



Papahānaumokuākea National Marine Sanctuary

Final Management Plan



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Cover photo: A Hawaiian voyaging canoe travels through Papahānaumokuākea. Photo: NOAA

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Acknowledgements

The sanctuary designation process was conducted in cooperation with the Papahānaumokuākea Marine National Monument’s co-managing agencies: the National Oceanic and Atmospheric Administration, the U.S. Fish and Wildlife Service, State of Hawai‘i, and the Office of Hawaiian Affairs.

In the early stages of the scoping phase, the sanctuary management plan development process was combined with a broader Monument management plan update process. The initial intent was to merge the plans and accompanying NEPA-HEPA processes in order to create an integrated document and process. Eventually the two processes were decoupled. During scoping, the Monument Management Board convened regularly to discuss the sanctuary management plan development and initial sanctuary proposal. Then through weekly meetings and a series of day-long workshops, the Monument Management Board’s Core Planning Team developed foundational elements (vision, mission, principles, goals) and a framework (five kūkulu) to provide the basis for both the sanctuary and the future monument management plans.

This designation builds upon existing management and programming in the marine portions of Papahānaumokuākea Marine National Monument, by adding the conservation benefits of a national marine sanctuary. Although ONMS has many fundamental responsibilities for managing the sanctuary, many sanctuary activities will be implemented in partnership or consultation with Monument co-managing agencies and other organizations. ONMS is committed to working closely with the Monument Management Board, Indigenous communities, and the Sanctuary Advisory Council to prioritize the activities in both management plans and create partnerships to help implement them.

The Papahānaumokuākea Marine National Monument Management Board and the Northwestern Hawaiian Islands Coral Reef Ecosystem Reserve Advisory Council were essential in the development of this sanctuary management plan. NOAA acknowledges and thanks its co-managing partners and advisory council members for their individual and collective contributions to this process.

Section 1: Foundations

Foundational Statement

Hanohano Nā ‘Āina Kūpuna: Honoring Papahānaumokuākea Kūpuna (Ancestral) Islands



Figure 1. Kānaka ‘Ōiwi have deep historical connections to all the islands, atolls, shoals, coral reefs, and submerged seamounts, as well as the ocean waters that surround them in Papahānaumokuākea. While the islands themselves were focal points for travel, the ocean and open waters were equally important and carry a multitude of values. Image: Brad Ka’aleleo Wong

E Kanaloa Haunawela
 Kanaloa ke ala ma’awe ‘ula a ka lā
 Kāne ke ala ‘ula a ka lā
 Kanaloa noho i ka moana nui
 Moana iki, moana o’o
 I ka i’a nui, i ka i’a iki
 I ka manō, i ka niuhi
 I ke koholā, a hohonu
 ‘O ke kai hohonu a he’e
 ‘O ke kai uli a palaoa
 ‘O ke kai kea a honu
 ‘O ka hou ka’i lōloa
 Ola ke kino walewale o Haunawela
 ‘O nā ‘au walu a Kanaloa
 I pa’a i ka maka
 I ka maka walu a Kanaloa, Ola!
 Lana i ke kai, lana i ka honua
 Lana i ka houpo a Kanaloa
 I ka Mokupāpapa
 Ka papa kaha kua kea o Lono
 ‘O Lono ka pao
 Ola i ke au a Kanaloa

Kanaloa of the depths of intensity
 Kanaloa of the west sky, the rising sun
 Kāne of the east sky, the rising sun
 Kanaloa residing in the great sea
 Small sea, mottled sea
 In the big fish, in the small fish
 In the shark, in the tiger shark
 In the whale, of the depths
 The depths and transcending
 The dark depths of the sperm whale
 White sea of turtles
 The wrasse parade in a long line
 The spawning cycle of the ocean is prolific
 The eight currents of Kanaloa
 The source is stable
 The numerous consciousness of Kanaloa, lives!
 It floats in the sea, it drifts upon the land
 It intermingles in the energy force of Kanaloa
 Out to the low laying islands
 The low laying coral islands of Lono
 Lono is the bridge
 Life to the realm of Kanaloa

(Kanaka’ole et al., 2017)

Mai ka puka ‘ana o ka lā i Ha‘eha‘e a hiki loa i ka welo ‘ana o ka lā i Hōlanikū, kāhiko ho‘owewehi ‘ia kākou a pau i ka lei aloha o ka pae moku o Kanaloa. Hanohano nō ‘o Papahānaumokuākea, he ‘āina akua nō ho‘i ia o ko Hawai‘i Pae ‘Āina. ‘O Wākea ke kāne, a ‘o Papahānaumoku ka wahine. Noho pū lāua a hānau ‘ia maīa ia mau ‘āina kūpuna mai loko a‘e o ka moana nui kūlipolipo i puka a‘e ai, a e hiki mai ana nō i kekahi wā e ho‘i hou ana ia mau moku lē‘ia i loko o ka ‘ōpū moana kai hohonu. Mau loa nō ka pilina pa‘a o nā Kānaka ‘Ōiwi i loko o ke ka‘ā o ka mo‘okū‘auhau i ke au o Kanaloa, nā mokupuni, nā moku ‘āina, me nā moku pāpapa, a me nā akua me nā ‘aumākua ma nā ‘ano kino mea ola like ‘ole i Moananuiākea. Kahu a mālama kākou o ke au nei i ia pilina ko‘iko‘i ma luna ho‘i o ka ‘ike kūpuna ma o ka hana kūpono ‘ana, ke mele ‘ana, ke a‘o ‘ana, ka noi‘i ‘ana, a me ka ho‘ōla ‘ana i ia mau moku kūpuna. Mai iō kikilo mai nō, hā‘ena‘ena ka lamakū o ka ‘ike kūli‘u o ka po‘e hulu kūpuna i ahi koli ai iā kākou, he ahi pio ‘ole ia e ‘ā no‘ao wenawena loa nei. Alu like nō ho‘i kākou ma lalo o ia ahi pio ‘ole, a na ia po‘e kūpuna nō e ho‘okele alaka‘i mau nei iā kākou a pau i ke alahula o ka ‘imi na‘auao i kēia ao mālamalama. I ka wā ma mua, ka wā ma hope. I ko kākou mālama ‘ana i nā moku kūpuna o ka pō, mālama pū ‘ia nō nā mokupuni o ke ao, pēlā nō e ola mau ai ‘o Papahānaumokuākea a ma ka pae moku holo‘oko‘a i nā makamaka ola o ko mua me ko hope, a mau loa aku nō.

From the rising of the sun at Ha‘eha‘e on Hawai‘i Island to the setting of the sun at Hōlanikū (Kure Atoll) at the northwestern extent of Hawai‘i, the love of the land is abundant, greetings to you all. Papahānaumokuākea is honored as a sacred realm of the gods to Kānaka ‘Ōiwi (Native Hawaiians). Papahānaumoku birthed these ancestral islands from the ocean through a union with Wākea. Papahānaumokuākea represents deep cosmological and spiritual relationships connected to pō (primordial darkness), a realm where ancestral spirits return to islands that were once birthed from the deep ocean. There are living genealogies and relationships between Kānaka ‘Ōiwi and the realm of Kanaloa (ocean deity), the many islands of Papahānaumokuākea, and the akua (ancestral gods) and ‘aumākua (ancestral guardians) represented by the diverse forms of life residing within this vast ocean area, Moananuiākea. These relationships are tended to and perpetuated in a variety of ways as part of a collective journey to care for these kūpuna (ancestral) islands. Since the beginning, the torch of expansive ancestral knowledge and connection has been passed down over generations by hulu kūpuna (esteemed elders) and it continues to burn intensely, lighting the path forward. The kūpuna will continue to lead and navigate the path well-traveled, continuing to seek knowledge as an ancestral practice. The past will guide the future. The undying flame guides us on the path towards the ancestral islands in pō as an extension of the way we mālama (take care of) the places in ao (realm of the living).

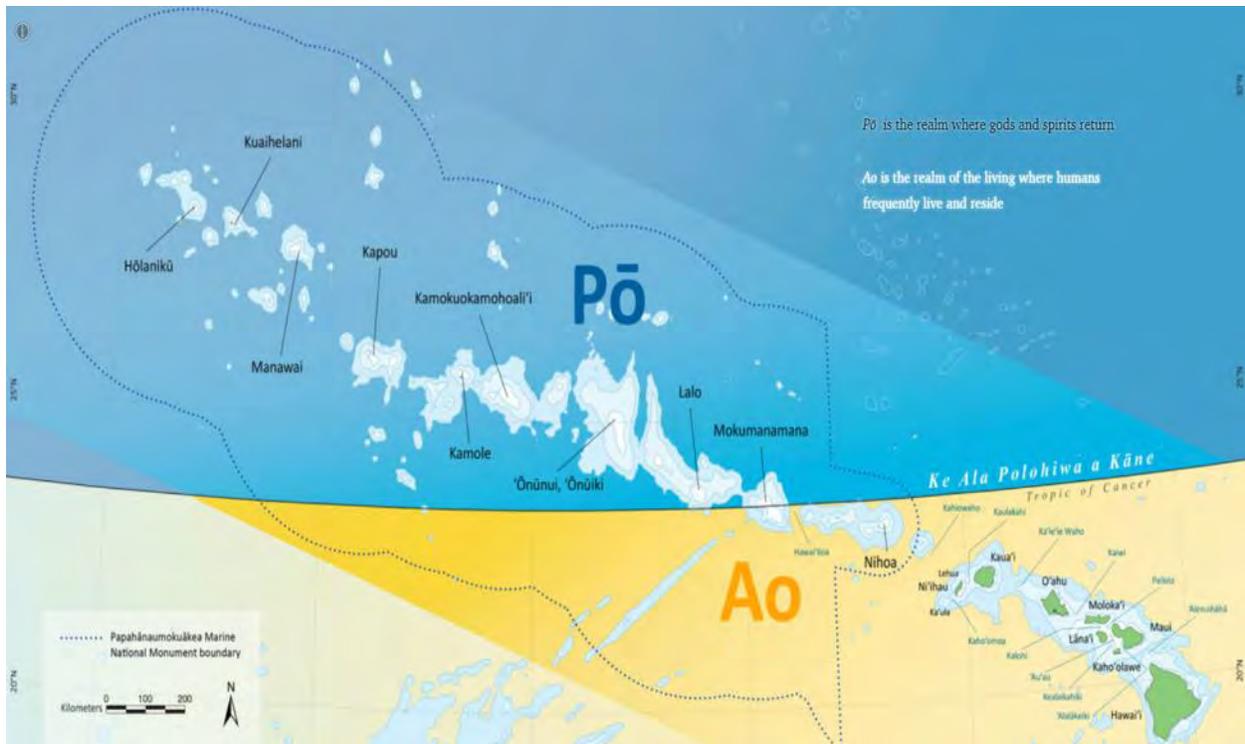


Figure 2. Map of the Hawaiian universe from the eastern edge to the northwestern extent of the Hawaiian Archipelago. Image: NOAA

Hulu kūpuna have strongly advocated for the long-term lasting protection of Papahānaumokuākea, and navigated us towards a shared vision and a collective journey of caring for this sacred place: “I ka wā ma mua, ka wā ma hope,” meaning looking to the past to guide the future (Kame‘eleihiwa, 1992). In moving forward with a proposed sanctuary designation, we seek to honor their legacy and build upon their foundation, so that Papahānaumokuākea will continue to thrive in perpetuity for many more generations to come. The proposed sanctuary designation aims to provide additional protection to this ‘Āina Akua (realm of the gods/ancestors), without diminishing any existing protections.

Core Values

Core values reflect shared foundational beliefs that influence the proposed sanctuary’s work. We have identified the following as our most important values:

Kuleana/Responsibility

- Strive for excellence as public stewards
- Be proactive and anticipate program needs to ensure the success and support of team members
- Act with aloha to sustain healthy working relationships

Mālama/Stewardship

- Protect Papahānaumokuākea for future generations and honor kūpuna
- Bring the place to the people in ways that spark curiosity and cultivate a sense of purpose that will, in turn, compel them to care for the places that sustain them and inspire them to deepen their cultural, scientific, and/or resource management expertise
- Build connections and collaborate with diverse partnerships to encourage stewardship of global ocean resources

Pono/Integrity

- Be accountable, honest, and transparent in all our work
- Communicate effectively and articulate expectations
- Enable and empower each other to do excellent work
- Be inclusive
- Respect difference and diversity

‘Imi ‘ike/Exploration

- Collaborate and utilize multiple knowledge systems and innovative technologies to pursue research, discovery, and exploration
- Ensure research has integrity and informs management needs
- Communicate a sense of wonder through the stories we tell about Papahānaumokuākea

About This Document

Management plans are specific planning and management documents required for all national marine sanctuaries. They identify immediate, mid-range, and long-range opportunities, and outline future activities. A management plan describes resource protection, research, education, and outreach programs that guide sanctuary operations; defines how a sanctuary should best protect its resources, including through innovative management strategies, enforcement, and surveillance activities; and describes sanctuary regulations if appropriate.

This plan would chart the course for the sanctuary over the next five to seven years. The plan reflects an integrated approach to management, both from a nature-culture integration perspective, also known as a biocultural perspective, and from a co-management perspective. Papahānaumokuākea Marine National Monument (PMNM) refers to the area designated as a monument via Presidential Proclamations 8031 and 8112. The Papahānaumokuākea Marine National Monument Expansion Area (MEA) refers to waters from 50 to 200 nmi designated as a monument in 2016 by Presidential Proclamation 9478. Both PMNM and the MEA are managed together by four co-trustees: the Department of Commerce through NOAA, the Department of Interior through the U.S. Fish and Wildlife Service (USFWS), the State of Hawai‘i through the Department of Land and Natural Resources, and the Office of Hawaiian Affairs. These organizations are collectively committed to realizing the mission of Papahānaumokuākea. Advantages of cooperative management, as delineated in the 2006 and 2017 co-trustee memorandum of agreements, include a joint monument management plan and a joint permitting system. The 2017 memorandum of agreement also recognizes the potential

designation of a future national marine sanctuary in the marine portions of the Monument, and the co-managers agreement that a sanctuary designation would not terminate or otherwise amend the way the Monument is currently co-managed. Other advantages of cooperative management include resource sharing for capacity-building, formal and informal research partnerships, and structured opportunities for involvement such as in outreach and education.

Sanctuary management would supplement and complement, rather than supplant, the existing co-management regime of Papahānaumokuākea. Cooperative projects will be pursued with co-managing agencies that allow for ease in sharing resources and in-kind assistance and support, as appropriate. There is currently a comprehensive monument management plan for PMNM (Papahānaumokuākea Marine National Monument, 2008), which will be updated in the future to include the MEA that was established in 2016 separately under a different presidential proclamation. The core elements (vision, mission, guiding principles, and goals) for the monument plan update were developed in 2022 through a coordinated process among the monument's co-managing agencies.

As described below in Section 3, this plan was designed to integrate with the existing monument co-management. To ensure consistency of protections between the sanctuary and the overarching monument, the monument management plan components were utilized for this sanctuary management plan. In other words, the core elements of the sanctuary management plan and the future monument management plan update are one and the same. Additionally, while the sanctuary management plan functions as a primary guidance document for NOAA's Office of National Marine Sanctuaries (ONMS), the strategies in this plan also will be incorporated into the future monument management plan update, along with strategies and other plan requirements of the other Papahānaumokuākea co-trustees. This sanctuary management plan is focused on the range of actions that would be undertaken by ONMS, building upon the strategies already being implemented by ONMS for the monument.

In writing this sanctuary management plan, the kua, or backbone, to the approach was to start with a focus on the Hawaiian concept of aloha 'āina. The *Mai Ka Pō Mai* Native Hawaiian guidance document was instrumental in developing the pōhaku niho, or foundational stones, for the plan. Content from other key documents, such as the *2008 Papahānaumokuākea Marine National Monument Management Plan* and *2020 State of Papahānaumokuākea Marine National Monument Status and Trends 2008-2019 report*, also substantially influenced this plan.

Aloha ‘Āina: A Hawaiian Environmental Ethic

“Hawaiian well-being is tied first and foremost to a strong sense of cultural identity that links people to their homeland. At the core of this profound connection is the deep and enduring sentiment of aloha ‘āina, or love for the land. Aloha ‘āina represents our most basic and fundamental expression of the Hawaiian experience. The ‘āina sustains our identity, continuity, and well-being as a people. It embodies the tangible and intangible values of our culture that have developed and evolved over generations of experiences of our ancestors.” (Kikilo, 2010)

“He Ali‘i Ka ‘Āina, He Kauwā Ke Kanaka—Land is a Chief, Man is a Servant.” (Pukui and Varez, 1983) This ‘ōlelo no‘eau (wise proverb) depicts the relationship that Kānaka Maoli have with land, emphasizing that land is not viewed as a commodity, but rather a chief, or one who protects and provides for its people. For the land to provide sustenance and shelter to the people, it needs to be tended to and cared for properly, a responsibility that Kānaka recognize and reciprocate. This ‘ōlelo no‘eau emphasizes the foundational Hawaiian worldview of aloha ‘āina and further defines this ideology beyond a love for the land, but rather a reciprocal relationship in which ‘āina and kānaka depend on one another to live—and ultimately to thrive.

Section 2: Purpose of the Management Plan

Strategic Guidance for Sanctuary Management

Primarily under the auspices of ONMS, the purpose of the plan is to provide strategic guidance for the sanctuary's work. The plan conveys the goals and priorities of the sanctuary and describes the strategic actions the sanctuary plans to conduct during the next five to seven years to accomplish them.

Program Guidance

The focal areas of our work are represented under five kūkulu, or pillars of management: resource protection and conservation; research and monitoring; governance and operations; partnerships and constituent engagement; and education, interpretation, and mentoring. Strategies in this plan articulate how the goal for each kūkulu will be achieved, providing guidance for day-to-day management.

Address Climate Change and Other Threats

Although this is not, strictly speaking, a threat-based plan, many of the strategies encompassed in this document indirectly or directly address threats to the sanctuary. As described in the [2020 State of the Papahānaumokuākea Marine National Monument Report](#), we recognize Papahānaumokuākea as an indicator for ecosystem health for the region, and seek to identify, monitor, and address major threats that include invasive marine species and the many effects global climate change will have on physical, biological, cultural, and historical resources and values. Climate change, in particular, is a prominent theme suffusing our work in research, education, outreach, and constituent engagement. The Papahānaumokuākea climate change science, education, and adaptation priorities identified in the *2020 State of the Papahānaumokuākea Marine National Monument Status and Trends 2008-2019 report*, the *Pacific Islands Region Research Strategy* (unpublished 2021), and the *Papahānaumokuākea Marine National Monument Education Strategy* (unpublished 2019) were reviewed and have influenced this plan.

Operationalize an Integrated Approach to Management

The sanctuary management plan serves as an important mechanism for weaving together knowledge systems in the service of management. This integration is a priority identified in the sanctuary's vision, mission, and guiding principles, which are consistent with the vision, mission, and guiding principles of the Monument.

Cooperative and Coordinated Management

The sanctuary's vision, mission, and guiding principles mirror those of the Monument. Strategies in this sanctuary plan aim to support and maintain existing co-management functions vis-a-vis the Papahānaumokuākea Marine National Monument Management Board, to promote unified governance in the spirit of seamless integrated stewardship.

Section 301 of the National Marine Sanctuaries Act (NMSA), 16 U.S.C. § 1431 calls for the development and implementation of coordinated plans for the protection and management of nationally significant marine areas with appropriate federal agencies, state and local governments, Native American Tribes and organizations, international organizations, and others; for the creation of models of, and incentives for, ways to conserve and manage these areas, including the application of innovative management techniques; and for cooperation with global programs encouraging conservation of marine resources. Further, Section 311 16 U.S.C. § 1443 allows for the Secretary of Commerce to enter into cooperative agreements, contracts or other agreements with, or make grants to, states, local governments, regional agencies, and others.

Advantages of cooperative management include a joint management plan and a joint permitting system. Other advantages of cooperative management include resource sharing for capacity-building, formal and informal research partnerships, and structured opportunities for involvement such as in outreach and education.

In accordance with NMSA, NOAA and the State of Hawai‘i would co-manage the sanctuary. NOAA may develop a memorandum of agreement with the State to provide greater details of co-management. NOAA and the State may develop additional agreements as necessary that would provide details on execution of sanctuary management, such as activities, programs, and permitting processes. Co-management of the proposed sanctuary with the State of Hawai‘i would not supplant the existing co-management structure of the Monument. NOAA will also manage the sanctuary in partnership with the U.S. Fish and Wildlife Service and the Office of Hawaiian Affairs. NOAA will update the Memorandum of Agreement for Promoting Coordinated Management of Papahānaumokuākea Marine National Monument with the State of Hawai‘i, Department of the Interior/USFWS, and Office of Hawaiian Affairs that reflects the addition of the proposed sanctuary, and specifically addresses how the addition of a sanctuary will supplement and complement, and not supplant, the existing Monument management framework.

Objectives of Sanctuary Designation

The sanctuary designation objectives are reflected in the sanctuary management plan elements. These objectives reflect NOAA priorities and the broader need for a sanctuary within the National Marine Sanctuary System. The sanctuary objectives guided the formulation of the overall sanctuary designation package, including the sanctuary regulations and management plan.

Sanctuary Designation Objectives

1. Provide long-term lasting protection of Papahānaumokuākea consistent with and reinforcing the provisions outlined in Executive Order 13178, Presidential Proclamations 8031, 8112, 9478, and the regulations at 50 CFR § 404 through the designation of a national marine sanctuary.
2. Augment and strengthen existing protections for Papahānaumokuākea ecosystems, living resources, and cultural and maritime heritage resources through the addition of National Marine Sanctuaries Act regulations.
3. Support and maintain existing co-management functions within the Papahānaumokuākea Marine National Monument Management Board to ensure unified governance in the spirit of seamless integrated stewardship.
4. Provide a pu‘uhonua to protect key habitats, vulnerable, endangered and threatened species, and highly mobile marine species that regularly move across the boundaries of Papahānaumokuākea Marine National Monument.
5. Manage the sanctuary as a sacred site consistent with Native Hawaiian traditional knowledge, management concepts, and principles articulated within Mai Ka Pō Mai.
6. Enhance community engagement and involvement, including engagement of the Indigenous Hawaiian community in the development and execution of management of the sanctuary.
7. Enhance resource protection, increase regulatory compliance, ensure enforceability, and provide for consultation through National Marine Sanctuaries Act authorities and regulations.
8. Conduct, support, and promote research, characterization, and long-term monitoring of marine ecosystems and species and cultural and maritime heritage resources.

Section 3: Sanctuary Management Plan

Strategic Plan Design

The National Marine Sanctuaries Act requires the preparation of a sanctuary management plan for a national marine sanctuary. This sanctuary management plan responds to the requirements of the NMSA, and in particular, Section 304(a)(2)(C). The plan creates a road map for future actions based on past experience and outcomes. A sanctuary management plan is designed to identify the best and most practical strategies to achieve common goals, while getting the most out of public investment.

As previously noted, this sanctuary management plan’s content was generally informed by several existing documents, notably the Mai Ka Pō Mai guidance document that inspired our goals and sought to integrate nature and culture seamlessly and the foundational *2008 Papahānaumokuākea Marine National Monument Management Plan*, along with the *Papahānaumokuākea Climate Change Vulnerability Assessment*, the *2020 State of Papahānaumokuākea Marine National Monument Status and Trends 2008-2019 report*, the *Papahānaumokuākea Natural Resources Science Plan 2011-2015*, and other management documents.

The core elements and framework for the sanctuary management plan were designed in coordination with the monument’s co-managing agencies, in order to ensure concurrence of plans between the sanctuary and the overarching monument. The core elements of this sanctuary management plan—vision, mission, principles, and goals—are the same as those that have been developed by the co-trustees for the future monument management plan update.

The sanctuary management plan’s framework is based upon Mai Ka Pō Mai and the goals of the future updated monument management plan. It consists of five jointly developed kūkulu (pillars of management) that are equivalent to action plan categories. These kūkulu are resource protection and conservation; research and monitoring; governance and operations; partnerships and constituent engagement; and education, interpretation, and mentoring. Additionally, the sanctuary management plan and the future monument management plan both will have a strategic scope and focus, incorporating high level strategies to be undertaken by the co-trustees. Many of the strategies found in this sanctuary management plan are already being implemented by ONMS for the monument, and they will be merged with and, if needed, further refined within the updated monument management plan when completed.

Vision, Mission, Guiding Principles, and Goals

The vision, mission, principles, and goals for the sanctuary management plan were developed through a collaborative process with the monument’s co-managing agencies in a series of monument management plan workshops held in 2020–2021.

Vision: ‘Āina Momona – Place of Abundance

Our vision for Papahānaumokuākea is a birthplace of rich ocean diversity where a living story of creation, exploration, and valor is remembered and shared throughout Hawai‘i and the world. People value the monument as a place of regeneration and renewal—a place of hope where an abundance of species thrive to nourish our minds and bodies and stir our ancient need for wild places where man is just one part of a whole. Papahānaumokuākea awakens a truth that most have forgotten—that we need a healthy ocean for our well-being. It reminds everyone that nature and culture are one and the traditional and conventional, spiritual, and scientific have learned to coexist. Papahānaumokuākea inspires us to care passionately for all nature and to learn to mālama—to care for each other.

Mission

Carry out seamless integrated management to ensure ecological integrity and achieve strong, long-term protection and perpetuation of Northwestern Hawaiian Islands ecosystems, Native Hawaiian culture, and heritage resources for current and future generations.

Guiding Principles for the Management Plan

The following set of principles was developed by the Papahānaumokuākea Marine National Monument’s co-managing agencies to guide management interactions. They refer to the way in which the co-management works.

1. **Cultivate Connection:** We encourage the development of meaningful, long-term relationships between people and place, in order to cultivate Aloha ‘āina (see definition).
2. **Knowledge:** Expand our knowledge of Papahānaumokuākea through both Native Hawaiian and other methods, understandings, and perspectives to holistically care for this place.
3. **Governance:** Management of Papahānaumokuākea resources is accomplished by PMNM co-trustees working together, demonstrating how collaborative partnerships can create synergy and increase management success.
4. **Education:** Education and outreach that inspires understanding of the nature, culture, and history of Papahānaumokuākea is essential to connect people and communities to place.
5. **Carefulness:** We practice adaptive management to protect and conserve Papahānaumokuākea and err on the side of doing no harm when there is uncertainty about the impacts of an activity.
6. **Partnership:** We foster collaborative partnerships to empower communities and encourage ownership among stakeholders in the stewardship of Papahānaumokuākea.

Goals for the Management Plan

Goals were developed for each kūkulu, or pillar of management, for the sanctuary management plan. These goals were also developed by the PMNM co-managing agencies.

Management Plan Goals

Goal 1. Resource Protection and Conservation

Ensure the long-term viability and resilience of Papahānaumokuākea by protecting, preserving, enhancing, and restoring its cultural, maritime heritage, and natural resources, with a focus on ocean and island health and human well-being.

Goal 2. Research and Monitoring

Support, promote, conduct, and coordinate research and monitoring, incorporating multiple forms of knowledge to increase understanding of Papahānaumokuākea cultural, maritime heritage, and natural resources, and to improve management decisions.

Goal 3. Governance and Operations

Provide the necessary policy, programs, structure, and processes to ensure effective, integrated management and fulfill the kuleana of shared stewardship for Papahānaumokuākea.

Goal 4. Partnerships and Constituent Engagement

Pursue, build, and maintain partnerships that generate active and meaningful involvement, with a commitment to incorporate traditional values and stewardship ethics, to strengthen world class conservation, community engagement, constituent support, and connection of people to place.

Goal 5. Education, Mentoring, and Interpretation

Inspire current and future generations to mālama Papahānaumokuākea cultural, maritime heritage, and biological resources through excellence in education and mentorship.

Sanctuary Management Kūkulu

Each of the following five kūkulu (pillars of management) sections begins with an overarching goal and a brief description, followed by a set of strategies which collectively address management needs for the sanctuary for the next five to seven years. The strategies were developed by ONMS staff through a process that entailed a comprehensive review of planning documents (previous monument management plans and condition/status reports; NOAA plans; and the Mai Ka Pō Mai guidance document), followed by a synthesis and update of relevant content. Many of the strategies in this sanctuary management plan are currently being implemented.

Kūkulu 1. Resource Protection and Conservation

Goal

Ensure the long-term viability and resilience of Papahānaumokuākea by protecting, preserving, enhancing, and restoring its cultural, maritime heritage, and natural resources, with a focus on ocean and island health and human well-being.

Description

HO‘OMANA. This kūkulu honors Papahānaumokuākea through resource protection actions that preserve, strengthen, and restore living pilina, or relationships, and weaving Kānaka ‘Ōiwi (Native Hawaiian) knowledge systems, values, and practices together with other knowledge systems and approaches in caring for this sacred biocultural seascape. Actions entail processes and protocols that acknowledge, safeguard, and promote the biocultural health of Papahānaumokuākea, and by extension, promote the health of the entire Hawai‘i Pae ‘Āina (Hawaiian Archipelago). This integrative approach weaves together our co-management guiding principles and cooperative conservation initiatives. To support biocultural conservation and restoration work, we strive to grow a collective kuleana, affirming respect and reciprocity for the place and our partners. The Mai Ka Pō Mai guidance document defines kuleana as a “...fundamental lineal and/or personal responsibility, which, in turn, conveys rights and privileges based on relationships to place and practices.” We also seek to, wherever possible, incorporate training opportunities for Kānaka ‘Ōiwi and others, to build diverse expertise in areas such as ecological/ecosystem monitoring, invasive species control, and maritime skills.

Strategies

Strategy 1.1. Resource Protection Framework: Actively work and advocate inside the ecosystem protection framework established for the monument, to minimize risks and damages to sanctuary resources.

Strategy 1.2. Resource Protection Tools and Technologies: Safeguard sanctuary resources by seeking out and developing new tools and technologies to protect resources from both anthropogenic and natural threats, including invasive species.

Strategy 1.3. Resource Protection Coordination: Coordinate with, and provide guidance for, permittees to increase awareness and implementation of resource protection, including a respectful and appropriate code of conduct, in all activities.

Strategy 1.4. Permitting Program: Monitor permit activity in the sanctuary in coordination with the monument permitting system, to mālama ‘āina and to mitigate potential cumulative effects.

Strategy 1.5. Native Hawaiian Resource Protection and Conservation: Develop and implement biocultural resource protection mechanisms and programs that weave in Native Hawaiian culture as a system of knowledge, values, and practices.

Strategy 1.6. Maritime Heritage Resource Threat Assessment: Assess threats to the wide range of maritime heritage resources, including climate impacts, and address appropriate conservation activities.

Strategy 1.7. Maritime Heritage Resource Coordination: Coordinate intra- and interagency efforts to protect and conserve the wide range of maritime heritage resources.

Strategy 1.8. Emergency Response: Coordinate, plan, assist, and lead, where applicable, interagency emergency response activities in order to respond to, mitigate, evaluate, and/or restore impacts of natural, cultural, and maritime heritage resource damages and/or events.

Strategy 1.9. Enforcement: Work with the existing interagency Law Enforcement Coordination Team to enhance communication and coordination among enforcement personnel in order to facilitate responses to incidents, uphold sanctuary regulations and policies, and enforce compliance with regulations, laws, and permit requirements through surveillance, vessel monitoring system tracking, and relevant technology.

Kūkulu 2. Research and Monitoring

Goal

Support, promote, conduct, and coordinate research and monitoring, incorporating multiple forms of knowledge to increase understanding of Papahānaumokuākea cultural, maritime heritage, and natural resources, and to improve management decisions.

Description

HŌ‘IKE. “‘A‘ohe pau ka ‘ike i ka hālau ho‘okahi. Not all knowledge is learned from one school.” (Pukui & Varez, 1983).

Hō‘ike focuses on weaving knowledge systems through research and monitoring activities that expand our collective knowledge base and inform Papahānaumokuākea management actions. ‘Ike means knowledge, but it also refers to sensing, experiencing, and understanding. Hō‘ike is about applying knowledge systems and demonstrating knowledge and expertise in a given area. Papahānaumokuākea continues to be an abundant source of knowledge where multiple traditions of Indigenous inquiry and environmental expertise are perpetuated and integrated with Western knowledge systems, inquiry, and approaches. References to these traditional processes, including different ways of observing the living world, can be found in countless oli, mo‘olelo, ka‘ao, and genealogies passed down from generation to generation.

It is important to honor the unique contributions of Kānaka ‘Ōiwi knowledge systems through meaningful inclusivity and engagement of Kānaka ‘Ōiwi practitioners, researchers, and community members in multi-disciplinary research partnerships. By weaving together multiple knowledge systems and employing multiple research approaches and multi-disciplinary methods, we more holistically analyze and understand the linkages and connectivity within the biocultural seascape of Papahānaumokuākea.

Strategies

Strategy 2.1. Marine Ecosystem Characterization: Map, inventory, and characterize marine ecosystems and key habitats.

Strategy 2.2. Marine Ecosystem Monitoring: Coordinate and engage in surveillance to monitor existing resources and potential threats affecting them, in order to understand ecosystem function and facilitate proactive management.

Strategy 2.3. Marine Ecosystem Monitoring Technologies: Incorporate new technologies to address the limitation of access and facilitate monitoring activities in the extensive marine areas surrounding each island and atoll.

Strategy 2.4. Marine Ecosystem Research: Conduct and coordinate research of marine ecosystems and habitats.

Strategy 2.5. Marine Ecosystem Community Research: Develop community monitoring and citizen science research, and associated educational and mentorship opportunities that can be applied across the pae ‘āina.

Strategy 2.6. Native Hawaiian/Cultural Research Program: Support, facilitate, and conduct Kānaka ‘Ōiwi (Native Hawaiian) access and research.

Strategy 2.7. Native Hawaiian/Cultural Integration: Weave together multiple knowledge systems, values, and practices, and employ multi-disciplinary methods, in science and research.

Strategy 2.8. Native Hawaiian/Cultural Capacity Building: Develop and support research initiatives that focus on next-generation capacity building for leadership succession of Kānaka ‘Ōiwi (Native Hawaiian) and Pacific Islanders.

Strategy 2.9. Maritime Heritage Research and Monitoring: Compile documentation relevant to the maritime cultural landscape, inventory and characterize heritage sites, and monitor the wide range of maritime heritage resources

Strategy 2.10. Socioeconomic Research and Monitoring: Conduct and support socio-economic research and monitoring in the sanctuary.

Kūkulu 3. Governance and Operations

Goal

Provide the necessary policy, programs, structure, and processes to ensure effective, integrated management and fulfill the kuleana of shared stewardship for the sanctuary.

Description

HO‘OKU‘I. Ho‘oku‘i describes a joining or stitching together of various parts to create a larger whole. For voyagers, certain stars that pass directly over specific islands were considered their ho‘oku‘i, their guiding star, such as the star Hōkūle‘a for Hawai‘i. This definition describes the role that ONMS plays as a uniting, connecting, and integrating force for certain activities within Papahānaumokuākea. Operations are carried out by multiple programs and structures that all come together to administer the site’s finances, policy, permitting, exploration, resource protection, research and monitoring, education, outreach, and partnership-building. Many initiatives involve cross-program collaboration. Guided by the principles and examples of pono practices from Mai Ka Pō Mai, ONMS’ governance and operations will contribute toward the broader co-management of Papahānaumokuākea.

Strategies

Strategy 3.1. Cooperative Management: Conduct cooperative, coordinated management with the Papahānaumokuākea Marine National Monument co-trustees for the proposed national marine sanctuary.

Strategy 3.2. Culturally Integrated Management Approach: Continue to conduct and improve programs and initiatives to increase internal cultural capacity and proficiency.

Strategy 3.3. Central Operations Planning: Conduct and coordinate annual site operations planning, budgeting, and implementation.

Strategy 3.4. Central Operations Capacity: Assess and enhance human resources and organizational capacity.

Strategy 3.5. Central Operations Assets: Conduct and coordinate the management of field equipment, vessels, vehicles, accountable property, and other assets.

Strategy 3.6. Integrated and Inclusive Management: Integrate diversity, equity, inclusion, and accessibility into our business practices and organizational culture to increase the diversity of our workforce and create a more inclusive work environment where everyone feels valued, is treated fairly, and experiences a true sense of belonging.

Strategy 3.7. Permitting Administration: Promote and facilitate permitted activities consistent with regulated actions that benefit Papahānaumokuākea.

Strategy 3.8. Vessel and Dive Operations: Maintain vessel operational capacity and dive operational capacity to safely and effectively support sanctuary protection, research, and management.

Strategy 3.9. Field Operations: Plan, coordinate, conduct, and support field, scientific, and resource protection projects and missions that integrate management, ensure ecological integrity, and promote strong, long-term protection and perpetuation of ecosystems, Native Hawaiian culture, and maritime heritage resources.

Strategy 3.10. Communications and Web Administration: Conduct effective communications and web administration to increase awareness of the sanctuary and foster and promote community relations.

Strategy 3.11. Data and Information Management: Effectively manage data to support sanctuary central operations, permitting, research, outreach, and constituent and cultural engagement.

Strategy 3.12. Evaluation to Support Adaptive Management: Conduct and coordinate a targeted tracking and evaluation program for sanctuary management.

Strategy 3.13. Emergency Response Coordination: Conduct, coordinate, and support emergency response for staff and facilities to ensure safety of workplace and workforce.

Kūkulu 4. Partnerships and Constituent Engagement

Goal

Pursue, build, and maintain partnerships that generate active and meaningful involvement, with a commitment to incorporate traditional values and stewardship ethics, to strengthen world class conservation, community engagement, constituent support, and connection of people to place.

Description

HO‘OULU. The word ho‘oulu, which includes the root word ulu (to grow, increase, spread), implies an active engagement and intention to inspire and promote growth. The Hawaiian word for community is kaiāulu. Communities are places of dynamic interactions and relationships that can cultivate abundance, innovation, and ingenuity. Kūkulu Ho‘oulu is grounded in these values of growth and inspiration, with strategies to engage and support diverse communities who care for Papahānaumokuākea.

Strategic partnership-building and constituent engagement are essential to maintain the holistic, multi-faceted relationships to Papahānaumokuākea and perpetuate the legacy of those who have shaped its management. New and existing partnerships serve to expand the collective wealth of skills and knowledge among key entities, including local communities, organizations, and other stakeholders. They create pathways for innovative approaches inclusive of Kānaka ‘Ōiwi perspectives, knowledge systems, values, and practices in our work, including research, management, and education. Partnerships also are instrumental in combining resources to increase training and mentorship opportunities for developing future generations of managers, scholars, and practitioners with a deep understanding of the historical context and holistic understanding of protecting biocultural seascapes and maritime cultural landscapes.

The range of constituent groups and partners is broad and expanding. Indigenous and underserved communities are two important areas where ONMS is currently expanding partnerships and engagement. Several new community partnerships which support marine research and marine resource stewardship are underway.

Strategies

Strategy 4.1. Sanctuary Advisory Council: To ensure consistent advice, transition the existing Northwestern Hawaiian Islands Coral Reef Ecosystem Reserve Advisory Council (RAC) to serve as the Sanctuary Advisory Council. Develop and maintain a Sanctuary Advisory Council and engage working groups, friends groups, and others to support sanctuary programs and initiatives; and continue other initiatives that allow sanctuary constituencies to be more involved in the sanctuary and enhance opportunities for long-term engagement.

Strategy 4.2. Constituency-Building and Engagement: Recruit, engage, and support volunteers, including non-traditional workers and participants in skills-development organizations.

Strategy 4.3. Academic Partnerships: Develop, promote, and maintain partnerships with academic institutions to build upon the opportunities for collaborative research, curriculum development, and mentoring.

Strategy 4.4. Native Hawaiian Partnerships: Grow internal and external processes to create diverse, inclusive, and equitable partnerships that enhance our ability to serve Native Hawaiian, underserved, and underrepresented communities.

Strategy 4.5. Economic Partnerships: Develop and maintain partnerships with tourism associations and the business community to raise awareness about Papahānaumokuākea and ocean resource stewardship.

Partnership Synergies

Among the co-managing partners of Papahānaumokuākea, there are affiliated organizations that directly support or otherwise strengthen NOAA's Office of National Marine Sanctuaries' (ONMS) management. These include the Northwestern Hawaiian Islands Coral Reef Ecosystem Reserve Advisory Council that advises ONMS; the Friends of Midway National Wildlife Refuge (NWR) and Friends of the Hawaiian Islands NWR groups that support the U.S. Fish and Wildlife Service; the Papahānaumokuākea Native Hawaiian Cultural Working Group that advises and is supported by the Office of Hawaiian Affairs; and the Kure Atoll Conservatory, which supports the State of Hawai'i Department of Land and Natural Resources. In addition to these, there are numerous other organizations and groups that indirectly support the management of Papahānaumokuākea Marine National Monument. Each brings a special set of skills, view points, values, and support functions to the work that is done by the co-trustees. While the actions in this sanctuary management plan focus exclusively on those groups that advise and support ONMS, there is synergy and cooperation between many of these entities, which will be further delineated in the next Papahānaumokuākea Marine National Monument Management Plan update.

Kūkulu 5. Education, Interpretation, and Mentoring

Goal

Inspire current and future generations to mālama Papahānaumokuākea cultural, maritime heritage, and biological resources through excellence in education and mentorship.

Description

HO‘OLAHA. The word ho‘olaha means to spread out or share. ONMS conducts education and outreach activities to build understanding of the environmental and cultural significance of this special place, and to share information about the important work that is being done in the region. Cultural values and perspectives, along with traditional history and accounts, can help to provide a more complete understanding of Papahānaumokuākea and the importance of protecting its ecosystems and other cultural resources, while also helping to establish a personal relationship to place. Developing culturally-grounded content can make information more accessible and engaging as we strive to increase awareness of Papahānaumokuākea and its traditions. In the end, what is most important is to bring the place to the people in ways that spark curiosity and cultivate a deeper sense of purpose.

ONMS’ premiere interpretive facility, Mokupāpapa Discovery Center, provides vital gathering space to bring Papahānaumokuākea to all audiences, as well as serve as a vibrant community center. In addition, a broad complement of education partnerships and collaborations with other interpretive centers, monument co-trustees, educational institutions, organizations, and businesses has, over time, expanded into a diverse network serving both kama‘āina (locals) and malihini (visitors/tourists) alike. Education and outreach efforts are amplified through collaborations with Kānaka ‘Ōiwi (Native Hawaiian) educators and organizations to weave in Kānaka ‘Ōiwi values, knowledge, and place-based connections, providing a holistic understanding of how nature and culture are interwoven. For malihini, this is an important example to increase awareness that Kānaka ‘Ōiwi were the first stewards, and that nature and culture are one and the same. For all audiences, understanding of the cultural context is foundational to cultivating a strong sense of kuleana (responsibility) for each person to actively engage in stewarding the places that care for them.

Strategies

Strategy 5.1. Awareness and Information in Multiple Languages: Conduct programs; develop and disseminate materials in ‘ōlelo Hawai‘i (Hawaiian language), English, and other languages for agencies, kama‘āina (locals), malihini (visitors), and wider audiences; and improve and update tools for understanding the physical, biological, cultural, and historical setting of Papahānaumokuākea.

Strategy 5.2. General Public Outreach: Actively engage in and support the development of National Marine Sanctuary System outreach initiatives, locally, regionally, and globally.

Strategy 5.3. Ocean, Land, Climate, and Conservation Literacy: Conduct and support programs and events in Hawai‘i to teach ocean, land, climate, and conservation literacy through a biocultural lens; and participate in the ocean literacy network.

Strategy 5.4. Native Hawaiian Culture and Heritage Education: Develop and provide educational programs and initiatives that are based on Native Hawaiian cultural values, concepts, and traditional resource management stewardship.

Strategy 5.5. Native Hawaiian Culture and Heritage Outreach: Provide cultural outreach opportunities to serve the Native Hawaiian community and others over the life of the plan.

Strategy 5.6. Interpretive Centers Partnerships: Actively utilize, and partner with discovery centers, aquariums, and museums to enhance our presence, programs, and partnerships. Conduct events and activities to engage broad audiences, and inspire ocean stewardship.

Strategy 5.7. Mokupāpapa Interpretive Center: Maintain Mokupāpapa Discovery Center as a premiere interpretive center and annually revisit and update strategic priorities and plans for interpretive facilities and partnerships.

Strategy 5.8. Navigating Change – Action-Oriented Conservation and Stewardship Outreach: Highlight Papahānaumokuākea as a model for teaching about conservation and stewardship/mālama, with emphasis on educating to change behavior and build stewardship in communities across the pae‘āina.

Strategy 5.9. Mentoring and Career Pathways: Conduct mentorship programs and events, and build partnerships to engage, inspire, and guide the next generation of conservation professionals.

Strategy 5.10. Global Perspective and World Heritage: Showcase the site to regional and international audiences, and actively participate in regional and international educational partnerships and programs.

Section 4: Success Indicators and Measures

The success of this management plan will be evaluated through a set of representative performance indicators and measures for each of the five kūkulu (pillars of management). These indicators and measures provide a means to track implementation of the sanctuary management plan. They will also provide supporting data for future sanctuary management plan reviews, as well as sanctuary and monument condition reports of biological, ecological, and cultural and maritime heritage resources.

Table 1. Performance Indicators and Measures

Kūkulu	Indicator	Measures
1. Resource Protection and Conservation	<p>1.a. Effective monitoring and management response is being conducted at sites where likely or actual threats to resources exist, e.g., invasive species, marine debris, trophic shifts, and climate-related impacts.</p> <p>Trend: - = +</p>	<ul style="list-style-type: none"> Threat monitoring programs continued or developed; mitigation programs continued or developed; plans developed. Vessel traffic monitored. Non-native and nuisance species of concern monitored. Number of annual expeditions, surveys, and monitoring efforts tracked. Database of known non-native and/or marine nuisance species is maintained and periodically updated. ONMS participation in regional response planning efforts. Staff maintain required response training.
1. Resource Protection and Conservation	<p>1.b. The condition of habitats and biocultural resources in the sanctuary is assessed, and measures are developed to maintain or improve them.</p> <p>Trend: - = +</p>	<ul style="list-style-type: none"> Annual Permitted Activities Summary reports completed and disseminated. Annual Best Management Practices reviewed. Annual permit database/records reviewed. Periodically evaluate if the condition of sanctuary resources has been maintained or improved, as assessed through a condition report, state of the monument report, or other means.
2. Research and Monitoring	<p>2.a. Area of the sanctuary seafloor where efforts to survey, map, ground truth, characterize, or analyze habitats have been completed.</p> <p>Trend: - = +</p>	<ul style="list-style-type: none"> Amount of area surveyed, mapped, ground truthed, characterized, and/or analyzed. Number of sites surveyed or monitored. Coordination measures implemented.

Kūkulu	Indicator	Measures
2. Research and Monitoring	<p>2.b. Support collaborative and coordinated management through timely sharing of data.</p> <p>Trend: - = +</p>	<ul style="list-style-type: none"> • Annual Accomplishments Report developed and disseminated. • Annual Permitted Activities Report developed and disseminated. • For each research/monitoring effort or data set: 1) date(s) data were collected; 2) efforts/time taken to analyze the data; 3) efforts/time to disseminate the data; 4) data sharing methods; and 5) products generated (e.g., journal publication or other anticipated end products).
3. Governance and Operations	<p>3.a. Resources and organizational capacity are sufficient to implement core operations and priority programs.</p> <p>Trend: - = +</p>	<ul style="list-style-type: none"> • Estimated percent of annual program/project implementation or milestones funded. • FTE allocations. • Staff feedback regarding capacity, program, and project implementation timeliness and impact.
4. Partnerships and Constituent Engagement	<p>4.a. Involve communities and volunteers in sanctuary management issues and ocean conservation.</p> <p>Trend: - = +</p>	<ul style="list-style-type: none"> • Attendance at events, public meetings, and events (e.g., open houses, advisory council meetings, Mokupāpapa Discovery Center community events). • Volunteer hours in sanctuary-led education, place-based stewardship, and research efforts (e.g., marine monitoring, beach cleanups, cultural monitoring, navigating change). • Number of community-focused initiatives. • Participation in regional efforts related to diversity, equity, and inclusion. • Number of Indigenous engagement strategies and events.
5. Education, Interpretation, and Mentoring	<p>5.a. Effectively interpret and communicate the importance of the sanctuary and its unique resources, and the unique role of NOAA and the sanctuary as a marine resource manager, using Mokupāpapa Discovery Center and a wide variety of media and methods to reach a broad range of audiences.</p> <p>Trend: - = +</p>	<ul style="list-style-type: none"> • Social media metrics. • Web items generated or updated. • Number of classes, students, teachers (by grades, location, etc.). • Number of outreach and community events. • Number of attendees at events, lectures, webinars, etc. • Number of Mokupāpapa Discovery Center visitors. • Interpretive exhibits and signage developed or updated. • Exhibits properly maintained and delivering content. • Newsletter developed and disseminated.

Kūkulu	Indicator	Measures
5. Education, Interpretation, and Mentoring	5.b. Develop and provide inclusive and effective cultural, ocean literacy, and stewardship programs and related education initiatives whose audiences include students, teachers, volunteers, partner organizations, visitors, and tourists. Trend: - = +	<ul style="list-style-type: none"> • Percentage or number of programs or events that involve Indigenous and underserved groups or audiences. • Number of annual mentorship and internship opportunities for Papahānaumokuākea stewardship. • Feedback from teachers and students. • Visitor feedback and survey data on visitor satisfaction. • Staff feedback and information about program improvement.

Section 5: Funding

The National Marine Sanctuaries Act requires NOAA to include an “estimate of the annual cost to the federal government of the proposed designation, including costs of personnel, equipment and facilities, enforcement, research, and public education” (16 U.S.C. § 1434(a)(2)(C)(v)). NOAA estimates the current annual costs for management of Papahānaumokuākea to be between \$3,250,000 and \$4,820,000 depending on the availability of funding. NOAA anticipates a need for similar levels of funding (adjusted to account for inflation) with sanctuary designation.

Management plan implementation is inextricably linked to resources. Management of the proposed sanctuary is envisioned to be funded by a mix of federal appropriations, external funding from collaborations with other agencies and organizations, and in-kind/volunteer support and supplies. The federal budget for the national marine sanctuary will be contingent on several factors, including the federal appropriations process, overall operational and construction budgets for ONMS as determined by Congress, and spending priorities determined by ONMS and NOAA. In general, NOAA anticipates the budget to grow over time to meet the needs of sanctuary management. Collaboration with partners, including non-profit organizations, is also anticipated to help implement key programs and activities.

If the proposed sanctuary designation takes effect, NOAA will maintain the essential, existing resources and actions for management, such as maintaining an administrative office and a sanctuary superintendent and supporting the operation of a Sanctuary Advisory Council. NOAA would continue to provide staff support to programmatic priorities, which include all resource protection, research, and education programs as identified above in specific action plans. Another priority reflected in the kūkulu is to maintain a Native Hawaiian cultural program to work closely with Kānaka ‘Ōiwi organizations. NOAA would also work to maintain the sanctuary’s presence through the Mokupāpapa Discovery Center and other site-based interpretive partnerships.

With sanctuary designation, NOAA would be able to enhance or fill gaps in critical programmatic priorities through the NMSA. NOAA would implement the maritime heritage program with mapping, characterization, archaeological documentation, and other activities described in the Papahānaumokuākea Maritime Heritage Research, Education, and Management Plan. Sanctuary status would also allow NOAA to advance joint collaborative projects with Kānaka ‘Ōiwi organizations and others to enhance understanding and conservation of cultural values to advance sanctuary management. Another priority would be to initiate the design, build, and operation of a dedicated research vessel. Once operational, NOAA (and partners) would begin implementing site-specific research and monitoring activities with this vessel.

Glossary and Acronyms

Glossary

‘Āina momona – Healthy, productive, thriving communities of people and place based on reciprocal pilina (relationships). ‘Āina momona exemplifies a place of abundance, or a place that produces lots of food and is inclusive of the kuleana that people have to a specific place to ensure its health in order to bountifully produce for all.

‘Āina – Land, ocean, communities; a source of sustenance that feeds one’s physical, mental, emotional, and spiritual well-being.

Ahupua‘a – A division of land, often oriented vertically extending from the uplands and usually includes portions of the sea, that is part of a larger traditional resource management system established by ancient Hawaiians to sustainably utilize the resources throughout the islands.

Aloha ‘āina – A Hawaiian philosophy of love for land and all that which feeds us, representing a most basic and fundamental expression of the Hawaiian experience. A Hawaiian expression of the rights and responsibilities to care for ‘āina as kin.

Biocultural – A dynamic, integrative approach to understanding the links between nature and culture and the interrelationships between humans and the environment (Maffi & Woodley, 2012). Biocultural heritage encompasses Indigenous and local community knowledge innovations and practices that developed within their social-ecological context (Davidson-Hunt et al., 2012). These approaches recognize the existence of multiple worldviews as the foundation for different ways of seeing and different ways of knowing (Chang et al., 2019).

Hawai‘i Pae ‘Āina – Hawaiian Archipelago.

Hō‘ike – To show, to reveal.

Ho‘olaha – To spread out, to share.

Ho‘oku‘i – Zenith; the position directly overhead where the heavens join together.

Ho‘omana – To strengthen cultural and spiritual mana (power).

Ho‘oulu – To inspire, to grow.

Kānaka ‘Ōiwi – Native Hawaiians; an individual who is a descendant of the aboriginal peoples who, prior to 1778, occupied and exercised sovereignty in the Hawaiian Islands, the area that now constitutes the State of Hawai‘i.

Ka‘ao – Histories, stories, and legends. They are often thought of as similar to mo‘olelo, however can be much more fanciful and embellished for storytelling purposes.

Kauhale – Group of houses comprising a Hawaiian home, formerly consisting of men's eating house, women's eating house, sleeping house, cook-house, canoe house, etc.

Kūkulu – Supporting pillars of heaven, here used to describe essential focal areas of management.

Kūpuna – Elder(s), ancestor(s).

Kuleana – A Hawaiian value that originates from the traditional practice of stewarding particular areas of land, known as kuleana, that are associated with familial lineages. It requires lineal and/or personal responsibility, rights, and privileges based on relationships to place and people.

Mai Ka Pō Mai – The 2021 Native Hawaiian guidance document for the management of Papahānaumokuākea Marine National Monument.

Mālama – To care for, to tend to.

Mo‘olelo – Story, history, tradition.

Native Hawaiian Cultural Landscape – Any place in which a relationship, past or present, exists between a spatial area, resource, and an associated group of Indigenous people whose cultural practices, beliefs, and/or identity connects them to that place. A Native Hawaiian cultural landscape is determined by and known to a culturally related group of Indigenous people with relationships to that place (Van Tilburg et al., 2017).

‘Ōlelo Hawai‘i – Native Hawaiian language.

Oli – Traditional Hawaiian chant.

Piko – An umbilical cord, summit, or top of a hill or mountain; crest; crown of the head; crown of the hat made on a frame (pāpale pahu); tip of the ear; end of a rope; border of a land; center, as of a fishpond wall or kōnane board; or place where a stem is attached to the leaf, as of taro.

Pono – Appropriate, moral, righteous, having integrity, ethical, correct, and deemed necessary by traditional standards in Hawaiian.

Ulu – To grow, to multiply.

Wahi Pana – A culturally significant site. Legendary, celebrated places where mo‘olelo, mele, hula connect the history of the place and its multi-layered relationships to the communities and families who are deeply connected to these places.

Acronyms

MEA – Papahānaumokuākea Marine National Monument Expansion Area

NMSA – National Marine Sanctuaries Act

NOAA – National Oceanic and Atmospheric Administration.

ONMS – Office of National Marine Sanctuaries (NOAA)

PMNM – Papahānaumokuākea Marine National Monument

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Appendix A: Terms of Designation

As published in the Federal Register within NOAA’s final rule for designation of Papahānaumokuākea National Marine Sanctuary, the final terms of designation for Papahānaumokuākea National Marine Sanctuary are provided here. The final rule, which includes sanctuary regulations and the terms of designation can be found on the [Papahānaumokuākea National Marine Sanctuary webpage](#).

Terms of Designation for Papahānaumokuākea National Marine Sanctuary

Section 304(a)(4) of NMSA as amended, 16 U.S.C. 1434(a)(4), requires that the terms of designation be described at the time a new sanctuary is designated, including the geographic area to be included within the sanctuary, the characteristics of the area that give it conservation, recreational, ecological, historical, research, educational, or esthetic value, and the types of activities that will be subject to regulation to protect those characteristics.

The following represents the terms of designation:

Preamble

Under the authority of the National Marine Sanctuaries Act, as amended (the “Act” or “NMSA”), 16 U.S.C. 1431 *et seq.*, approximately 582,570 square mi (439,910 square nmi) of the waters of the Pacific Ocean surrounding the Northwestern Hawaiian Islands are hereby designated as a national marine sanctuary for the purpose of providing long-term protection and management of the ecological, cultural, and historical resources and the conservation, recreational, scientific, educational, and esthetic qualities of the area.

Article I: Effect of Designation

The NMSA authorizes the issuance of such regulations as are necessary and reasonable to implement the designation, including managing and protecting the ecological, cultural, and historical resources and the conservation, recreational, scientific, educational, and esthetic qualities of Papahānaumokuākea National Marine Sanctuary (the “sanctuary”). Section 1 of Article IV of these terms of designation lists those activities that may be regulated on the effective date of designation, or at some later date, in order to protect sanctuary resources and qualities. Listing an activity does not necessarily mean that it will be regulated. However, if an activity is not listed it may not be regulated, except on an emergency basis, unless Section 1 of Article IV is amended by the same procedures by which the original sanctuary designation was made.

Article II: Description of the Area

The sanctuary encompasses the submerged lands, seamounts, and Pacific Ocean waters from the shoreline seaward to approximately 200 nautical miles west of 163° West Longitude surrounding the Northwestern Hawaiian Islands which consist of the islands, atolls, and emergent lands stretching from Nihoa in the southeast to Hōlanikū (Kure Atoll) in the

northwest. The marine waters east of 163° West Longitude surrounding Nihoa extend seaward from the shoreline to approximately 50 nautical miles. The total area of the sanctuary comprises approximately 582,570 square miles (439,910 square nautical miles). The precise boundary coordinates are defined in Appendix A to the regulations at 15 CFR part 922, subpart W.

Article III: Special Characteristics of the Area

Papahānaumokuākea is a place of special national significance that provides large-scale ecosystem services for the region and the world. The marine habitat includes several interconnected ecosystems, including coral islands surrounded by shallow reef, deeper reef habitat characterized by seamounts, banks, and shoals scattered across the area of the sanctuary, mesophotic reefs with extensive algal beds, pelagic waters connected to the greater North Pacific Ocean, and deep-water habitats and abyssal plains 5,000 meters below sea level. These connected ecosystems provide essential habitats for rare species such as the threatened green sea turtle and the endangered Hawaiian monk seal, as well as habitat for more than 14 million seabirds that forage in the pelagic waters to nourish the chicks they are raising on the tiny islets. Papahānaumokuākea is home to 20 cetacean species, protected by the Marine Mammal Protection Act, with some listed as endangered under the Endangered Species Act. At least a quarter of the nearly 7,000 known marine species in the region are found nowhere else on Earth.

The area of the sanctuary is also a place of historical and cultural significance. The area of the sanctuary includes the location of the Battle of Midway, a turning point in World War II for the allies in the Pacific Theater. Research indicates that 60-80 sunken military vessels and hundreds of sunken military aircraft are scattered across the seafloor. In addition to Navy steamers and aircraft, there are whaling ships, ancient Japanese sailing ships known as junks, motorized East Asian style fishing vessels known as Hawaiian fishing sampans, Pacific colliers, and other vessels from the 19th and 20th centuries.

Papahānaumokuākea is also a sacred place to Native Hawaiians, who regard the islands and wildlife as kūpuna, or ancestors. The region holds deep cosmological and traditional significance to the people of Hawai‘i and the Native Hawaiian culture, and contains a host of intact and significant archaeological sites found on the islands of Nihoa and Mokumanamana, both of which are on the National Register of Historic Places and Hawai‘i Register of Historic Places. Papahānaumokuākea is as much a spiritual space as it is a physical geographical area, rooted deep in Native Hawaiian creation and settlement stories.

Article IV: Scope of Regulations

Section 1. Activities Subject to Regulation

The following activities are subject to regulation, including prohibition, as may be necessary to ensure the protection and effective management of the ecological, cultural, historical, conservation, recreational, scientific, educational, or esthetic resources or qualities of the area:

1. Access to the sanctuary;
2. Ship reporting, ship routing, and other shipping activities;
3. Vessel monitoring;

4. Vessel discharge;
5. Exploring for, developing, or producing oil, gas, or minerals, or any energy development activities;
6. Using or attempting to use poisons, electrical charges, or explosives in the collection or harvest of a sanctuary resource;
7. Introducing or otherwise releasing an introduced species from within or into the sanctuary;
8. Deserting a vessel;
9. Commercial fishing;
10. Non-commercial fishing;
11. Possessing fishing gear;
12. Anchoring on or having a vessel anchored on any living or dead coral with an anchor, anchor chain, or anchor rope;
13. Drilling into, dredging, or otherwise altering the submerged lands; or constructing, placing, or abandoning any structure, material, or other matter on the submerged lands;
14. Removing, moving, taking, harvesting, possessing, injuring, disturbing, or damaging; or attempting to remove, move, take, harvest, possess, injure, disturb, or damage any living or nonliving sanctuary resource;
15. Attracting any living sanctuary resource;
16. Touching coral, living or dead;
17. Swimming, snorkeling, or closed or open circuit SCUBA diving;
18. Discharging or depositing any material or other matter, or discharging or depositing any material or other matter outside of the sanctuary that subsequently enters the sanctuary;
19. Anchoring a vessel;
20. Native Hawaiian practices;
21. Research and scientific exploration;
22. Scientific research and development by Federal agencies;
23. Activities that will further the educational value of the sanctuary or will assist in the conservation and management of the sanctuary;
24. Recreational activities; and
25. Interfering with, obstructing, delaying, or preventing an investigation, search, seizure, or disposition of seized property in connection with enforcement of the NMSA or any regulation or permit issued under the NMSA.

Listing an activity here means that the Secretary of Commerce can regulate the activity, after complying with all applicable laws, without going through the designation procedures required by paragraphs (a) and (b) of section 304 of the NMSA. No term of designation issued under the authority of the NMSA may take effect in Hawai'i state waters within the sanctuary if the Governor of Hawai'i certifies to the Secretary of Commerce that such term of designation is unacceptable within the review period specified in the NMSA.

Section 2. Emergencies

Where necessary to prevent or minimize the destruction of, loss of, or injury to a sanctuary resource or quality, or to minimize the imminent risk of such destruction, loss, or injury, any

and all activities, including those not listed in Section 1, are subject to immediate temporary regulation, including prohibition.

Article V: Alteration of This Designation

The terms of designation, as defined under section 304(a)(4) of the NMSA, may be modified only by the same procedures by which the original designation is made, including public hearings, consultations with interested Federal, Tribal, State, regional, and local authorities and agencies, review by the appropriate Congressional committees, and approval by the Secretary of Commerce, or his or her designee.



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