

LEBUU'S VOYAGE FACT SHEET

Euotelel a Klingil a Debel Belau or the Palau National Marine Sanctuary (PNMS) is one of the world's largest Large-Scale Marine Protected Areas (LSMPA). It was created by Palauans for Palauans. Despite being rich in natural resources, very little is known about the deep ocean habitats that the PNMS protects.

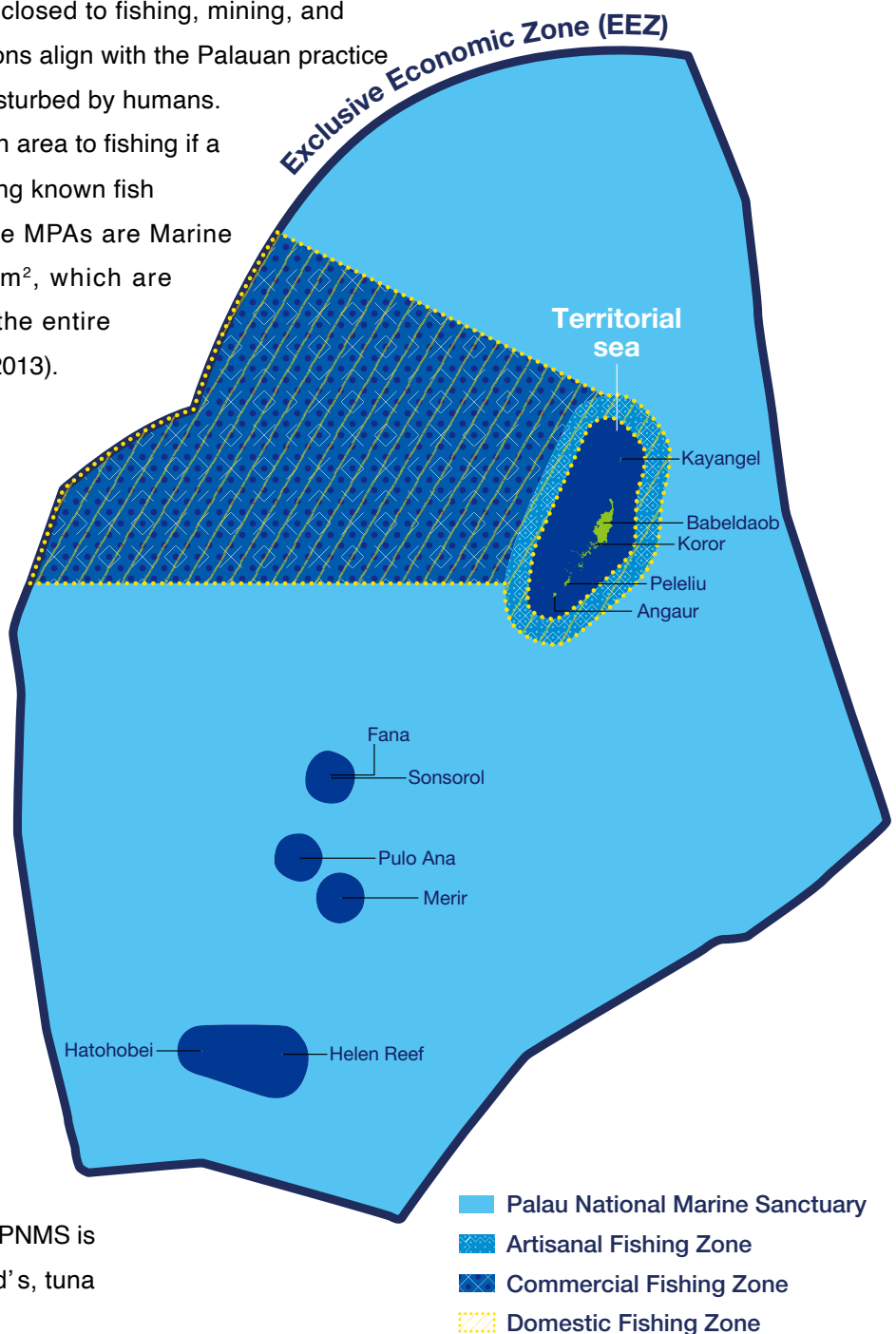
Facts about the PNMS:

1 The PNMS is a Large-Scale Marine Protected Area (LSMPA). An MPA is an area of ocean that is closed to fishing, mining, and similar activities. These regulations align with the Palauan practice *BUL*, a tradition of leaving ecosystems undisturbed by humans. In the past, local chiefs would close a certain area to fishing if a resource had become overexploited or during known fish spawning and feeding periods. Large-scale MPAs are Marine Protected Areas greater than 150,000 km², which are "actively managed for protection across the entire geographic extent of the area" (Big Ocean, 2013).

2 The PNMS is 475,077 km², an area bigger than the U.S. state of California. This makes it one of the largest MPAs in the world and one of the largest conservation commitments (as a %) of any country in the world.

3 The PNMS covers 80% of Palau's Exclusive Economic Zone (EEZ). An EEZ is an area of ocean, which a coastal nation has administration over. Palau is a small country but it claims a massive ocean, and most of that ocean is deep and unexplored.

4 One of the main purposes of the PNMS is to protect Palau's, and the world's, tuna stocks for future generations.



What do we know about the seafloor of the Palau National Marine Sanctuary?

We know that the deep-water regions surrounding Palau host rich and diverse marine habitats, including over 225 underwater mountains and extremely deep ecosystems in the Palau Trench. These environments may be home to a huge number of deep-sea animals.



Exploration Vessel *Nautilus*:

In October and November 2024, the Ocean Exploration Trust's Exploration Vessel *Nautilus* will conduct two expeditions in the PNMS in partnership with local organizations such as the Palau International Coral Reef Center and international partners like the NOAA Office of Ocean Exploration. Called Lebuu's Voyage I & II, these expeditions will gather seafloor mapping data and explore the seafloor with remotely operated vehicles. The expeditions are named after Lebuu, who could be considered Palau's first explorer. In November 1783, Lebuu departed on a worldwide voyage and was one of the first Pacific Islanders to visit Great Britain.

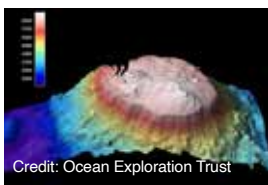
Remotely operated vehicles (ROVs):

ROV *Hercules* is at the center of the Nautilus Exploration Program. Controlled by pilots onboard *E/V Nautilus*, ROVs working as a team can reach over 13,000 feet deep to film, map, and gather samples from the ocean seafloor. With ROV *Hercules*, Ocean Exploration Trust has surveyed ancient shipwrecks, discovered hydrothermal vents, and helped to identify dozens of marine species new to science.



Seafloor mapping:

Seafloor mapping is an essential step in ocean exploration. Currently, only 26% of the world's ocean floor has been mapped at high resolution. Multibeam sonar mapping systems collect a range of data, which includes



measurements of the depth of water and shapes of underwater terrain. Less than 30% of Palau's EEZ has been mapped to that level.

Ocean explorers:

During expeditions, the ship is home to 52 ocean explorers and professional mariner crew from Palau and around the world. They are scientists, educators, ROV pilots, videographers, engineers, chefs, cultural liaisons, and students. A team is strong when there are people with different specialties and knowledge working together. No matter what career you choose, there is a place for you in ocean exploration!