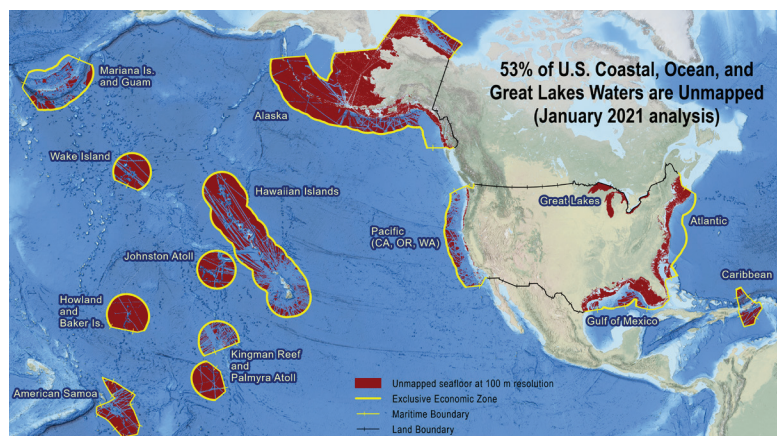


# What is the National Strategy for Mapping, Exploring, and Characterizing the United States Exclusive Economic Zone (NOMEK Strategy)?

Mapping, exploring, and characterizing our waters and seafloor provide the fundamental knowledge necessary to conserve and sustain our ocean, which in turn sustains us. The [NOMEK Strategy](#) and its [Implementation Plan](#) outline the goals and steps that U.S. Federal agencies will take to map, explore, and characterize our oceans and coasts. Implementation of the NOMEK Strategy is led by the interagency NOMEK Council, the Interagency Working Group on Ocean and Coastal Mapping, and the Interagency Working Group on Ocean Exploration and Characterization. This important work will advance scientific understanding, safeguard the Nation's economic prosperity, and promote the health and security of all Americans. The U.S. Exclusive Economic Zone (EEZ) extends up to 200 nautical miles from shore and covers more seafloor area than all 50 states combined, but only 47 percent of it has been minimally mapped and only a fraction of that has been explored or characterized.<sup>1</sup> To improve our understanding of the U.S. EEZ, the NOMEK Strategy frames five goals for action:

1. Coordinate interagency efforts and resources to map, explore, and characterize the U.S. EEZ
  - The U.S. will align priorities in efforts to map, explore, and characterize the U.S. EEZ.
2. Map the U.S. EEZ
  - The U.S. will coordinate mapping efforts to completely map U.S. waters deeper than 40 meters by 2030, and coastal waters (0-40 meters) by 2040.
3. Explore and characterize priority areas of the U.S. EEZ
  - The U.S. will identify priority areas and coordinate interagency and cross-sectoral efforts to explore and characterize the U.S. EEZ.
4. Develop and mature new and emerging science and technologies to map, explore, and characterize the U.S. EEZ
  - New and emerging science and technology are key to fulfilling the mapping, exploration, and characterization goals, and federal agencies will coordinate efforts to promote and advance new technologies.

<sup>1</sup> A "minimally mapped" area has at least 1-2 soundings per 100 m cell based on the U.S. Bathymetry Gap Analysis.



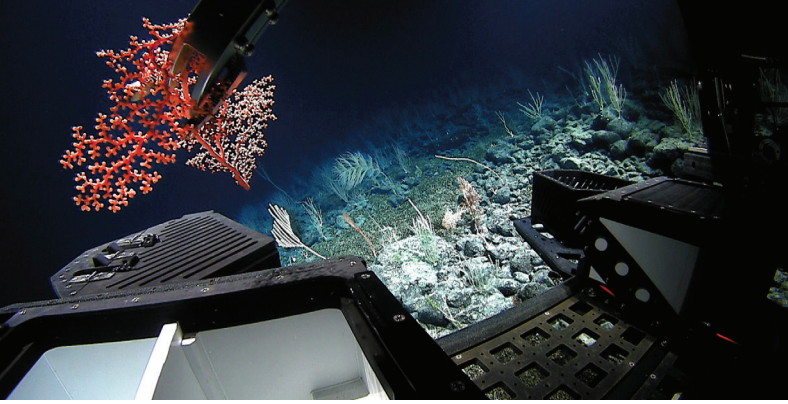
Unmapped seafloor in the U.S. EEZ as of January 2021.

## NOMEK definitions for Mapping, Exploration, and Characterization:

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

**Exploration:** Ocean exploration provides a multidisciplinary first look at an unknown or poorly understood area of the seafloor, sub-bottom, and/or water column and an initial assessment of an area's physical, geological, chemical, and biological characteristics.

**Characterization:** Ocean characterization provides comprehensive data and interpretations for a specific area of interest of the seafloor, sub-bottom, and/or water column, in direct support of specific research, resource management, policymaking, or applied mission objectives.



Port-side biological sampling bin open to receive coral sample.

**5. Build public and private partnerships to map, explore, and characterize the U.S. EEZ**

- Mapping, exploring, and characterizing the U.S. EEZ requires efforts beyond Federal agencies, and agencies will support cross-sectoral partnerships to ensure mapping, exploration, and characterization goals are completed.

Mapping, exploring, and characterizing the U.S. EEZ will increase our understanding of natural and cultural resources, physical hazards, ocean processes related to climate, earthquakes, tsunamis, weather forecasting, ocean habitats, fisheries, and biodiversity. The data will aid commerce through safer navigation and identification of marine resources.

**Key Benefits of NOMECS Efforts Include:**

- A resilient society
- Protection of our natural resources
- A safe and prosperous economy
- A diverse blue workforce

The NOMECS Strategy relies on key partnerships to accomplish its goals:

- **Cross-Sectoral Engagement:** Private sector, academic, and non-governmental organizations will help to develop and mature new and emerging science and technology and contribute to the growth and efficiency of mapping, exploration, and characterization efforts.
- **Tribal Engagement:** The NOMECS Strategy aligns with principles of the Biden Administration's [Memorandum on Tribal Consultation and Strengthening Nation-to-Nation Relationships](#) to engage with Tribal Representatives and work with Tribal governments on aspects of the Implementation Plan, including education and workforce development, targeted outreach related to marine cultural heritage, data sharing, and use of knowledge and data for coastal community climate adaptation and mitigation.

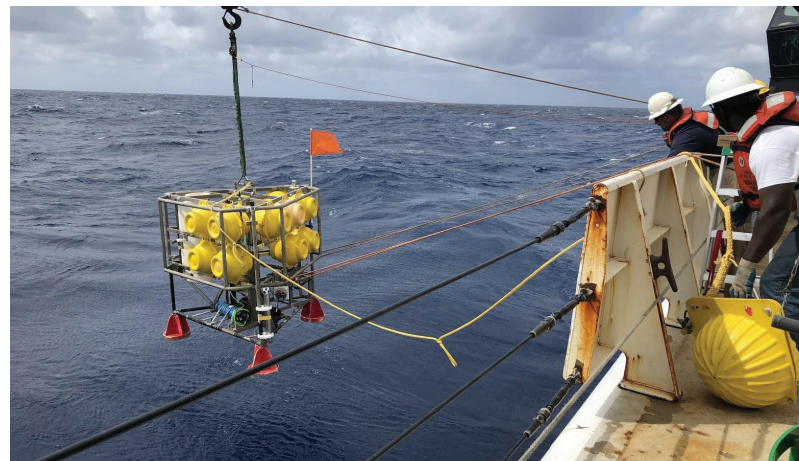
Implementation of the NOMECS Strategy complements several ongoing national and international efforts:

- **[Alaska Coastal Mapping Strategy \(ACMS\)](#)** - NOMECS Strategy activities will align with efforts to map the Alaskan coastal zone by 2030.
- **[Increasing the Efficiency of Permitting for Ocean Exploration, Mapping, and Research Activities](#)** - Cross-sectoral contribution to the NOMECS Strategy will be supported through improved Federal coordination to streamline the permitting and authorization process, and sharing of best practices to improve permitting and regulatory procedures.
- **[The Nippon Foundation-GEBCO Seabed 2030 Project](#)** - NOMECS Strategy activities and products directly contribute to this international effort to produce a definitive map of the world ocean floor by 2030.
- **[30 x 30](#)** - NOMECS data can help identify marine areas suitable for conservation, contributing to the Biden Administration's stated goal of conserving 30 percent of U.S. lands and waters by 2030.
- **[United Nations Decade of Ocean Science for Sustainable Development \(UN Ocean Decade\)](#)** - The NOMECS Strategy supports UN Ocean Decade goals for creating a clean and resilient global ocean, promoting diversity in STEM fields, and ocean literacy.

**How to Get Involved**

Get on our mailing list, or share your existing data and collaborate with us on new acquisitions of data and technology innovations.

Contact us at [nomecs.execsec@noaa.gov](mailto:nomecs.execsec@noaa.gov)



Deploying a benthic lander near the coral mounds of Richardson Hills for long-term deployment.