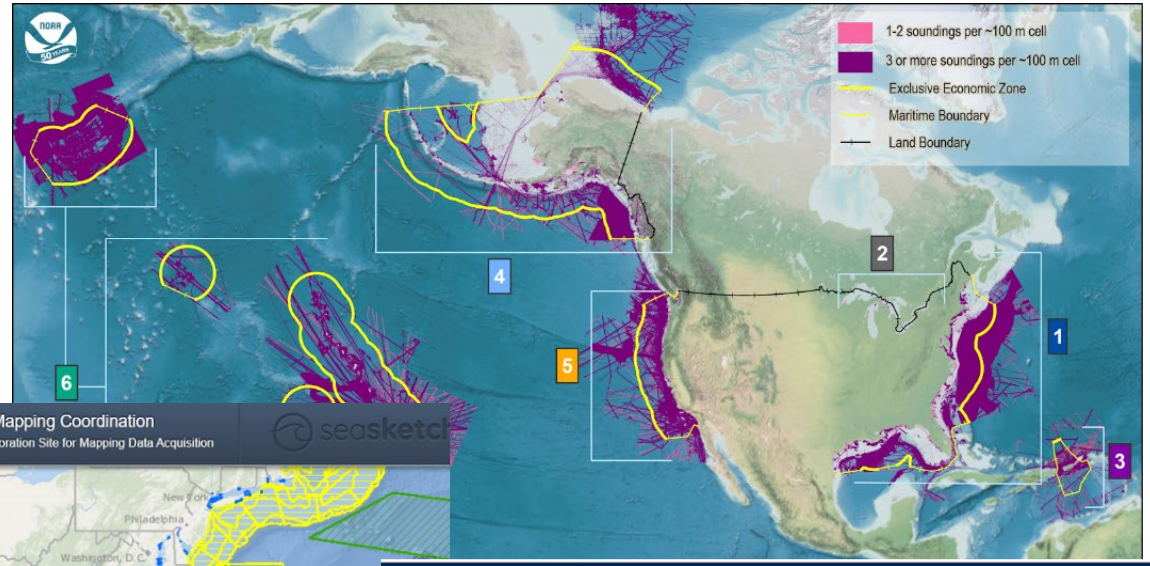
Ocean mapping provides comprehensive data and information needed to understand seafloor characteristics such as depth, topography, bottom type, sediment composition and distribution, and underlying geologic structure.

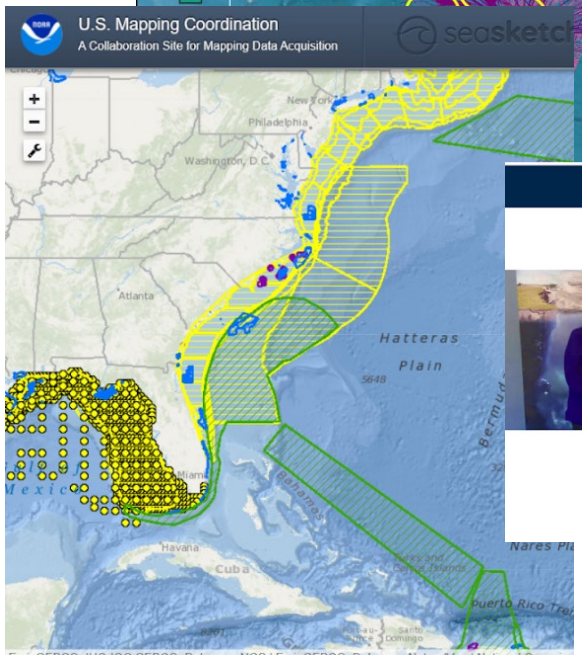
Standard Ocean Mapping Protocol

- Protocol to include specs for
  - Bathymetry
  - Backscatter
  - Water Column
  - Side Scan Sonar
  - Sub-bottom
  - Magnetometer

Plus Data Management!

- **Make the Most of Every Survey Mile**
  - Guide data acquisitions and processing
  - Encourage widest access to data
  - Get data into public archives
  - Use national data standards



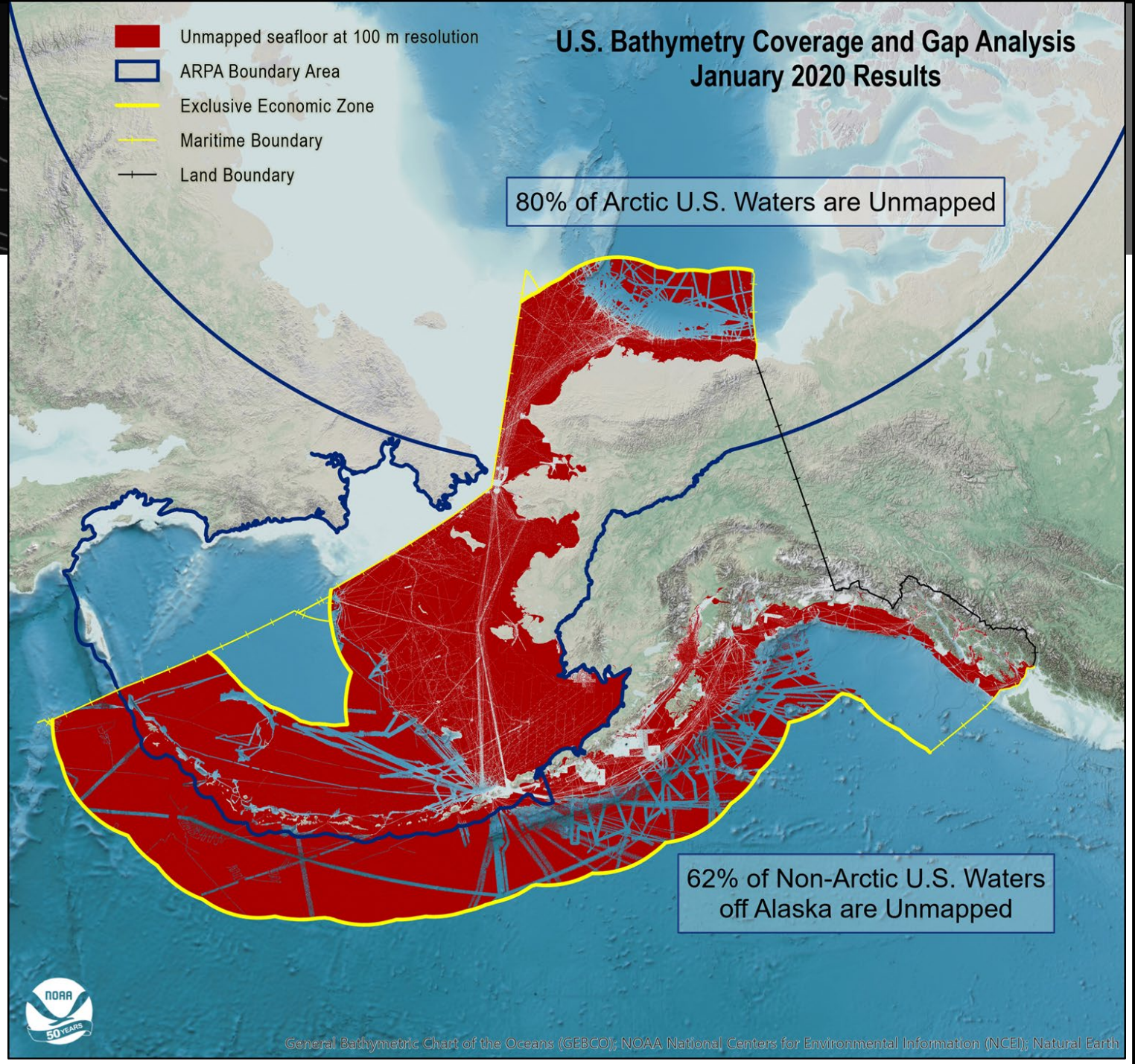


Bathymetry Gaps

Criteria for Minimally Mapped

- Area must be surveyed after 1960
- Each 100 m cell must be supported by at least 1 sounding
- Publicly accessible bathymetry at NOAA NCEI and OCM

Based on U.S. Bathymetry Gap Analysis:
https://iocm.noaa.gov/seabed-2030-bathymetry.html

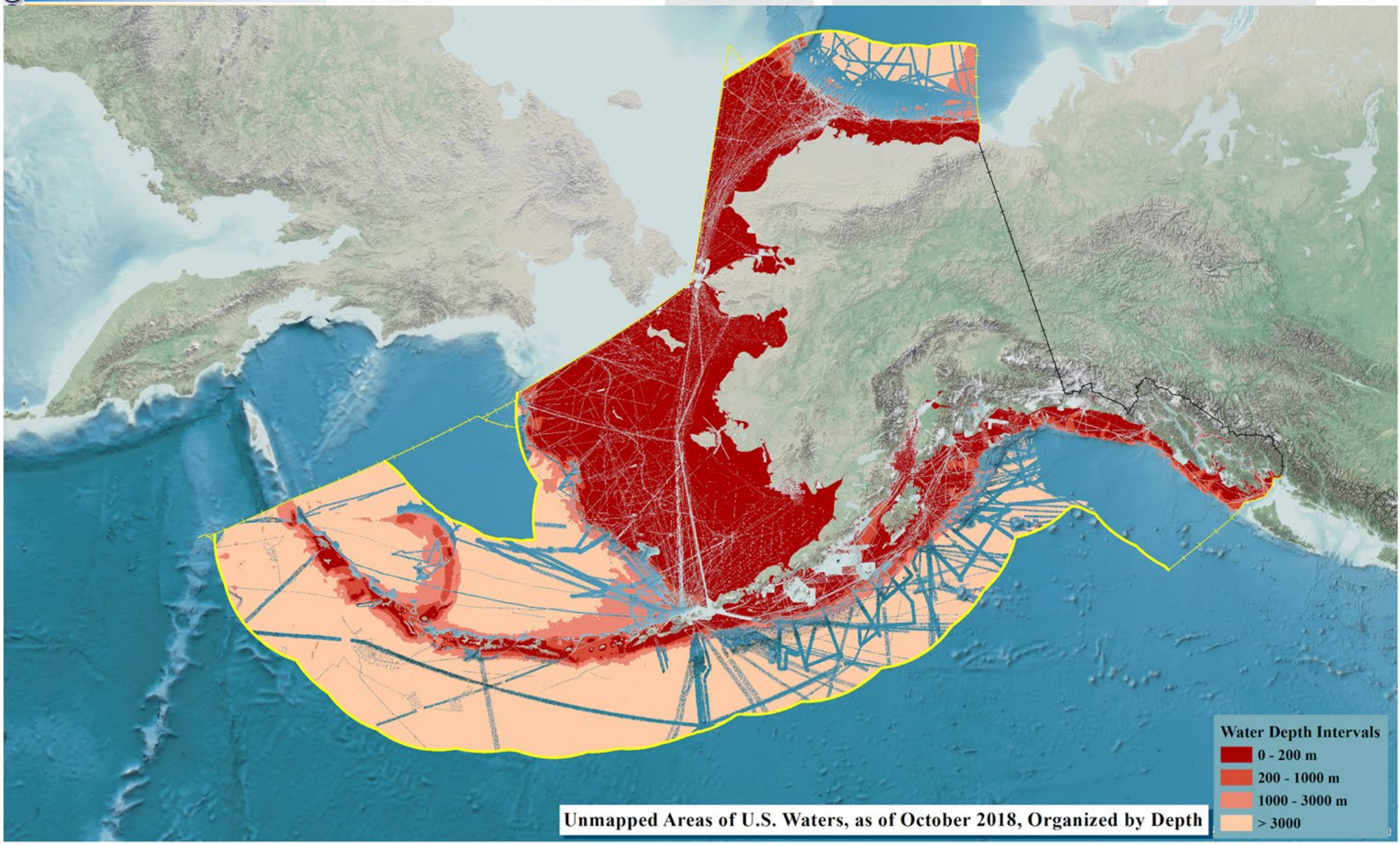


Level of Effort

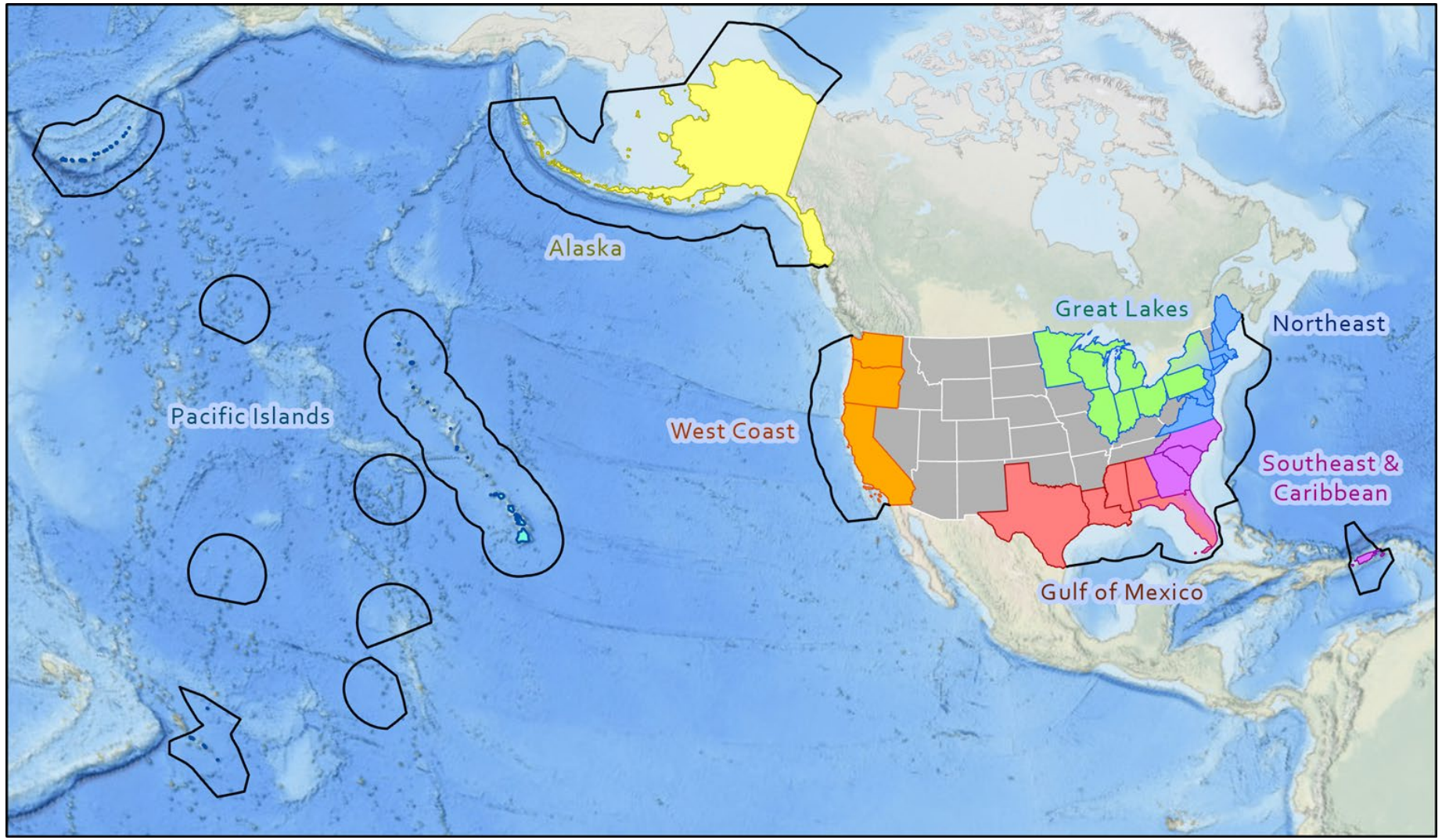
Different mapping strategies may be needed!

We are acquiring ~10% of what we need to achieve annually to reach our goals

	Total Area of U.S. Waters (sq nm)	Unmapped U.S. Waters (sq nm)	Unmapped Portion Across Four Water Depth Intervals							
			0 - 200 m		200 - 1000 m		1000 - 3000 m		>3000 m	
			Area	Effort	Area	Effort	Area	Effort	Area	Effort
4 Alaska	1,080,200	790,100	43%	98%	5%	0.9%	7%	0.3%	45%	0.7%



What is Campaign Mapping?



Measure of Success

Measurable annual progress on U.S. ocean and coastal mapping data acquisition using all available platforms to maximum extent through coordinated mapping campaigns responsive to identified priorities.

Key Steps to Progress

- **Share** all available data with centralized repositories, like NCEI
- **Participate** in mapping coordination activities
- **Innovate** to increase survey efficiency

Contact us at
iwgocm.staff@noaa.gov

Visit our website at
https://iocm.noaa.gov/

Thank you!