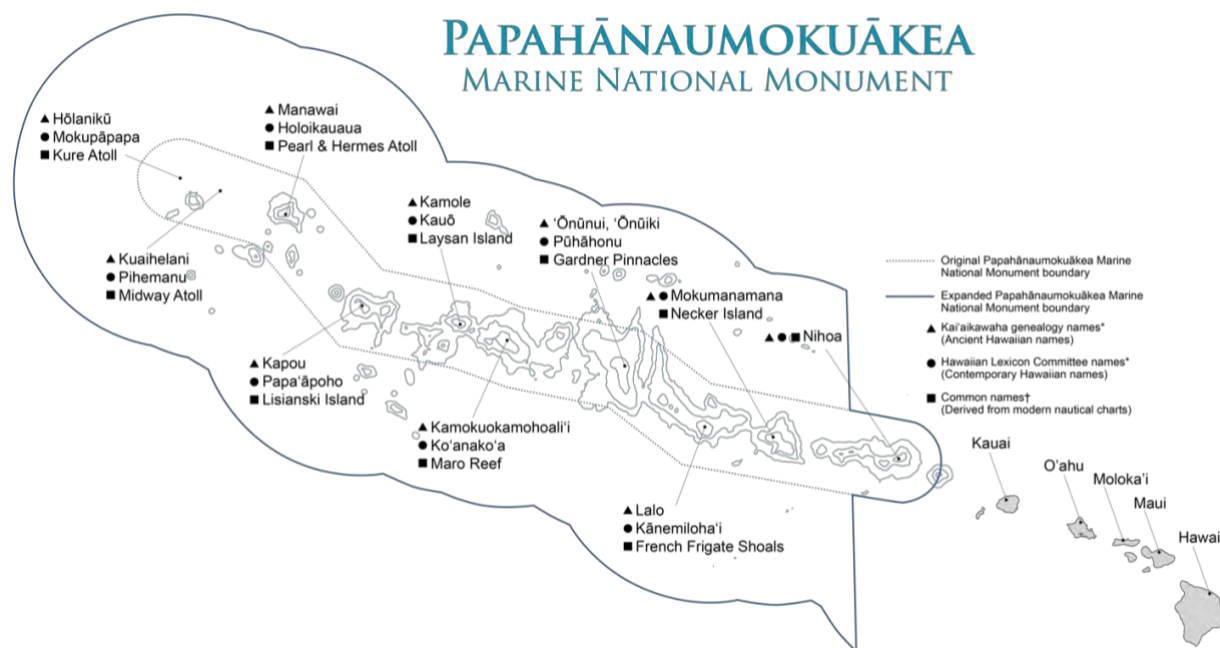


Papahānaumokuākea Marine National Monument Accomplishments Fiscal Year 2020

One of the largest conservation areas in the world, Papahānaumokuākea Marine National Monument protects more than 580,000 square miles of the Pacific Ocean. The monument's coral islands, seamounts, banks, and shoals include some of the healthiest coral reefs in the U.S. and support dynamic habitats containing a diversity of fish, coral, birds, marine mammals, and other flora and fauna, many of which are unique to the Hawaiian Archipelago.



The monument celebrates significant milestones

The monument reached more than 40,000 constituents while celebrating two milestones: the 20th anniversary of the Northwestern Hawaiian Islands Coral Reef Ecosystem Reserve and its Reserve Advisory Council and the 10th anniversary of Papahānaumokuākea as a UNESCO “Mixed” (natural and cultural) World Heritage Site. Events included the virtual adaptation of NOAA's 4th Annual World Oceans Day celebration with Ko Olina Resort, a celebration of UNESCO World Heritage Site designation at the Waikīkī Aquarium, a virtual birthday party, and profiles highlighting the contributions of current and former advisory council members.



The monument celebrates 20 years of the Northwestern Hawaiian Islands Reserve Advisory Council. Photo: NOAA

State of Papahānaumokuākea, status and trends 2008-2019

[The State of the Monument report](#) was released as a multi-agency effort to describe the status and trends of the natural and cultural resources of the monument. Using the best available science and most recent data as well as input from more than 40 researchers, the report documents the physical, living, historical, cultural, and archaeological resources to support ongoing research and adaptive management. The report also highlights trends that may require monitoring or management actions in the future and serves as a framework to inform resource managers, researchers, communities, and stakeholders about preserving the monument.



Mokumanamana. Photo: Ruben Carrillo

Response to invasive outbreak of unidentified red alga

Following the discovery of a major outbreak and invasive growth of an unidentified red alga at Pearl and Hermes Atoll, scientists coordinated a research team of experts to address this problem. This team identified and described the alga as a new species (*Chondria tumulosa*) and successfully pursued over \$500k in research grants. Monument scientists further coordinated with the U.S. Fish and Wildlife Service to pursue grants to develop eDNA markers to identify the presence of the alga from water samples, and are collaborating with the NASA Ames Research Center to use satellite imagery to monitor the spatial extent of the algal outbreak.



A coral reef at Manawai (Pearl and Hermes Atoll) that has been completely overgrown by the red alga *Chondria tumulosa*. Photo: Taylor Williams/College of Charleston

Multi-agency response to grounded weather buoy

Over the course of two years, the monument collaborated with NOAA's National Data Buoy Center, the U.S. Fish and Wildlife Service, the state of Hawai'i, and the Office of Hawaiian Affairs to coordinate the removal of a detached weather buoy that had beached onto Lisianski Island in the Northwestern Hawaiian Islands. The response involved the contracting of a private engineering firm and vessel to carry out the challenging salvage operation, which was successfully completed in August with minimal disruption to protected species or further damage to the rocky shoreline.



Salvage technicians dismantle the buoy tower prior to removal. Photo: Sea Engineering, Inc.

Looking Ahead

- Although delayed due to the COVID-19 pandemic, eight videos on the “Voices of Papahānaumokuākea” will be released in coordination with the Office of Hawaiian Affairs as part of the 15th anniversary celebration of the designation of the monument.
- The monument will release its Mai Ka Pō Mai: a guidance document for Papahānaumokuākea, a multi-agency effort to identify and integrate Native Hawaiian traditional knowledge and management concepts into monument management.
- The monument will continue another year of milestone celebrations with the recognition of the 15th anniversary of the designation of Papahānaumokuākea Marine National Monument.

NATIONAL MARINE SANCTUARY SYSTEM



Scale varies in this perspective. Adapted from National Geographic Maps.

- National Marine Sanctuary
- ▲ Marine National Monument
- Proposed National Marine Sanctuary

The National Marine Sanctuary System is a network of underwater parks encompassing more than 600,000 square miles of marine and Great Lakes waters. The network includes a system of 14 national marine sanctuaries and Papahānaumokuākea and Rose Atoll marine national monuments.