

A Strategy to Map, Explore, and Characterize the U.S. EEZ

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The National Ocean Mapping, Exploration, and Characterization (NOMECE) Strategy

Only 47 percent of the U.S. Exclusive Economic Zone (EEZ) has been minimally mapped and only a fraction of that has been explored or characterized (Fig. 1). In 2020, the United States government released the NOMECE Strategy, an innovative policy framework for mapping, exploring, and characterizing (MEC) the Nation's EEZ, an area of seafloor that is larger than the entire land area of the United States.

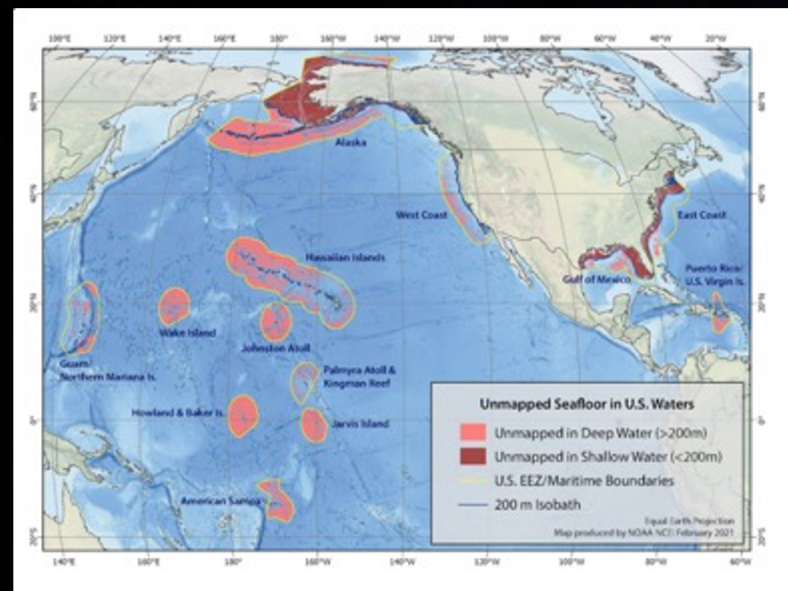


Fig. 1: NOAA estimates 47% of the USA's EEZ remains unmapped.

Submit Your Mapping Data: <https://iocm.noaa.gov/data-sharing/provider-engagement-form.html>

Example NOMECE objectives:

- Identify strategic priorities for exploration and characterization
- Address critical knowledge gaps to better inform decisions
- Establish MEC data collection protocols and standards
- Improve data accessibility and usability
- Inspire the public

5 Goals of the NOMECE Strategy

- 1 Coordinate existing federal agency efforts and leverage shared resources
- 2 Map the seafloor in all U.S. waters by 2030 (>40m depth) or 2040 (<40m)
- 3 Explore and characterize identified priority areas
- 4 Develop innovative ocean science methodologies and technologies
- 5 Build new non-federal partnerships and boost public involvement



Fig. 2: Multibeam sonar bathymetry data of Pao Pao Seamount (NOAA OER)

What Is a NOMECE Project?

NOMECE projects will typically: involve multiple federal agencies; collect and make publicly available a combination of mapping, exploration, and characterization data; advance useful technologies or methods; adhere to established federal standards and protocols; and involve at least some non-federal collaboration.

Aleutian Islands Project Example

Collaborations: NOAA, BOEM, and the USGS, with work conducted by private sector and academia; Tribal engagement will be sought

Significance: Identified as a priority area for multiple agency mission needs including systematic characterization of sensitive benthic habitats, geology, and submarine geohazards

- Planned Activities:**
- **Mapping** (multibeam bathymetry/backscatter) with uncrewed surface vehicle (Fig. 3)
 - **Exploring** with traditional vessel-based and submersible methods identifies areas of interest like vents, seamounts, and locations for physical sampling
 - **Characterizing** the area with physical sampling (eDNA, coral vouchers, sediment cores, water chemistry, etc.) will provide baseline information for ideal siting of long-term monitoring stations such as at deep coral reefs (Fig. 4)



Fig. 3: Emerging/developing technologies such as uncrewed surface vehicles will be essential in achieving the Strategy's ambitious goals.



Fig. 4. Deploying a benthic lander for long-term monitoring at a deep sea coral site

The NOMECE Community

The White House Ocean Policy Committee and Ocean Science and Technology Subcommittee entrusted coordination and implementation of this Strategy to a new interagency NOMECE Council and two interagency working groups with broad federal representation and cross-sector engagement (Fig. 5), starting with an actionable blueprint detailed in the Implementation Plan.

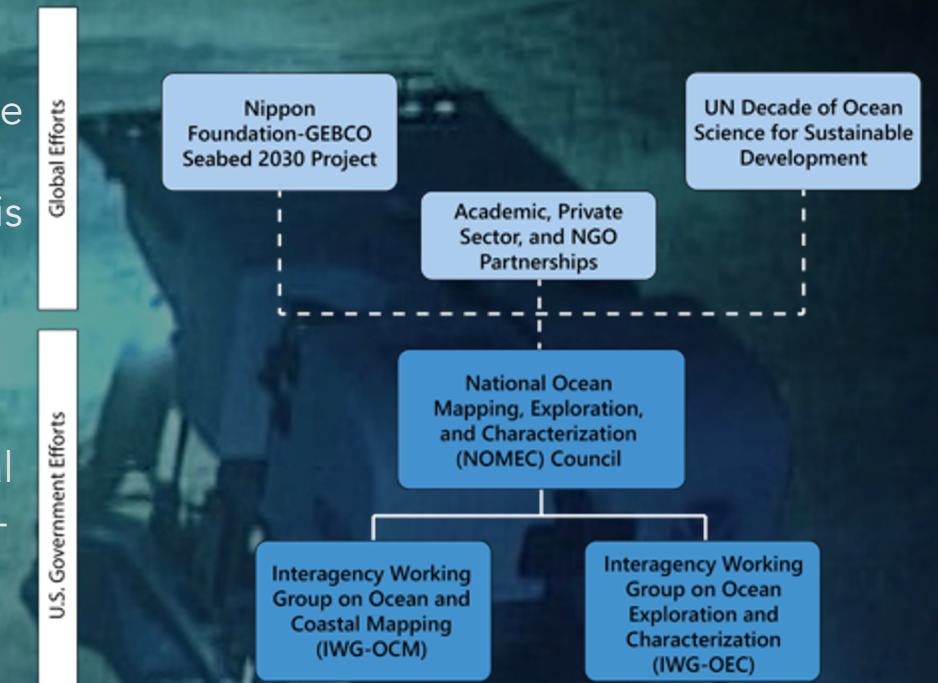


Fig. 5: A diagram of the NOMECE ecosystem demonstrates connections to international efforts and US Federal bodies.

NOMECE Happenings

- Mapping data *solicitations/ submissions* (ongoing)
- UN Decade Laboratory Satellite Event (September 2021)
- NOMECE Website launching soon (September 2021)
- Priorities for Ocean Exploration and Characterization (public comment Fall 2021, release Winter 2021)
- Standard Ocean Mapping Protocol (Winter 2021)
- Ocean Sciences Meeting: OEC Priorities scientific session and NOMECE townhall (February/March 2022)
- NOMECE Project Database (ongoing)
- Regional campaigns and other collaborations (ongoing)



To learn more and get involved, contact us at:

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Visit us at noaa.gov/NOMECE

More: <https://oeab.noaa.gov/oeabresources/legislationandpolicies>