



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

Safer maritime navigation and community access

Fisheries management and subsistence

Hazard mitigation and adaptation

Seascape Alaska Benefits

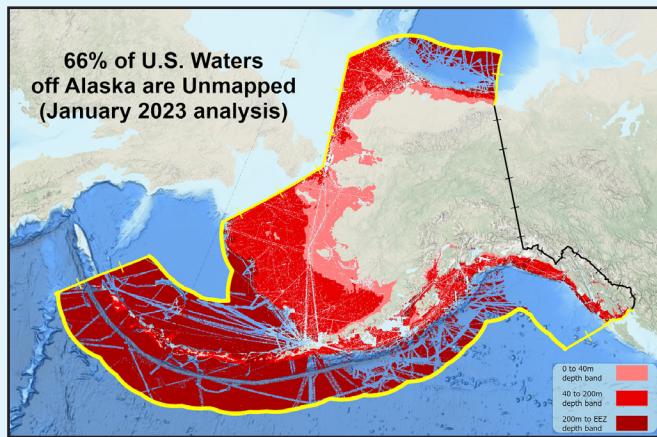
Identification of marine habitats and maritime cultural heritage

Ocean and climate models and research

Renewable marine energy and identification of critical marine minerals

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 66% unmapped ([Progress Report On Unmapped U.S. Waters, March 2023](#)), 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.

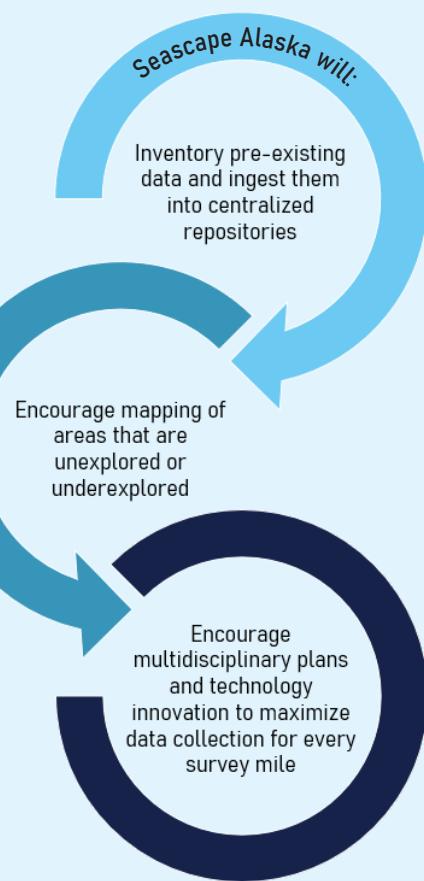


How to fill the gaps?

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.

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

other sources



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

Coastal water

Representing ~0-40 meters water depth, mapping in this area may be ideal for aircraft using LIDAR technology, small boats, and autonomous systems using multibeam sonar technology. Concerns about safe navigation require a high level of data accuracy.

uncrewed

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. Conditions are not usually suitable for aerial survey methods. Concerns about safe navigation require a high level of data accuracy.

Deep water

Representing water depths >200 meters, mapping this area is ideal for ships and uncrewed systems using multibeam sonar technology. Conditions are not suitable for aerial survey methods. Navigation safety is not a primary concern in this area.



Uncrewed aerial vehicles

Satellite-derived bathymetry

Sidescan sonar

Single beam bathymetry

Crowdsourced bathymetry

