Seascape Alaska

Working together to understand the depths of Alaska's vast seascape

What is Seascape Alaska?

Seascape Alaska is a regional campaign supporting the 2020 National Strategy for Mapping, Exploring, and Characterizing the United States Exclusive Economic Zone (NOMEC). Working toward a common goal to fully map the U.S. waters off Alaska, the campaign is a collaboration among federal, tribal, state, and non-governmental partners with a wide range of interests and dependencies on mapping data across coastal and ocean waters throughout the U.S. Exclusive Economic Zone.

Vision: Accessible, high quality modern seabed data for Alaskan waters to support U.S. research, resource management, sustainable economic growth, and the health and security of Americans.

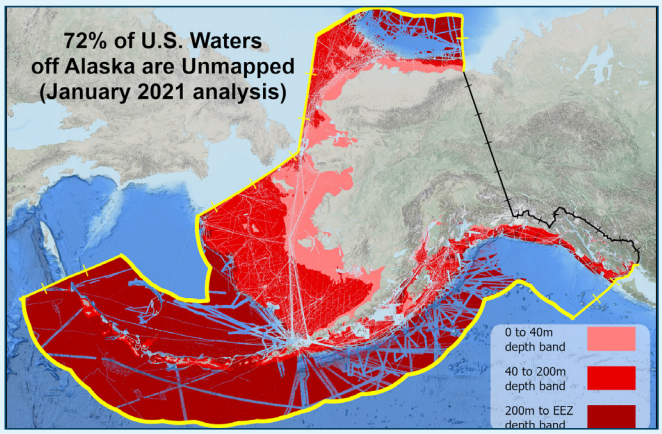
Values:

- Accessible, high quality data and products
- Data and products follow best practices
- Members work together to achieve more
- Innovation is encouraged
- Plans and progress are shared broadly

What are the coastal and ocean mapping needs?

The planet Mars is better mapped than our oceans here on Earth. At just over 1 million square nautical miles in size and 72% unmapped (Progress Report on Unmapped U.S. Waters, January 2021), Alaskan waters are the least mapped relative to any other U.S. state. Current data are sparse and pre-date modern mapping technologies. Filling these data gaps has far-reaching benefits, including safer navigation and community access, hazard mitigation, preservation of marine habitats and heritage, a deeper understanding of natural resources, and fisheries management.

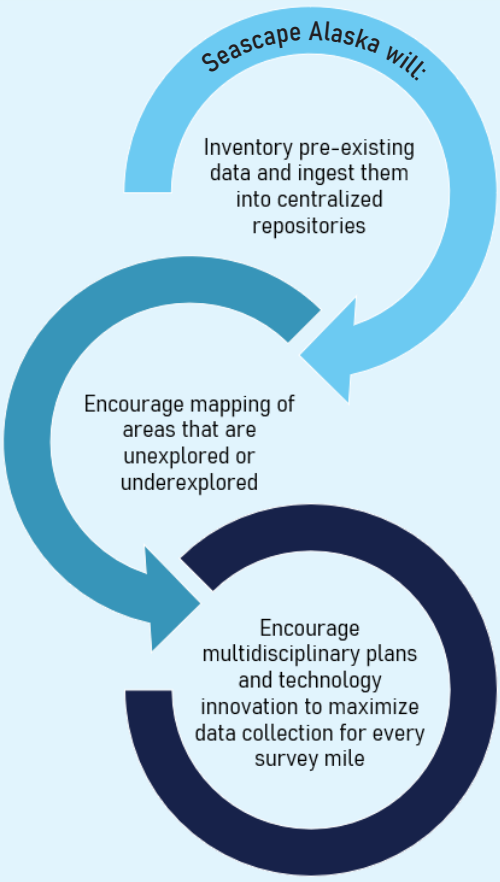
September 2021



How to fill the gaps?

Mapping this region is a complex task to ensure the broadest use of the data for campaign participants and other stakeholders.

Mapping will be accomplished through multibeam sonar and aerial lidar surveys, complemented by uncrewed systems and crowdsourced bathymetry involving traditional and non-traditional mapping assets. There are also instances where data have been collected but are not easily accessible to the public, and need to be added to repositories such as the National Centers for Environmental Information.



How to get involved?

Do you have mapping assets and data, ideas and technology, funding, or a network? Do you want to join the effort or learn more? Contact Meredith.Westington@noaa.gov, and let us know if you can contribute your mapping data here.

MAPPING THE SEAFLOOR

primary sources of bathymetry

Multibeam and LIDAR surveys

by trained hydrographers and other personnel from government, academia, and private sector

Coastline

Representing ~0-40 meters water depth, mapping in this area is ideal for aircraft using LIDAR technology and autonomous systems using multibeam sonar technology.

Shallow water

Representing ~40-200 meters water depth, mapping this area is ideal for ships using multibeam sonar technology alongside autonomous systems as a force multiplier.

Deep water

Representing water depths >200 meters, mapping this area is ideal for ships using multibeam sonar technology.

uncrewed

other sources

- Uncrewed aerial vehicles
- Satellite-derived bathymetry
- Sidescan sonar
- Single beam bathymetry
- Crowdsourced bathymetry