

July 6, 2020

The Honorable David Bernhardt
Secretary
Department of the Interior
1849 C Street, N.W.
Washington, D.C. 20240

The Honorable Wilbur Ross
Secretary
Department of Commerce
1401 Constitution Avenue, N.W.
Washington, D.C. 20230

Dear Secretaries Bernhardt and Ross:

We are writing in opposition to proposals to re-open the Papahānaumokuākea Marine National Monument (PMNM) to commercial fishing based on the milestones for science, conservation, and culture made possible under the expansion of the PMNM. We are confident that an objective review of the facts will show:

- Science that demonstrates the value of the monument as a refuge from the pressures of fishing and environmental change;
- Actions to manage, conserve, and restore this unique ecosystem; and
- Successful adaptations of human activity to embrace the expanded boundaries of the PMNM: Native Hawaiians, fisheries, non-governmental organizations (NGO), and philanthropy.

In addition to the achievements we describe in our letter today, we would like to remind you of the analysis in an earlier report Senator Schatz made to you on June 6, 2017, regarding the reasons and support for the expansion of the PMNM during the previous administration. We have enclosed this report to reiterate why the expansion was initially justified, and the breadth of the coalition that supports the PMNM.

As you review these materials, we are confident you will concur with our judgment that no changes to the prohibited actions within the PMNM are warranted.

OVERVIEW

The expansion of the PMNM created a framework for systematic exploration and management of the Northwestern Hawaiian Islands (NWHI). It has also strengthened human connections to this remote but consequential region without significant impacts to fishery participants. Key accomplishments include:

- Mapping and exploration of the PMNM to identify points of scientific interest for subsequent fieldwork and analysis;
- Surveys of marine life that confirm the unique biodiversity supported by within the PMNM;

- A robust baseline of management activities, including marine debris removal, periodic surveys of species of interest, and relocation of species threatened by habitat loss;
- Identification and management of emerging threats to the PMNM: invasive algae, coral bleaching, and hurricane damage;
- Native Hawaiian participation in the management of the PMNM, and the development of research priorities; and
- Preservation of the seascape and its ecology to support Native Hawaiian cultural practices, and provide context for archaeological sites.

The PMNM expansion has also created a framework for partnerships and collaboration among a broad spectrum of groups, including non-governmental organizations (NGOs), philanthropic organizations, and marine labs. Even a partial roster of partners is impressive:

- Jupiter Research Foundation
- National Fish and Wildlife Foundation (NFWF)
- National Marine Sanctuaries Foundation
- Ocean Exploration Trust
- ‘Opihi Partnership
- Schmidt Ocean Institute
- Vulcan Inc.

The mapping, monitoring, and research that the PMNM has been able to attract would not have been possible without the global recognition that it has achieved. In addition, the PMNM has a signature grant program designed to draw in external partners to help create private-public partnerships to support the site. Since Fiscal Year 2017, NOAA has supported over \$2 million in grants for management, research, and education in the PMNM. These funds are subject to a 100% non-federal matching requirement, but leveraged \$4 million of non-federal matching funds—far above the 100% requirement.

Even as the expansion of the PMNM has fueled the growth of conservation and management activities, fisheries have not suffered. Despite claims that the Hawai‘i longline fishery would suffer greatly under an expansion of the PMNM, NOAA records tell a different story. According to NOAA logbook summaries, the longline fishery’s highest catches over the past ten years were in 2018, 2017, and 2016—the year of the PMNM expansion, and the two following years for which logbook data are available.

Between the substantial progress made possible by the expansion, and the lack of impact to the longline fishery, we believe that no further changes to the PMNM are warranted.

SCIENCE

Scientific inquiry into the PMNM falls into two major categories: exploration and discovery. The two activities are closely related: exploration informs scientists where to invest research resources for scientific discovery.

For example, submarine and remotely operated vehicle (ROV) expeditions, such as those coordinated by NOAA's *Okeanos Explorer* in 2016 and the E/V Nautilus exploration in 2018, have mapped numerous seamounts, and identified 14 seamount habitats with lush deep coral communities. These data have driven a better understanding of the complexity and deep-sea habitability of the PMNM and will enable targeted exploration to learn more about the deep sea communities protected by the PMNM.

One instance of the science we may see from these efforts to explore the seamounts comes from Kure atoll. In the mesophotic depths around Kure Atoll, researchers reported that 100% of the fishes were endemic to the area, meaning the entire fish community is composed of fishes that are not found anywhere else on Earth. According to the researchers, this is the highest level of endemism known from any marine ecosystem.

Just this year, the Jupiter Research Foundation conducted a passive acoustic survey of the waters of the PMNM with instruments mounted on an autonomous ocean drone. Passive acoustic technology records the sounds of the ocean with minimal disruption to the animals observed, and researchers can analyze the recordings to determine the range of species present, and approximate their abundance. This mission was completed on March 12 of this year, and scientists will be working through the data and reporting their findings.

Making these discoveries takes a commitment of resources, and a management regime capable of protecting the PMNM to preserve the integrity of the ocean ecosystem that attracts researchers. The PMNM expansion supports both. For example, prior to the expansion, only 5 of the 88 known seamounts in the U.S. Exclusive Economic Zone around the NWHI had been surveyed. In the years since the expansion, that number has almost doubled to 9—and the Ocean Exploration Trust is poised to almost double the number again, with a proposal to explore 8 more of the seamounts next year. To sustain this level of scientific investment, we believe it is critical to maintain the current size and scope of the monument.

MANAGEMENT

Management of the PMNM maintains the health of the ecosystem with a set of baseline activities that include a variety of biological monitoring programs, marine debris removal, and coral reef restoration. In addition, special management actions address changed circumstances and unforeseen emergencies, such as damage from Hurricane Walaka, and the discovery of invasive algae at Pearl and Hermes Atoll—but also special support for species of interest such as monk seals, Hawaiian green sea turtles, and the black-footed albatross.

Sequential observations of species of interest in the PMNM forms a record that allows scientists to work with managers to assess the effectiveness of their efforts, and identify areas for focus. Coral monitoring in particular has proven valuable to understand the extent and impacts of recent mass bleaching events in the Pacific during the 2014-2017 global scale coral bleaching event. Understanding how corals respond to serial bleaching events provides insight on how management can support corals to survive warmer and more acidic ocean conditions.

Species specific interventions are also a critical part of the PMNM management. For example, an estimated 96% of the Hawaiian green sea turtle population migrate to French Frigate Shoals to reproduce. Since the expansion, NOAA has increased its survey effort with an additional field researcher, longer field seasons, seven-days-per-week coverage, and saturation tagging with microchip tags on all nesting females. The increased effort will improve population and models for predicting sea turtle resilience to the changing ocean environment.

Similarly, the PMNM supports 90% of the world's breeding population of black-footed albatross, 95% of breeding Bonin petrels, and 75% of Tristram's storm-petrels. Each of these species lives on islands with very low elevations that are predicted to be highly susceptible to sea-level rise and storm surge in the coming century. These ocean changes put the bird populations at risk of losing their nesting habitats. In 2018 a small portion of the breeding population from the low-lying atolls was relocated to higher ground in the main Hawaiian Islands. Moving these rare seabirds' long distances by sea supports their adaptation to an ever-changing environment and help prevent the potential loss of the species.

Marine debris removal also comprises a significant and continuous need for PMNM management. The Pacific gyre brings much of the Pacific Ocean's trash through the Northwestern Hawaiian Islands, which threatens the integrity of the PMNM. Abandoned fishing gear conglomerates and continues to entangle, trap, and kill marine life. As large masses of debris held together with netting and other gear get closer to shore, they can damage or destroy coral reefs in their path.

From mid-September through October of 2018, a team of scientists led by NOAA Fisheries' Ecosystem Sciences Division carried out a 41-day expedition to the monument. There, they conducted in-water and shoreline marine debris surveys and removal operations totaling over 78 tons of marine debris at French Frigate Shoals, Laysan Island, Lisianski Island, Pearl and Hermes Atoll, Midway Atoll, and Kure Atoll. This particular instance is part of a cumulative multi-agency effort led by NOAA since 1996, which has removed over two million pounds of marine debris over the twenty-four years of the effort.

In addition to these baseline activities, management addresses emerging threats. For example, in recent years, morbillivirus has been recognized as a major threat to monk seals, so in the 2017 field season, 512 vaccinations were administered—protecting more than one-third of the population. Other recent management issues include assessment of coral reefs damaged by the

hurricane to plan for restoration activities, and analysis of an invasive algae that is covering and killing reefs in Pearl and Hermes Atoll.

Collectively, these actions reveal a steady tempo of effort to perform necessary conservation activities for the PMNM, punctuated by special activity to address newly-discovered threats.

MARITIME HISTORY

While the expansion has attracted attention and investment for the site's scientific and conservation value, the PMNM is also home to remarkable maritime and military heritage sites. There are 140 potential sites (60 shipwrecks and over 70 aircraft) within the original boundaries of PMNM—and the expansion area grows that number to over 800 shipwrecks and aircraft that have been lost in PMNM, many associated with the Battle of Midway. To date, only 23 of these sites have been documented, including 18 vessels and five World War II era aircraft.

Notable highlights include the discoveries of two Japanese World War II aircraft carriers. These vessels are not covered by the Sunken Military Craft Act and would not be otherwise protected if the PMNM had not been expanded. During the extensive underwater surveying of the Battle of Midway site, the *Research Vessel (R/V) Petrel*, owned and operated by Vulcan Inc., discovered long lost wreckage from the battle. On October 16, 2019, the *R/V Petrel* crew was able to identify ship remains as those of the Japanese aircraft carrier *Kaga*. On October 20, 2019, they identified sonar images of the Japanese flagship *Akagi*. The crew aboard *R/V Petrel* spent several weeks surveying the massive area, documenting more than 500 square nautical miles of the ocean floor that were a part of the Battle of Midway, all within the PMNM. The wreckage of both ships was found 5,400 meters (more than 17,000 feet) below the surface. Discoveries in the deep ocean can reveal new information on this turning point in the war.

The site's connection to maritime heritage goes beyond military history. A whaling vessel from Nantucket known as the *Two Brothers* was initially discovered at French Frigate Shoals in 2011, and in November, 2017, the site was added to the National Register of Historic Places. This recognition came from the site's significant contribution to learning about Pacific maritime history and the North American whaling industry. The story of the *Two Brothers* draws the connection between the remotest protected area on Earth and the small communities in New

England halfway around the world. It is the first shipwreck site in the PMNM be listed on the national register, and joins the *USS Arizona* and the *USS Utah* as the only other listed shipwreck sites in Hawai'i.

NATIVE HAWAIIAN CULTURE

A notable achievement of the expansion of the PMNM was the inclusion of the Office of Hawaiian Affairs (OHA) as a co-trustee of the site. This historic action ensured Native Hawaiian perspectives at the highest levels of decision making for the PMNM. OHA's status as a co-trustee is also helping to develop and implement a resource management structure that integrates the best of conventional science and traditional practices. Incorporating Native Hawaiian perspectives into management and science confers a further benefit: the preservation of the Papahānaumokuākea ecology to provide better context for Native Hawaiian cultural practices and archaeological sites.

With OHA as a co-trustee, a Native Hawaiian plan for Papahānaumokuākea: *Mai Ka Pō Mai*, is in the final stages of development after years of workshops and outreach to the Native Hawaiian community. When it is completed, *Mai Ka Pō Mai* will be a guidance document with updated and expanded management practices informed by years of shared experience operating the monument, and it will establish a framework for Native Hawaiian access, research, customary use, and traditional practice within the PMNM.

The process of developing this guidance has created a climate of cooperation with remarkable success stories. For example, cooperation among the co-trustees facilitated the collection, transportation and storage of deceased albatrosses and tropical birds from the PMNM. The plumage from the birds was used in the restoration of kāhili (royal standards used as a symbol of the ali'i chiefs and families of the Hawaiian Islands) in the throne room of the historic 'Iolani Palace. The features were also used to make two kāhili that were installed in Lili'uokalani Hall at the Office of Hawaiian Affairs.

In addition, for over 10 years, the Monument Management Board has supported almost annual intertidal monitoring expeditions, which integrates cultural knowledge and practices with western science to assess and better understand the shorelines and shallow waters of high islands within PMNM. Participants survey Nihoa, Mokumanamana, La Perouse Pinnacle at French Frigate Shoals and Gardner Pinnacles. This ongoing research, led by members of the 'Opihi Partnership, a public/private collaborative partnership, informs communities across Hawai'i about the development of sustainable harvesting protocols, establishment of rest areas and important baseline information about the rocky intertidal shorelines of Hawai'i. The dual focus of western science and traditional knowledge has served as a platform in which cultural practitioners and scientists can engage and inform each other in a space that is neutral and welcoming.

It also teaches community members who participate in these expeditions about the true meaning of ‘āina momona, a place of abundance, where harvesting is truly limited and inspires community members to go back to their homes and work to cooperatively manage the nearshore intertidal resources in their own back yards. ‘Āina momona describes a land that is rich, abundant, plentiful, sweet and fat. It is a land that abounds in and produces an abundance of food. Expeditions have been funded by both the Office of National Marine Sanctuaries and the Office of Hawaiian Affairs.

The work of the ‘Opihi Partnership is only one aspect of the important work enabled by the monument expansion at Nihoa and Mokumanamana Islands. Nihoa and Mokumanamana are on the National Historic Register as sites with the highest concentrations of Native Hawaiian cultural resources within the archipelago. These islands represent almost intact archeological sites that have become a baseline to understand and restore similar sites in the main Hawaiian Islands. The current regulatory environment enables two levels of protection. First, regulations require every vessel that enters PMNM to provide notice as they are entering and leaving, and to carry a Vessel Monitoring System (VMS) that is monitored by NOAA and the U.S. Coast Guard. These measures allow for the physical protection of the site from intrusion.

In addition to protecting the site from unauthorized individuals, the regulatory regime protects the biological resources. Because of this, Nihoa and Mokumanamana Islands have become a biological window to the past, representing island speciation and endemism on a scale that now only exists in a few places in the world—and also the context to understand both Native Hawaiian and Polynesian stories of migration and discovery. In particular, these islands also support investigations into traditional non-instrument navigation techniques on Native Hawaiian voyaging canoes, while the archipelago as a whole supports the Polynesian Voyaging Society’s apprentice navigator training program.

This beneficial use of PMNM resources demonstrates the strength of an approach that recognizes and preserves human connections to the monument. Whether it is maritime history or Native Hawaiian cultural practices, the PMNM has importance and significance for many—and the expansion of the monument has provided an opportunity to show how these connections make the site stronger.

CONCLUSION

The expansion of the PMNM has brought significant benefits. The larger site has drawn greater interest in its potential for science, conservation, management, culture, and history—which has, in turn, created more opportunities to partner with the external community. Together, a wide spectrum of stakeholders have pushed shared values forward to demonstrate the value of marine monuments—and through it all, the Hawai‘i Longline Fleet has brought in its highest landings in the past ten years.

Senator Schatz's earlier report demonstrated why the expansion was justified in the first place, and our letter to you today shows how the site has lived up to these expectations, and that no modifications to the prohibited actions within the monument are necessary.

Sincerely,



BRIAN SCHATZ
United States Senator



TULSI GABBARD
Member of Congress



ED CASE
Member of Congress