

2020 STATE OF



PAPAHĀNAUMOKUĀKEA MARINE NATIONAL MONUMENT

STATUS AND TRENDS 2008-2019
OVERVIEW



papahanaumokuakea.gov



Photo: Ruben Carrillo

PAPAHĀNAUMOKUĀKEA MARINE NATIONAL MONUMENT

Papahānaumokuākea Marine National Monument is the single largest conservation area in the U.S., encompassing an area of 582,578 square miles of the Pacific Ocean—an area larger than all the country’s national parks combined.

Home to the highly endangered Hawaiian monk seal, threatened green sea turtles, and many species found nowhere else on Earth, the complex and highly productive marine and island ecosystems of the monument are significant contributors to the biological diversity of the Hawaiian Archipelago and surrounding ocean.

Papahānaumokuākea has spiritual significance in Hawaiian cosmology. Cultural sites found on the islands of Nihoa and Mokumanamana are on both National and State Registers for Historic Places. Mokumanamana has one of the highest densities of sacred sites in the Hawaiian Archipelago.

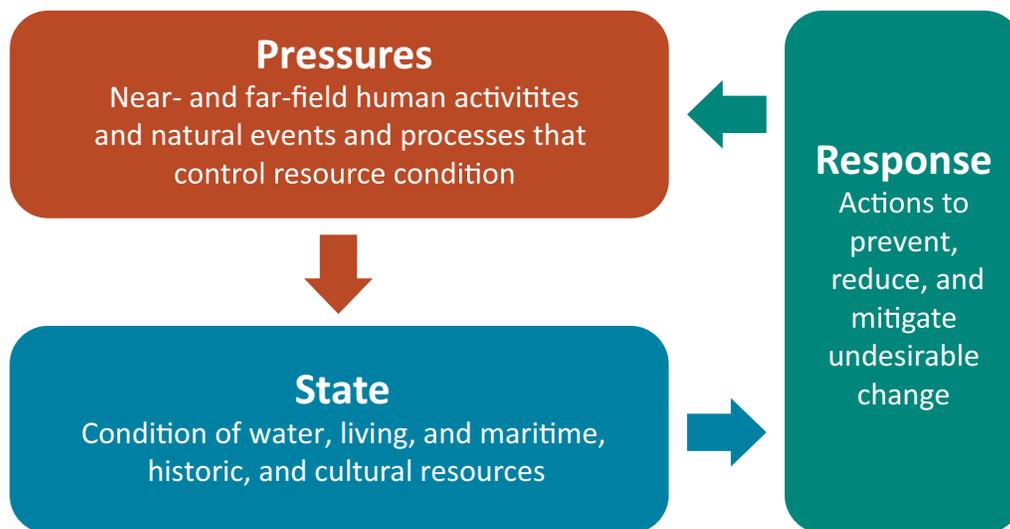
The monument is also home to a variety of post-Western-contact historic resources, such as those associated with maritime heritage, the Battle of Midway, and 19th century commercial whaling.



Photo: Tane Casserley/NOAA

STATE OF THE MONUMENT REPORT

The State of the Monument Report uses the best available science and most recent data to assess the status and trends of the resources of Papahānaumokuākea Marine National Monument. It documents the status and trends of resources from 2008–2019, unless otherwise noted. It employs a Pressure-State-Response (PSR) conceptual model to describe the role of pressures on resources, status and trends for resources, and a summary of management implications, including future research and management needs.

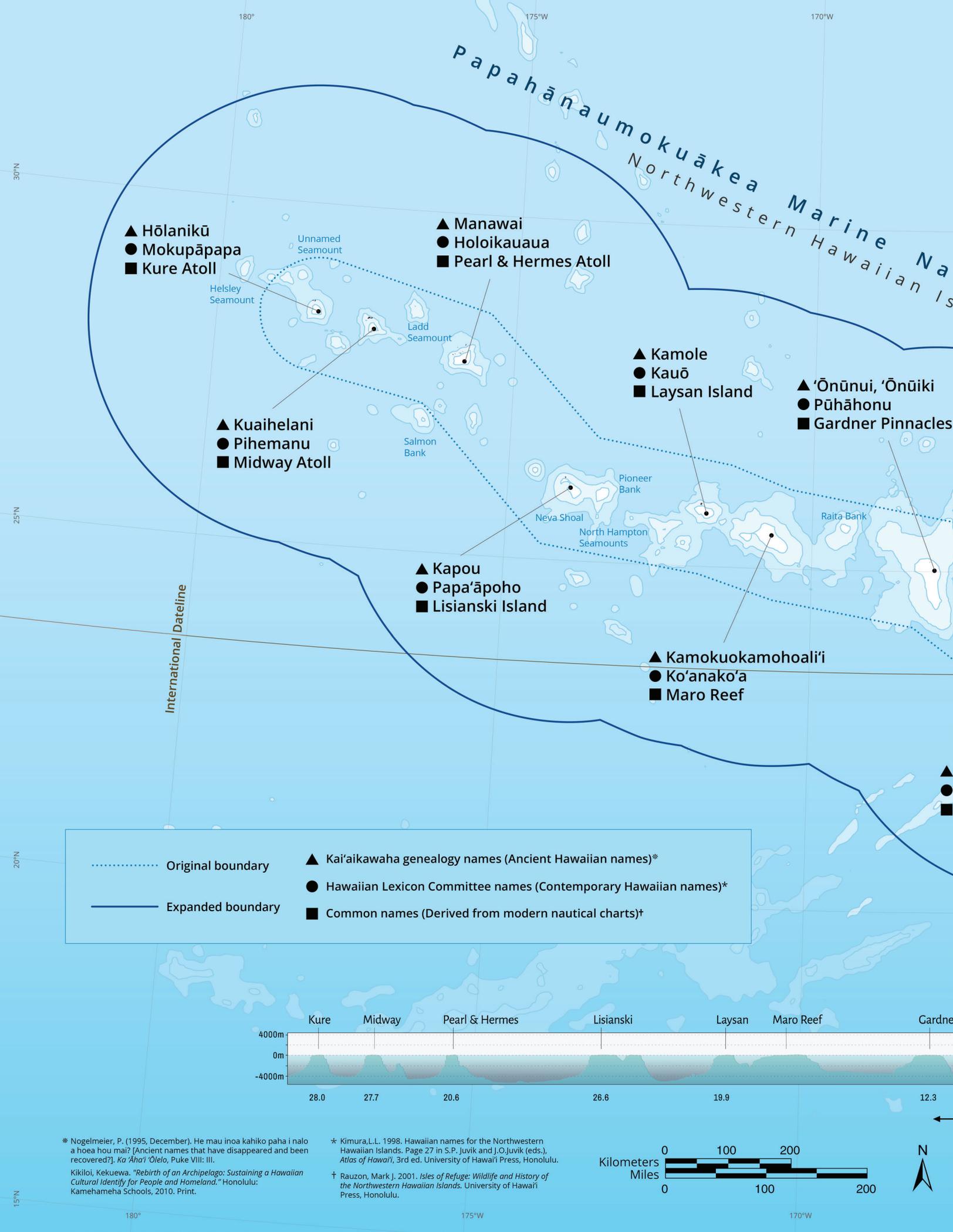


The findings in this report document status and trends in the physical environment, living resources, and historical and cultural archaeological resources. Physical resources included assessing trends of climate conditions, habitat, water quality, and contaminants. Biological resources included monk seals, sea turtles, shallow and deep-sea corals, seabirds, and endemic plants and animals. Heritage resources included maritime, historical, and cultural resources.

The report is intended to support ongoing adaptive management of

Papahānaumokuākea by helping to identify not only the status of resources, but also gaps in current monitoring efforts. The report also highlights issues that may require monitoring and management actions in the future. The report also provides a framework that can serve to inform discussions among resource managers, researchers, communities, and other stakeholders about preserving the integrity of Papahānaumokuākea.

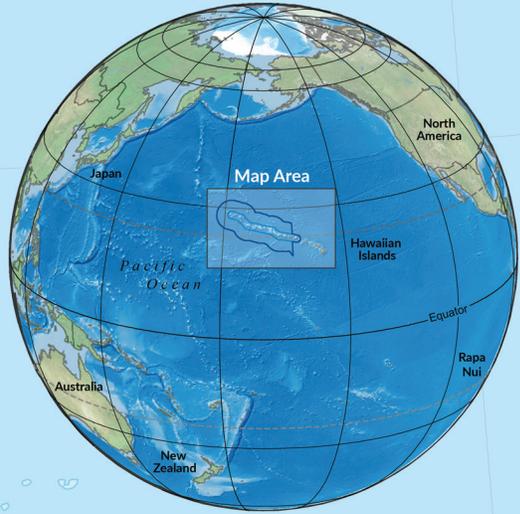
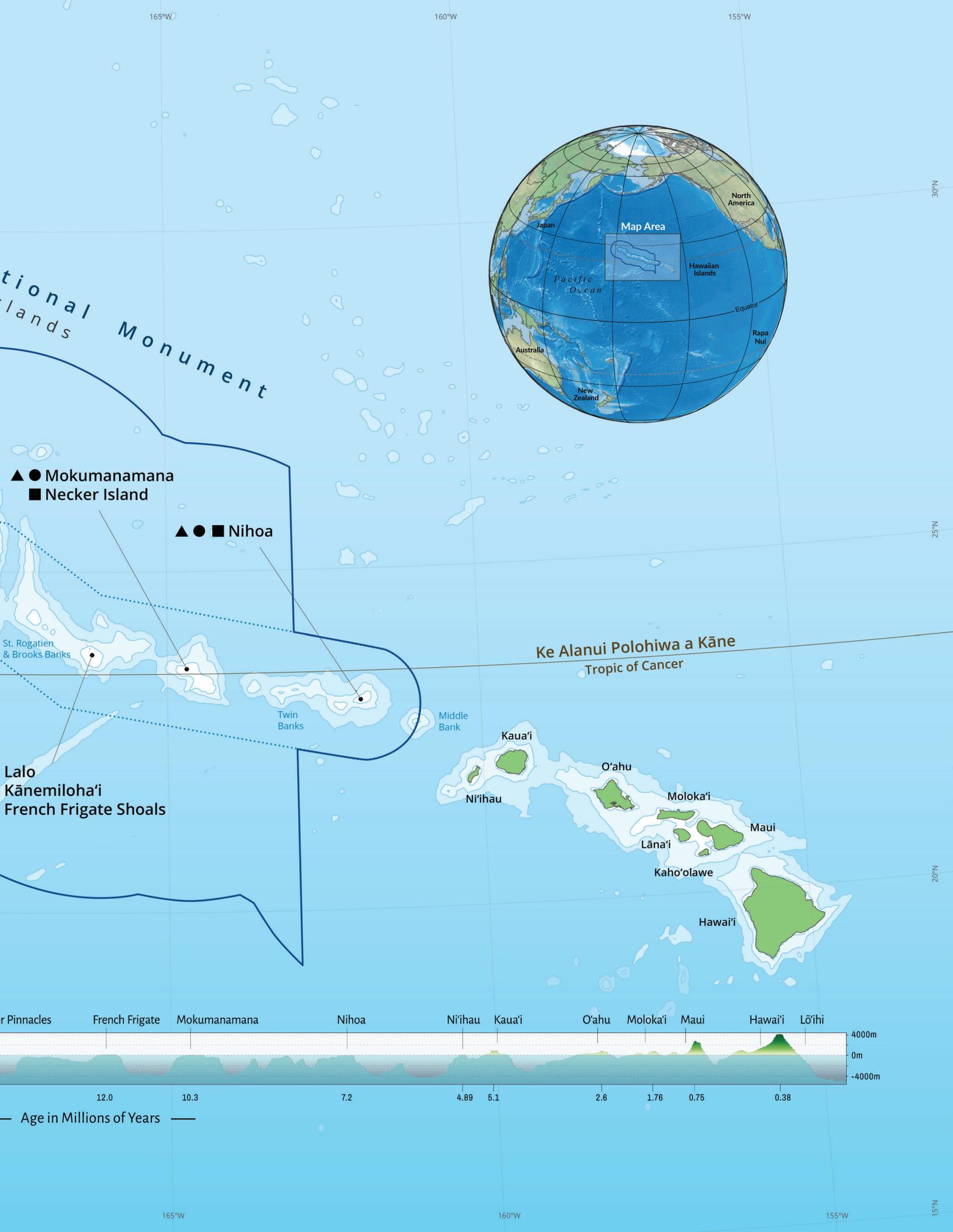




* Nogelmeier, P. (1995, December). He mau inoa kahiko paha i nalo a hōea hou mai? [Ancient names that have disappeared and been recovered?]. *Ka 'Āhali 'Ōlelo*, Puke VIII: 111.
Kikiloi, Kekuewa. "Rebirth of an Archipelago: Sustaining a Hawaiian Cultural Identity for People and Homeland." Honolulu: Kamehameha Schools, 2010. Print.

* Kimura, L.L. 1998. Hawaiian names for the Northwestern Hawaiian Islands. Page 27 in S.P. Juvik and J.O. Juvik (eds.), *Atlas of Hawaii*, 3rd ed. University of Hawai'i Press, Honolulu.

† Rauzon, Mark J. 2001. *Isles of Refuge: Wildlife and History of the Northwestern Hawaiian Islands*. University of Hawai'i Press, Honolulu.



National Monument
lands

- ▲ ● Mokumanamana
- Necker Island
- ▲ ● ■ Nihoa

Ke Alanui Polohiwa a Kāne
Tropic of Cancer

St. Rogatien & Brooks Banks

Lalo
Kānemilohaʻi
French Frigate Shoals

Twin Banks

Middle Bank

Kauaʻi

Oʻahu

Nihoa

Niʻihau

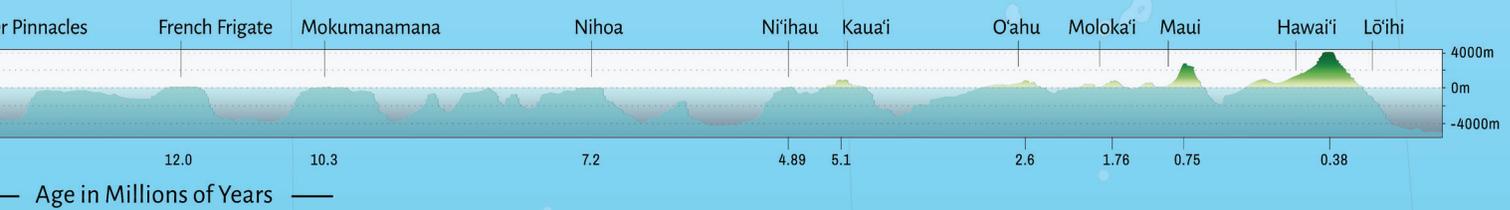
Molokaʻi

Maui

Lānaʻi

Kahoʻolawe

Hawaiʻi



CONDITION OF RESOURCES

Marine Habitat

Impacts from local human uses have been relatively few, and the monument's reefs and other marine resources are considered to be in nearly pristine condition across most of the region. However, some marine habitats have been impacted by derelict fishing gear, large storms, aggressive nuisance algae, and coral bleaching. Most marine areas of the monument have not been significantly affected and are in good to fair condition.



Photo: Mark Sullivan/NOAA

Terrestrial Habitat

Terrestrial habitats have been affected by past human activities that altered soils and vegetation, introduced non-native species, and left behind contamination on many of the islands. These habitats continue to be affected by human activities taking place outside the monument, such as those resulting in the deposition of marine debris. Without active management efforts to restore habitat, remove invasive species and marine debris, abate contaminants, and enhance the resilience of endangered species, resources would be in considerably worse condition.



Photo: Mark Sullivan/NOAA



Photo: Andrew Gray/NOAA

Living Resources

Most living resources in the monument appear to be in healthy condition, owing in part to years of layered protections by the co-managing agencies. Many populations of endangered and other vulnerable species appear to be recovering. Endangered species status is largely attributed to factors inherent in isolated locations, such as relatively small populations, limited distributions, and vulnerability to perturbations. Further, management actions, such as non-indigenous species removal and translocations, have successfully contributed to improvements in habitat quality and species abundance and distribution. Shallow-water coral reefs vary by location, with localized natural disturbance events and coral bleaching affecting different reefs. In contrast, deep-sea habitats remain in nearly pristine condition, with little disturbance. However, several concerns remain. Perhaps one of the most significant threats to living resources in the monument is global climate change and its manifestations, including changes in ocean chemistry, rising sea levels, and rising sea surface temperatures. The effects of these changes include coral bleaching and increased frequency and severity of storms.

Heritage Resources

The condition of maritime, historic, and cultural resources in the monument is declining, due to weathering, corrosion, and erosion. These resources are finite and non-renewable. Though little can be done to prevent deterioration from natural processes, the information these resources contain may be preserved through timely archaeological study, documentation, and conservation of artifacts.



Photo: Kaleomanu'iwa Wong



Papahānaumokuākea was inscribed as a mixed (natural and cultural) World Heritage Site by the United Nations Educational, Scientific, and Cultural Organization (UNESCO) in 2010. This year marks 10 years for the monument as the only mixed UNESCO World Heritage Site in the United States and the second World Heritage Site in Hawai‘i.

In 2021, Papahānaumokuākea celebrates 15 years as a marine national monument. It is jointly administered by four co-trustees: NOAA, U.S. Fish and Wildlife Service, the state of Hawai‘i, and the Office of Hawaiian Affairs. Management of the monument is overseen by NOAA’s Office of National Marine Sanctuaries, NOAA Fisheries, U.S. Fish and Wildlife Service Ecological Services and Refuges Program, state of Hawai‘i Divisions of Aquatic Resources and Forestry and Wildlife, and the Office of Hawaiian Affairs.

Access the full report at www.papahanaumokuakea.gov



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